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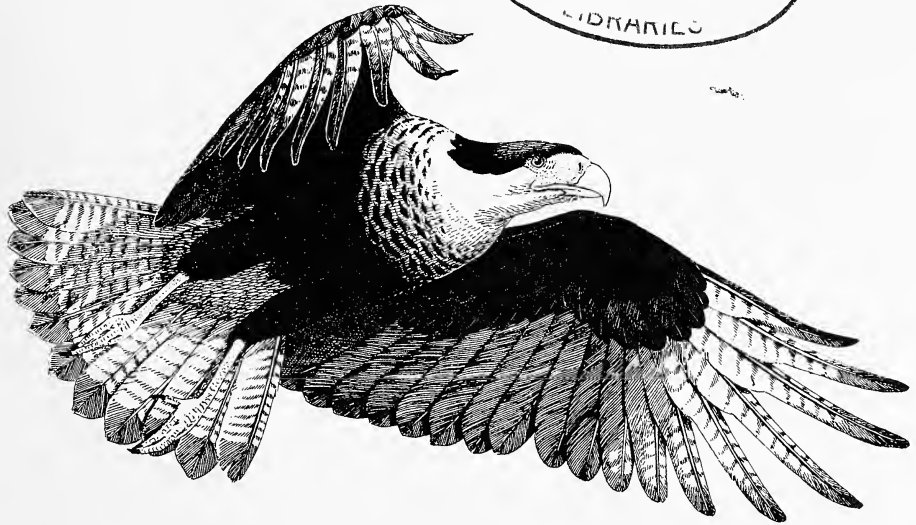
PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 1

FEBRUARY 2006

PAGES 1-35

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The *Florida Field Naturalist* is published quarterly (February, May, August, and November) by the Florida Ornithological Society. It is printed by E. O. Painter Printing Co., P.O. Box 877, DeLeon Springs, Florida 32130. The permanent address of the Florida Ornithological Society is Department of Ornithology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611. The Florida Ornithological Society web site can be found at www.fosbirds.org

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PAGES 1-35

Florida Field Naturalist 34(1):1-3, 2006.

FIRST RECORD OF THE VARIED BUNTING FROM FLORIDA

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On 1 June 2005, at 16:00, a small dark-plumaged bird was found beneath a window of the Siesta Market on Siesta Key, Sarasota County, Florida. The bird was still limp suggesting it probably hit the window that day. Prepared as a study skin (Fig. 1, GEW 6004), the specimen was a male (testes: 4×3 mm.), weighed 12.5 g, had moderate fat and no molt. The feathers showed no fraying and the feet and the bill showed no abnormalities, which support the conclusion that the bird was not held in captivity. The fresh specimen was correctly identified as a Varied Bunting (*Passerina versicolor*) and placed in a freezer by MvD until transportation to Archbold Station could be arranged. The study skin is now in the ornithological collection at Archbold Biological Station.

The Varied Bunting occurs normally throughout almost all of Mexico, as a summer breeder in the north and central portion of the country, and as a permanent resident elsewhere except along the southwest coast and the southeast portion of the country where it is a winter visitor. The northern limit of its range is in the extreme southwest United States, specifically in southern Arizona, New Mexico and Texas (Groschupf and Thompson 1998). Vagrants are reported from the northern parts of these three states and from California. The only report from east of the Mississippi River is an individual (AHY female) photographed at Long Point, Ontario, Canada, 7 May 1995 (Prior 1995).

Four races of *Passerina versicolor* are recognized (Paynter 1970). However, the differences among them are slight, and validity of some races is doubted (Groschupf and Thompson 1998). Additional work is needed. We do not assign the Florida specimen to a particular race.

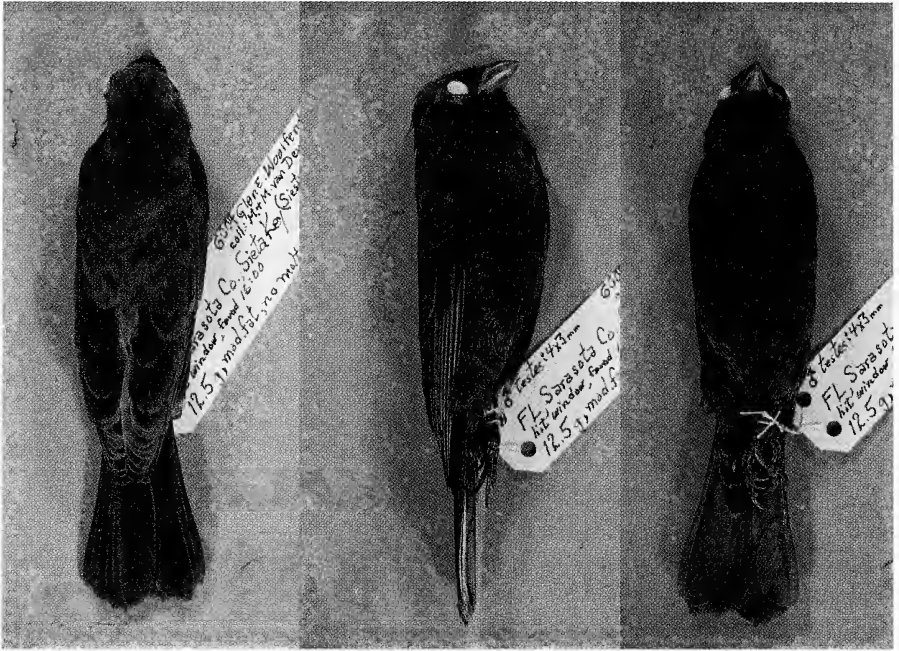


Figure 1. The Florida Varied Bunting specimen found on Siesta Key, Sarasota County, Florida; in dorsal, lateral and ventral view.

Assuming Mexico is the place of origin of the specimen reported here, and that natural events account for its appearance on 1 June along the Gulf coast of peninsular Florida, the individual probably flew eastward across the Gulf from Mexico. Less probably it may have flown along the Gulf shore of United States from Texas. No weather disturbances occurred immediately prior to the discovery of the specimen. Early June is when late migrant Varied Buntings are moving north to their breeding grounds. The appearance on the peninsula of Florida (Highlands Co.) on 19 June 1996 of a Western Wood-Pewee (*Contopus sordidulus*) may be a comparable event. This individual was thought to be a late spring migrant off course from its pathway from Central America to western North America (Woolfenden et al. 1996).

We thank several people, and especially Wes Biggs, for getting this specimen to Archbold where it was prepared and preserved, and Reed Bowman for taking the photographs. We urge other persons who report on birds rare in Florida to publish an account which includes a photograph. If the specimen disappears, for many species at least, tangible evidence of the occurrence still will exist in the form of the photograph.

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A NON-INDIGENOUS WADING BIRD BREEDING IN THE FLORIDA EVERGLADES: THE SACRED IBIS

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During the 2005 dry season, while studying the breeding biology of Everglades wading birds at the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Palm Beach County), we documented the first nesting efforts of the non-indigenous Sacred Ibis (*Threskiornis aethiopicus*) in the Florida Everglades. The Sacred Ibis is a medium-sized (65-75 cm long) white ibis, with black highlights on its head and neck, wing-tips, and ornamental plumes along its back. The head and neck are featherless and covered with black scaly skin. The adult iris is brown and its lower eyelid is pale pink. The decurved bill is relatively broad and black with gray grooves on the sides of the upper bill. The distinctive black plumes begin at the scapulars and form a loose, lace-like net across the back, closed wings, and tail. Its legs and feet are featherless and also black. Bare skin beneath the wings is bright red during breeding. Males tend to be slightly larger (average 1499 g) than females, (average 1209 g; Clark 1979a). Hancock et al. (1992) provide a detailed description of the species.

Sacred Ibis are colonial wading birds native to wetlands throughout Africa (Hancock et al. 1992). However, they have escaped captivity in 12 European countries and currently breed in the wild in Belgium, France, Italy, the Netherlands and the Canary Islands (Clergeau et al. 2005). The breeding season of the Sacred Ibis coincides with the wet season (December-March) in its native habitat, when prey abundances increase. Their clutch size is generally 2-5 eggs, with an incubation period of 28-29 days. Both sexes incubate and feed the young, which leave the nest at 2-3 weeks post hatching and form conspecific crèches. They fledge at 35-40 days of age, and leave the colony at 35-48 days. Sacred Ibis adults feed principally on aquatic insects, insect larvae, amphibians, and other small aquatic animals (Urban 1974, Clark 1979b, Hancock et al. 1992). Chicks are primarily fed insects and crustaceans

(Kopij et al. 1996) and, after fledging, also forage for insects on dry land during periods of aquatic prey shortages. Adult and chick prey selection is similar to that of the White Ibis (*Eudocimus albus*; Kushlan and Bildstein 1992).

Previous observations in Florida.—The earliest sighting of feral Sacred Ibis in Florida occurred during the mid 1990s at the Miami Metro Zoo shortly after Hurricane Andrew (1992) (J. Sailor, Metro Zoo, pers. comm.). Although the Miami Metro Zoo kept Sacred Ibis in their avian collection before Hurricane Andrew, all of their birds were recovered after the hurricane (J. Sailor, Metro Zoo, pers. comm.). The feral birds may have escaped from a private collection in the Homestead area. Sacred Ibis have been reported at several locations throughout Florida since the mid 1990s; sightings have been scattered both spatially and temporally and primarily in developed regions. Sightings in south Florida, include the Palm Beach Zoo, Palm Beach County (2000; K. Lovett, Palm Beach Zoo, pers. comm.); Dump Marsh, Dade County (2002; B. Rapoza, pers. comm.); Deering Estate, Miami-Dade County (2003; E. Lent, pers. comm.); Caloosa Golf Course, Dade County (2004; E. Einspruch, pers. comm.); and the Palm Beach Waste Management facility, Palm Beach County (1998, 2000, 2004, and 2005; M. B. Morrison, Solid Waste Authority of Palm Beach County, pers. comm.). The only observation of a Sacred Ibis in undeveloped habitat was in 1999 in the Shark River Slough, Everglades National Park (E. Lent, pers. comm.). Sacred Ibis have not been reported as seen during a Christmas Bird Count (CBC) in Florida or across North America (Audubon Society 2005).

Breeding of feral Sacred Ibis in developed areas has been observed at the Metro Zoo in Miami since shortly after hurricane Andrew (J. Sailor, Metro Zoo, pers. comm.) and at the Palm Beach Waste Management Facility in 2004 (M. B. Morrison, Solid Waste Authority of Palm Beach County, pers. comm.). The Metro Zoo population has grown from several to approximately 40 individuals despite efforts to prevent nesting (J. Sailor, Metro Zoo, pers. comm.), suggesting they may be nesting elsewhere in the vicinity.

Breeding in the wild in Florida.—During the 2005 dry season (November–May) we examined wading bird breeding success in the Everglades at the Arthur R. Marshall Loxahatchee National Wildlife Refuge (LNWR), Palm Beach County. To examine nest survival we visited wading bird nesting Colony 111 (26°31N, 80°16W) every 3–4 days. The colony consists of 12 tree islands, 0.04–0.13 ha in size, dominated by cocoplum (*Chrysobalanus icaco*), willow (*Salix* spp.), dahoon holly (*Ilex cassine*), smilax (*Smilax laurifolia*), red bay (*Persea borbonia*), and wax myrtle (*Myrica cerifer*). Over 90% of the nests at Colony 111 were White Ibis, with the remainder being Black-crowned Night-Herons (*Nycticorax nycticorax*) and Great Egret (*Ardea alba*).

On 23 May 2005, we observed two adult Sacred Ibis roosting on a tree island in Colony 111. We photographed the birds, took field notes on their appearance, and determined that neither bird had leg bands. Later that day we observed one adult thermal soaring with three Wood Storks (*Mycteria americana*) approximately 500 m south of Colony 111. The adult's soaring behavior comprised approximately five seconds of thermal soaring followed by an equivalent period of rapid wing beats. On 30 May, we revisited the site and observed two adults at a nest with two downy chicks (~15 days old) (Fig. 1). The nesting island was 17×43 m in size, with approximately 75 White Ibis nests. The nest was constructed of sticks and was similar to adjacent White Ibis nests; it was 2.3 m above the ground in a cocoplum; the nest bowl was round and 46 cm in diameter.

On 7 June, we removed the two chicks and relocated them to the Busch Wildlife Sanctuary, Jupiter, Florida. While removing the chicks, we



Figure 1. Adult (center) with 15-20 day old chick (lower left) at Colony 111, Arthur R. Marshall Loxahatchee National Wildlife Refuge, Palm Beach County, Florida.

discovered a second Sacred Ibis nest, containing one egg (Fig. 2). The second nest, also in a cocoplum, was 2.8 m above ground, and 44 cm in diameter. The nest later failed, perhaps due to the onset of the rainy season.

The discovery of these nesting efforts of the Sacred Ibis in the Everglades is both interesting and alarming. Non-native Purple Swamphen (*Porphyrio porphyrio*) (Pranty et al. 2000, Pranty 2004) and Egyptian Geese (*Alopochen aegyptiacus*) (Braun 2004) successfully breeding in Florida illustrate the potential for future successful Sacred Ibis nesting in the region. While locating medium-sized conspicuous wading birds might seem straightforward, these birds are difficult to detect among other predominantly white wading birds. We visited this colony of over 2000 pairs of White Ibis 18 times before detecting the nesting Sacred Ibis pairs. The vast size of the Everglades ecosystem and number of breeding colonies may prevent detection and dispersal of these birds before they become established throughout the Everglades.

Introductions of non-native species have often resulted in slow but gradual population growth patterns; however, there exists the potential for exponential growth once a population becomes established (e.g., Monk Parakeets (*Myiopsitta monachus*, Pruett-Jones et al. 2004; Mute Swans (*Cygnus olor*, Petrie and Francis 2003). Developing a program to monitor population growth and habitat use of Sacred Ibis and other nonnative birds would provide important information to facilitate a better understanding of the potential for competitive interactions with native birds.



Figure 2. Sacred Ibis egg at Colony 111, Arthur R. Marshall Loxahatchee National Wildlife Refuge, Palm Beach County, Florida.

ACKNOWLEDGMENTS

Funding for research that led to this observation was provided by the U.S. Fish and Wildlife Service, Florida Atlantic University and the South Florida Water Management District. We appreciate the support and cooperation of the Arthur R. Marshall Loxahatchee National Wildlife Refuge staff. M. I. Cook, D. E. Gawlik, J. A. Jackson, H. E. Kirk, and one anonymous reviewer provided valuable comments on previous drafts of this manuscript.

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WADING BIRDS, SHOREBIRDS, AND WATERFOWL IN RICE FIELDS WITHIN THE EVERGLADES AGRICULTURAL AREA

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Abstract.—Wetland reclamation and development have resulted in wildlife habitat loss and diminished habitat quality in south Florida. In response to these changes, waterbird numbers have declined or individuals have moved into modified or artificial habitats. Rice, a well-known artificial habitat for waterbirds in many rice-growing regions (Kushlan and Hafner 2000), is cultivated in the Everglades Agricultural Area (EAA) and provides habitat for waterbirds. During the 1998 rice-growing season, 300 surveys were conducted in 14 representative rice fields. Objectives included determining the number and relative abundance of waterbird species in rice fields, impacts of temporal and spatial field condition on waterbird richness and abundance, and characterization of waterbird activities in rice fields. Forty-one species of waterbirds were observed in rice fields. Species richness at survey sites ranged from 12-28 and density ranged from 4.6 to 72.6 birds/min/100 ha. Species richness and overall abundance fluctuated in response to rice growth or harvest phase and field water levels. Significantly more wading birds and shorebirds were present in rice fields during water drawdown. Shorebird abundance was negatively correlated to water level and rice height. Waterfowl abundance was negatively correlated with cloud cover. Primary activity of all birds was foraging (63%), followed by resting (33%), walking or running (4%), and nesting (<1%). Rice fields harvested twice (ratooned) provided additional water drawdown phases. Waterbird abundance may increase in the EAA with greater area devoted to rice fields and increased ratooning of existing fields. Effects of rice farming practices on waterbirds, including chemical use and harvesting methods, should be further evaluated.

Numbers of waterbirds in south Florida, including wading birds, shorebirds, and waterfowl, have declined throughout the last century as anthropogenic influences have altered original ecosystems (Kahl 1964, Robertson and Kushlan 1974, Kushlan 1976, Ogden 1994, Frohring et al. 1988, Sklar et al. 2002). The decline in waterbirds has frequently been attributed to habitat loss through wetland conversion

(National Audubon Society 1992, Light and Dineen 1994). Two important consequences of landscape perturbation have been loss of nearly half of the native Everglades habitats and degradation of remaining wetlands (Davis and Ogden 1994). In response to habitat loss and alteration in the Everglades, many waterbird species are now found in modified or artificial habitats (Kushlan and White 1977, Bancroft 1989, Ogden 1991, Frederick 1993, Frederick and McGehee 1994).

As natural wetland area declines, waterbird populations increasingly use rice fields for additional or alternative foraging and nesting habitat worldwide. Artificial wetlands associated with rice farming provide habitat for waterbirds in the Mediterranean region (Fasola et al. 1996, Fasola and Ruiz 1996), Malaysia (Avery 1997), Cuba (Acosta et al. 1996), and Japan (Maeda 2001). In the U.S. over one million hectares of rice are grown annually, primarily in the Mississippi Alluvial Valley, Gulf Coastal Plain, and Central Valley of California (Coats 2004) and receive high use by shorebirds, wading birds, and waterfowl (Twedt and Nelms 1999, Elphick 2000, Maeda 2001, Czech and Parsons 2002, Huner et al. 2002).

Rice culture in the Everglades Agricultural Area (EAA) began in the late 1970s and approximately 7800 ha are currently grown annually (Schueneman and Deren 2000). Summer censuses conducted by Sykes and Hunter (1978) detected 59 waterbird species using temporarily flooded fallow fields in the EAA. Turnbull et al. (1989a) reported the presence of breeding Fulvous Whistling-Ducks (*Dendrocygna bicolor*) centered in the EAA, and Smith (1995) briefly noted the use of EAA irrigation ditches by Snowy Egrets (*Egretta thula*) and Tricolored Herons (*Egretta tricolor*). An undated census reported that all species found in the water conservation areas (WCAs) of the Everglades were also found in EAA rice fields (Lodge 1994).

Recovery of Florida's waterbird species relies on identification of habitats currently in use, whether artificial or natural, and the evaluation of their role as waterbird habitat. Our objectives in this study were to (1) compile a species checklist of waterbirds using EAA rice fields, (2) compare waterbird abundance and richness in selected rice fields to spatial and temporal variables, and (3) evaluate activity and microhabitat preference of all individual birds observed within selected rice fields.

METHODS

Study Area.—The EAA is about 280,000 ha of primarily sugarcane (76%), with smaller areas devoted to vegetables, rice, and sod (Izuno and Bottcher 1994). Approximately 6% of total land area devoted to sugarcane and vegetables is rotated annually to rice production and then returned back to other uses (Izuno and Bottcher 1994). Fields are planted with rice between late February and mid-May and require an average of

120 days for maturation. Fields are harvested without extracting the entire plant, which allows a second or ratoon crop to grow to maturity after an additional 85 days (Schueneman and Deren 2001). Initial harvests generally take place in July and August and ratoon harvests occur between September and October. Fields are laser-leveled prior to planting to assure flooding results in uniform water depth across planted areas. Temporary and permanent irrigation ditches and canals connect rice fields and offer variation in water depth and vegetation communities between rice fields.

We surveyed 14 rice fields between March and November of 1998 (Fig. 1). We identified a representative section of each field, marked each corner with flagging, and counted all waterbirds seen or heard within the identified area. Representative sections included a portion of the larger rice field complex, transitional vegetation to the road

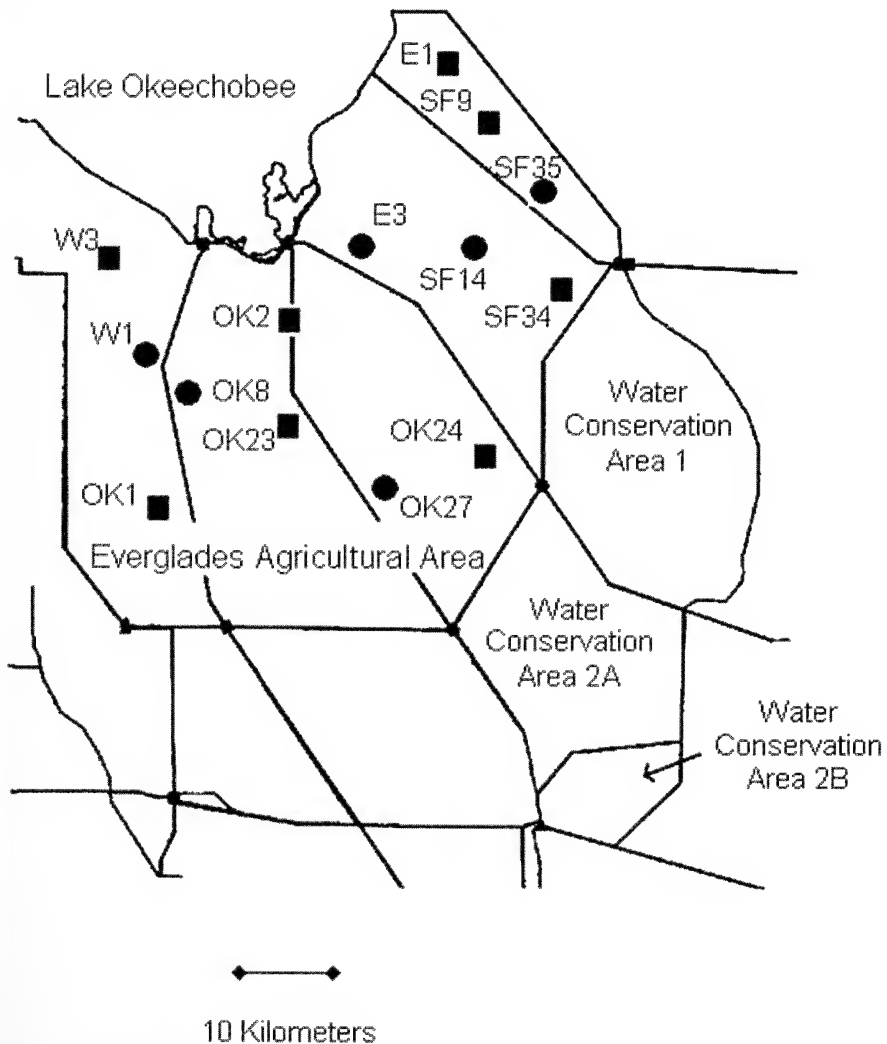


Figure 1. Survey sites within the Everglades Agricultural Area.

edge or adjacent field, and the full width of one irrigation waterway. Each survey consisted of either a 20- or 30-min count and start time varied randomly to eliminate time of day bias. Counts occurred within five hours of sunrise. All birds that touched down in the flagged area were counted unless they were observed leaving and re-entering the field; their activity and microhabitat location were assessed. Activity was divided into four categories: foraging, resting, moving, or nesting. Microhabitats included bare soil, dry vegetation, edge, open water, and emergent vegetation. All birds were grouped according to feeding guilds and identified as wading bird, shorebird, or waterfowl as described by Elphick et al. (2001).

Environmental variables recorded included height of rice, height of plants, depth of water, minutes after sunrise, wind speed measured in five mile per hour increments, cloud cover estimated in 10% increments between 0 and 100, air temperature in degrees Celsius, and cultivation phase. Cultivation phases included a pre-planting period when fields were cleared of vegetation, periods of rice growing without flooding, flooded rice fields, the drawdown period, and the initial and final harvests which were characterized by rice stubble standing in non-flooded fields.

Abundance variables, including total number of birds per minute per 100 ha (min/100 ha), wading birds/min/100 ha, shorebirds/min/100 ha, and waterfowl/min/100 ha, were compared with independent environmental conditions using ANOVA. Total bird abundance in a selected representative rice field was also graphed over time. Variables related to species richness included total number of species and number of species within each guild, but these values were too low for statistical analysis.

No changes in bird activity or microhabitat location were recorded after initial count and assessment. Birds entering a field during a count were recorded as moving. Moving birds also included those walking, swimming, or running, unless these activities were necessary for foraging or nesting. Nesting behaviors included nest building, nest inhabitation, incubation of eggs, copulation, or interaction with young remaining in nests.

RESULTS

Forty-one waterbird species were observed using rice fields of the EAA. Breeding evidence was positively identified for 8 of these species (Table 1). Half the total individuals observed were wading birds (50%), followed by waterfowl (39%), and shorebirds (11%). Twenty-two species were observed on more than 50 days and were observed using six or more survey sites (Fig. 2). Species richness ranged from 12-28 species and average number of wading bird species observed each day was higher than waterfowl or shorebirds. Total bird abundance, and abundance for each guild, peaked twice throughout the growing season (Fig. 3).

The primary activity for all waterbirds was foraging (63%), followed by resting (33%), moving (4%), and nesting (<1%). Shorebirds and wading birds spent the majority of their time foraging, while waterfowl foraged and lounged nearly equally. Only waterfowl and shorebirds were observed engaged in breeding activities. The number of all birds foraging and moving decreased continually from sunrise to five hours after sunrise. Resting peaked in the third hour for all birds, and reproductive activities differed little among hours.

Wading birds and waterfowl were observed most frequently in open water, whereas shorebirds were seen most frequently in non-

Table 1. Waterbird species observed in rice fields of the Everglades Agricultural Area, total number of individuals observed throughout the survey period¹, guild designations, and status in Florida according to Rodgers et al. (1992).

| Common name | Species | Total number | Guild | Status |
|-------------------------------------|------------------------------|--------------|----------------|------------------|
| American Coot ⁷ | <i>Fulica americana</i> | 22 | D ² | — |
| Anhinga | <i>Anhinga anhinga</i> | 30 | D | — |
| Black-crowned Night-Heron | <i>Nycticorax nycticorax</i> | 10 | W ³ | — |
| Black-necked Stilt ⁷ | <i>Himantopus mexicanus</i> | 298 | S ⁴ | — |
| Blue-winged Teal | <i>Anas discors</i> | 22 | D | — |
| Cattle Egret | <i>Bubulcus ibis</i> | 630 | W | — |
| Common Moorhen ⁷ | <i>Gallinula chloropus</i> | 755 | D | — |
| Fulvous Whistling-Duck ⁷ | <i>Dendrocygna bicolor</i> | 101 | D | — |
| Glossy Ibis | <i>Plegadis falcinellus</i> | 474 | W | — |
| Great Blue Heron | <i>Ardea herodias</i> | 55 | W | — |
| Great Egret | <i>Ardea alba</i> | 459 | W | — |
| Greater Yellowlegs | <i>Tringa melanoleuca</i> | 20 | S | — |
| Green Heron | <i>Butorides virescens</i> | 115 | W | — |
| Killdeer ⁷ | <i>Charadrius vociferus</i> | 150 | S | — |
| King Rail ⁷ | <i>Rallus elegans</i> | 33 | S | — |
| Least Bittern | <i>Ixobrychus exilis</i> | 40 | W | SSC ⁵ |
| Least Sandpiper | <i>Calidris minutilla</i> | 12 | S | — |
| Lesser Yellowlegs | <i>Tringa flavipes</i> | 105 | S | — |
| Little Blue Heron | <i>Egretta caerulea</i> | 158 | W | SSC |
| Mottled Duck ⁷ | <i>Anas fulvigula</i> | 1035 | D | — |
| Pied-billed Grebe | <i>Podilymbus podiceps</i> | 54 | D | — |
| Purple Gallinule ⁷ | <i>Porphyryla martinica</i> | 197 | D | — |
| Semipalmated Sandpiper | <i>Calidris pusilla</i> | 46 | S | — |
| Snowy Egret | <i>Egretta thula</i> | 212 | W | SSC |
| Sora | <i>Porzana carolina</i> | 53 | S | — |
| Tri-colored Heron | <i>Egretta tricolor</i> | 182 | W | SSC |
| White Ibis | <i>Eudocimus albus</i> | 299 | W | SSC |
| Wood Stork | <i>Mycteria americana</i> | 435 | W | E ⁶ |
| Yellow-crowned Night-Heron | <i>Nyctanassa violacea</i> | 56 | W | — |

¹Species with fewer than 10 sightings included: American Bittern (*Botaurus lentiginosus*), Double-crested Cormorant (*Phalacrocorax auritus*), Herring Gull (*Larus argentatus*), Limpkin⁵ (*Aramus guarana*), Reddish Egret⁵ (*Egretta rufescens*), Short-billed Dowitcher (*Limnodromus griseus*), Solitary Sandpiper (*Tringa solitaria*), Semipalmated Plover (*Charadrius semipalmatus*), Stilt Sandpiper (*Calidris himantopus*), Upland Sandpiper (*Bartramia longicauda*), Western Sandpiper (*Calidris mauri*), and Wilson's Plover⁵ (*Charadrius wilsonia*), ²Waterfowl, ³Wading bird, ⁴Shorebird, ⁵State species of concern, ⁶Federally endangered, ⁷Breeding evidence observed.

flooded vegetation. All wading birds and waterfowl used each microhabitat at least once. Shorebirds used all except levees without vegetation and did not perch above water. Foraging waterbirds were observed in open water most often, followed by vegetated water and cleared soil, and used all habitats. All microhabitats were used for lounging, but ditch edges and vegetated water were used for this activity most often.

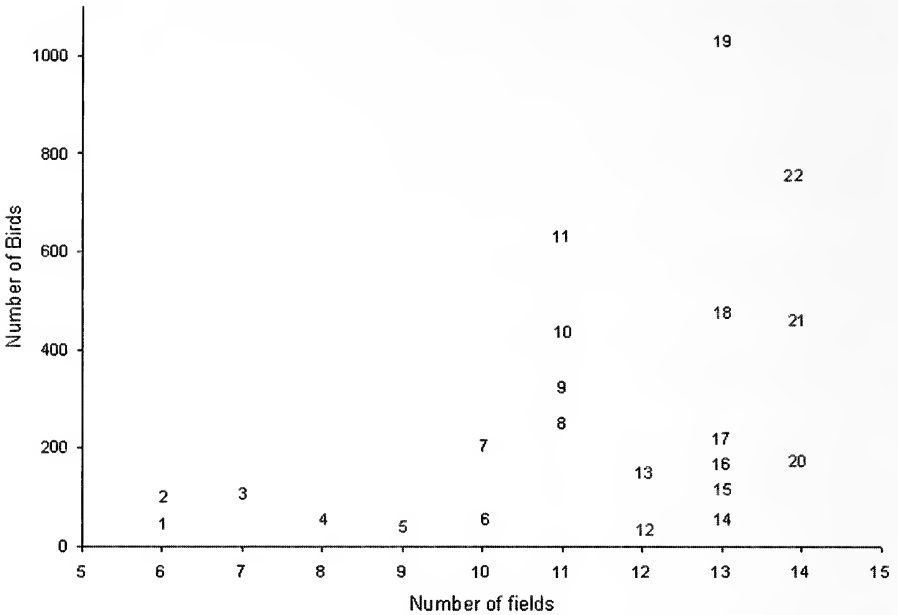


Figure 2. Number of individuals of each species seen in 6 or more fields (>50 observations). 1 = Sora, 2 = Fulvous Whistling-Duck, 3 = Lesser Yellowlegs, 4 = Pied-billed Grebe, 5 = Least Bittern, 6 = Yellow-crowned Night-Heron, 7 = Snowy Egret, 8 = White Ibis, 9 = Black-necked Stilt, 10 = Wood Stork, 11 = Cattle Egret, 12 = King Rail, 13 = Killdeer, 14 = Great Blue Heron, 15 = Green Heron, 16 = Little Blue Heron, 17 = Purple Gallinule, 18 = Glossy Ibis, 19 = Mottled Duck, 20 = Tri-colored Heron, 21 = Great Egret, 22 = Common Moorhen.

Moving birds were typically on cleared soil, dry vegetation, in open water, or in vegetated water. Nesting took place primarily in emergent or dry vegetation, but also occurred on bare soil.

Phase of cultivation significantly affected overall abundance of birds, wading birds, and shorebirds (ANOVA, $p < 0.0001$), but not waterfowl (ANOVA, $p > 0.05$). In addition, shorebird abundance was inversely related to water depth and rice height (ANOVA, $p = 0.02$, $p < 0.0001$ respectively), and waterfowl abundance was inversely related to cloud cover (ANOVA, $p = 0.03$). The time of the count in minutes after sunrise had no detected influence on total bird abundance (ANOVA, $p > 0.05$). Total abundance, shorebird abundance, and waterfowl abundance were significantly different among fields (ANOVA, $p = 0.02$, $p = 0.02$ and $p < 0.0001$ respectively).

DISCUSSION

Waterbird abundance in EAA rice fields appears to represent interplay between seasonal migration patterns and rice field conditions. For

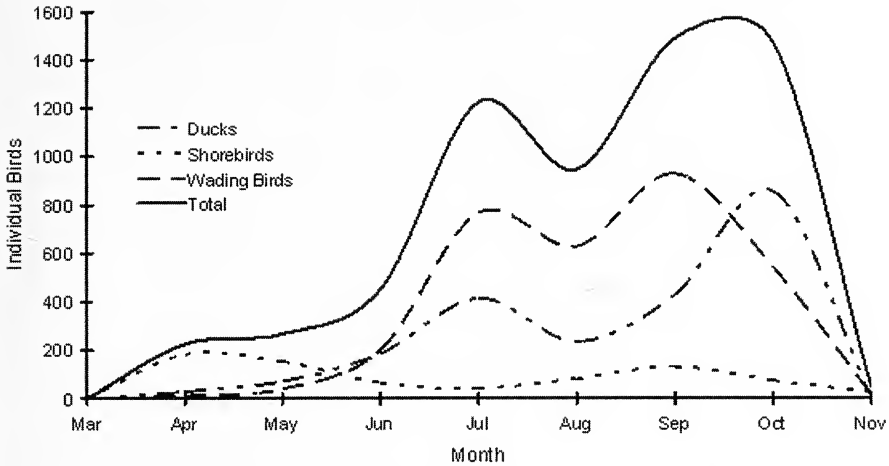


Figure 3. Number of individual birds present in EAA rice fields by guild during the 1998 rice-growing season.

shorebirds and waterfowl, it is unclear which of these most influenced abundance. While abundance peaks for shorebirds and waterfowl may have occurred as a result of natural spring and fall migration periods, it is also possible that field conditions were best suited for shorebirds during spring migration when shallow water and recently cleared soils attracted shorter-legged, substrate foragers. Similarly, ducks were most abundant during their fall migrations, which also coincided with availability of large expanses of open water in rice fields, a preferred habitat for foraging. Wading birds exhibited peak abundance beginning in June that may have resulted from northward movement from the Everglades at the close of the nesting season and the beginning of the rainy season, when prey are less concentrated in natural wetlands. However, wading birds were present in rice fields throughout the summer, with fluctuations in abundance corresponding more closely to rice field conditions.

Examination of abundance in a selected representative rice field (SF9), illustrates the interplay of migration and field conditions more clearly (Fig. 4). During the pre-planting stage when fields were cleared and not yet flooded, little bird activity took place. An initial increase in bird abundance coincided with flooding (Fig. 4, Point A). Shorebirds were the first guild to arrive following this initial flooding, suggesting that flooded fields with little vegetation were more attractive to shorebirds than cleared and dry fields, since both conditions were available during spring migrations. As rice matured and flood level was unchanged, total bird abundance fluctuated little (remaining around 20 birds/min/100 ha).

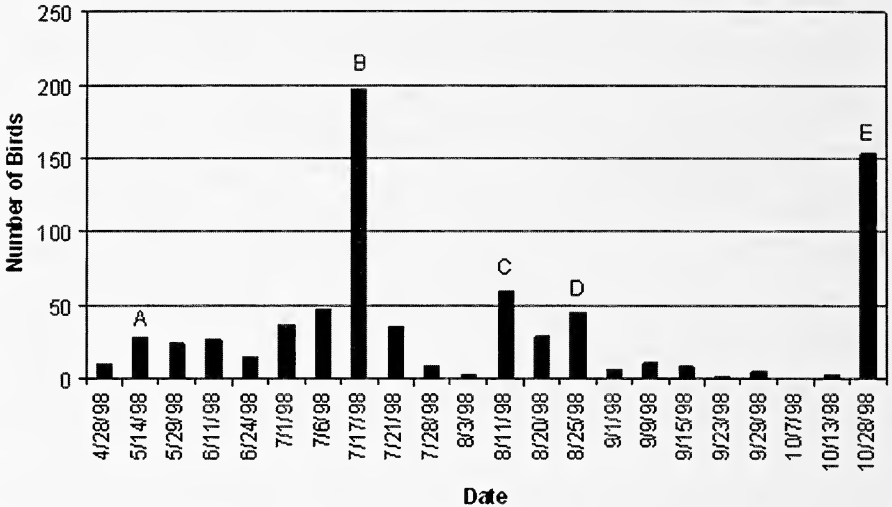


Figure 4. Total number of individuals of all guilds in a representative rice field (SF9) throughout the 1998 growing season. Each date represents a single sampling event. A = initial flood, B = drawdown, C = initial harvest, D = ratoon re-flood, E = final drawdown.

Bird abundance rose rapidly in mid-July during the initial drawdown period, when water is drained from fields in preparation for harvest (Fig. 4, Point B). Drawdown reduces water level in rice fields rapidly, generally taking less than a day to completely drain a field and reduce water levels in adjacent irrigation ditches. Aquatic organisms become highly concentrated in ditches and easy prey for foraging waterbirds. Hundreds of wading birds were frequently observed using irrigation ditches for foraging during drawdown. It is this great surge in abundance, long observed by EAA farmers, that initiated this study.

Soon after drawdown, bird abundance decreased rapidly. Unharvested fields of dry vegetation attracted few birds. Again, this indicates wading bird preferences for certain field conditions, since all field conditions were available for selection during the period of the study.

The next peak in bird abundance occurred during initial harvests after rice is extracted and while machinery is working the soil (Fig. 4, Point C). Prey items exposed during tilling result in a parade of foraging birds following behind machinery. In particular, Great Egrets and Cattle Egrets were most abundant in fields as tilling occurred.

After the initial harvest, this field was ratooned, resulting in a repeat of the entire cultivation cycle, although abbreviated to 2-3 months. The second flood (Fig. 4, Point D) and drawdown (Fig. 4, Point E) attracted a similar large number of birds.

While aquatic prey assemblages in the rice fields of the U.S. are poorly studied, rice fields in other areas provide indications of potential aquatic communities. Once Mediterranean fields are flooded, complex mature communities of aquatic prey become established through ecological succession, despite human induced alterations (Fores and Comin 1992). In some cases, rice fields have been assessed as preferable habitat for some species of herons in the Mediterranean, since they offer superior prey availability to natural areas and allow greater food intake rates (Fasola and Ruiz 1996).

Microhabitat availability was an important factor in waterbird use of rice fields, particularly edge habitat, which was used often by all guilds. The importance of edge habitat for birds in agriculture has been recognized in rice as well as other crops (Best et al. 1990, Maeda 2001, Perkins et al. 2000). Dry vegetation, such as that found on levees and at the edges of fields, was used by wading birds and primarily for resting and moving between other microhabitats. Open water, often associated with irrigation or field management in conjunction with the rice itself, was one of the microhabitats most frequently used by ducks. Fallow fields or bare soil can also be important habitat for many of the birds found in agriculture in this study (Best et al. 1990, Fujioka et al. 2001, Perkins et al. 2000). Variation in microhabitat availability between fields may be a result of varying management practices at separate fields. Peripheral vegetation, canal placement, and size and shape of irrigation ditches all vary between fields.

In Australian rice fields, cultivation schedules conflicted with breeding season of waterbirds (Richardson et al. 2001). As a result, increasing food needs of reproducing birds of each year do not correspond to the highest availability of prey items in rice fields. However, in the EAA, rice field cultivation schedules are currently beneficial to migrating, breeding, and foraging waterbirds of south Florida. Furthermore, it may be possible to increase benefits to waterbirds by making adjustments to EAA rice cultivation timing and practices. For example, because only a portion of the existing rice fields in any year are ratooned, hundreds of hectares of land are left fallow (Schueneman and Deren 2000). Increasing the number of ratooned fields would offer additional acreage of waterbird habitat and a greater number of overall draw-down events. In addition, although some sugarcane is left fallow after three crop rotations, it may not be rotated into rice until after six rotations (Lodge 1994). Rotating sugarcane fields into rice every three rotations would also increase acreage of rice field availability.

Before management recommendations can be made, however, further studies are necessary. Farming practices and timing, including use of chemicals and fertilizers and cultivation and tillage may adversely affect waterbirds in rice (Wyss 1996, O'Connor and Shrubbs

1986). A study of pesticide residues found sublethal levels of organochlorine and organophosphate pesticides within Fulvous Whistling-Ducks of the EAA (Turnbull et al. 1989b). Local traffic, harvest, and crop rotation also pose threats to birds in crops (O'Connor and Shrubbs 1986). Wyss (1996) found that Fulvous Whistling-Duck nests frequently failed since initiation occurred too close to harvests.

ACKNOWLEDGMENTS

We thank the Wedgeworth family and south Florida's Rice Council for financial support. For access to survey sites and data we thank Raoul Perdomo, Modesto Ulloa, Gerald Powell, and Pete Rosendahl of Florida Crystals, and Walter Parker and Carle Flori of US Sugar Corporation. This research was supported by the Florida Agricultural Research Experiment Station.

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BEACHED BIRD SURVEYS ON SHELL KEY, PINELLAS COUNTY, FLORIDA

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Abstract.—A twice monthly series of beached bird surveys has been established on Shell Key, Pinellas County, Florida in conjunction with the Tufts University SEANET program. The goal of SEANET is to provide information on potential ecological threats to seabird populations. Beached bird carcasses are also collected to assess the body burden of brevetoxin, the toxin associated with red tides caused by the toxic dinoflagellate, *Karenia brevis*, in the Gulf of Mexico. In this report we summarize the first 10 months of information on seabird mortality and the brevetoxin body burden for species commonly found on Pinellas County beaches.

Evidence for the impact of Harmful Algal Blooms (HABs or red tides) on sea and shorebird populations has been largely anecdotal until recently, when brevetoxin, a potent neurotoxin produced by the red tide dinoflagellate, *Karenia brevis*, was found in tissues of Double-crested Cormorants (*Phalacrocorax auritus*, Kreuder et al., 2002) and in the gastro-intestinal tract of Lesser Scaup (*Aythya affinis*, J. Landsberg, FWRI pers. comm.). Hundreds of Lesser Scaup were found dead in southwest Florida in March 2002. Since red tides in the eastern Gulf of Mexico are an annual occurrence (Steidinger et al. 1998), one would expect impacts on the avian community would be well documented. However, recent reviews by Shumway et al. (2003) and Landsberg (2002) supplement earlier studies by Quick and Hendersen (1974, 1975) and confirm that only a handful of publications exist about avian mortalities in connection with Florida West Coast red tides.

Given the difficulty and expense of conducting avian surveys at sea during a red tide bloom, a beach survey was established as an alternate method to obtain samples for brevetoxin analysis. This beach sur-

vey is part of a larger program called SEANET (Seabird Ecological Assessment Network; www.tufts.edu/vet/seanet) established by Mark Pokras, Rebecca Harris, and Florina Tseng at the Center for Conservation Medicine in the Tufts Cummings School of Veterinary Medicine. Aims of this program, as stated in their brochure, include “establishing links between marine ecological health and human health by monitoring seabird mortality. Numerous threats contribute to mortality, including disease, fisheries operations, organic pollutants, heavy metals, offshore development (potentially wind farms), and oil pollution. These risks to seabirds also threaten the coastal and marine environments used by humans for respite and ecological services, such as food production, waste elimination, and flood protection. Pinpointing areas of concern enables SEANET and our collaborators to focus on specific causes of mortality or ecological degradation, and propose policy and conservation measures to counteract the threats.”

Beached bird surveys are an important monitoring tool that has been used throughout the world for decades to detect threats to marine and coastal birds and the larger ecosystems upon which they rely (e.g., Camphuysen and Heubeck 2001). Since HABs are an ecosystem level event in the Gulf of Mexico (Steidinger et al. 1998) and the growth and maintenance of these blooms may be related to increased coastal eutrophication due to estuarine nutrient fluxes (Vargo et al. 2004), establishing this survey was a natural connection for the SEANET program. Although the main focus area of the SEANET program is in the Northeastern states, expansion into the Southeastern U.S. is underway. The beach transect established with the help of the Pinellas County Environmental Management staff at Shell Key in Pinellas County is the first such study.

METHODS

Surveys for beached birds of all species were done twice monthly along the western shore of Shell Key Preserve that is located off the coast of Pinellas County, Florida (Fig. 1). The route is approximately 2.6 km long starting at the north end of the island at 27°40.564 N latitude, 82°44.376 W longitude and ending at the south end of the island at 27°39.273 N, 82°44.781 W (see Fig. 1). The average width of the beach is estimated as 30 m, so the total area covered is approximately 0.078 km². All surveys follow protocols established by the SEANET Program (Harris et al., in press) and are usually conducted in conjunction with twice monthly nesting and winter bird surveys done by Pinellas County Environmental Management (PCEM) staff and volunteers. Copies of all data forms are sent to Harris for incorporation into the SEANET database. A hand-held Garmin GPS III was used to determine the location of each carcass.

An initial survey was done on 7 March 2004 to determine the transect length. Typically, surveys are done from north to south, but several were done in the opposite direction when PCEM staff provided access to the island.

Live bird identifications and counts (data not presented) were conducted only on the initial transect whereas dead, beached birds were counted during both the southward

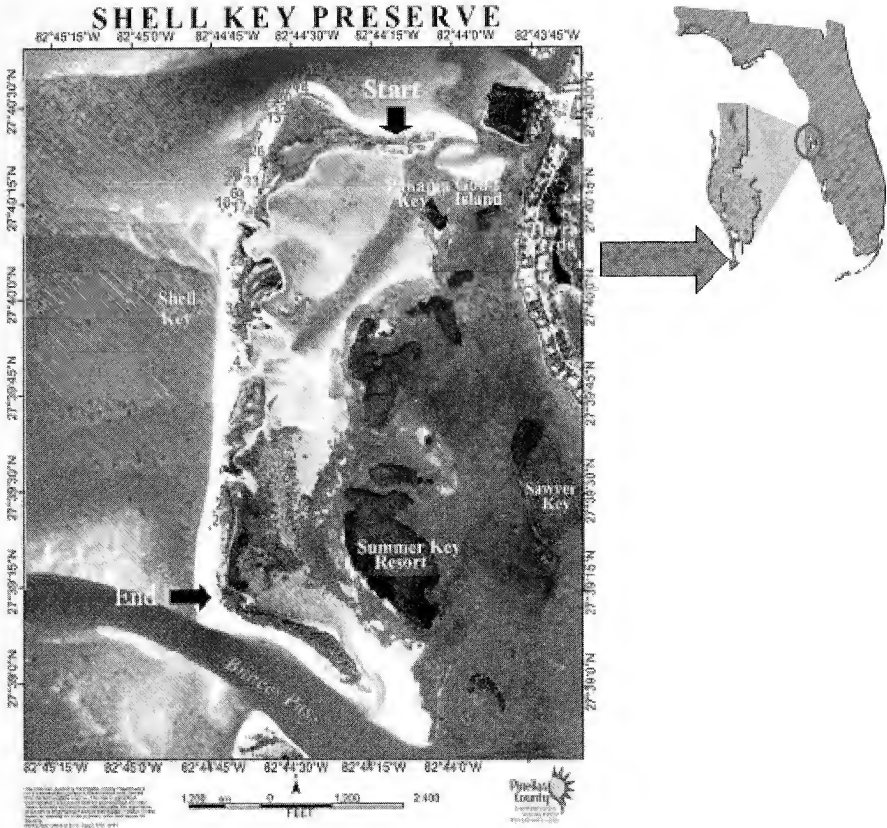


Figure 1. The location of Shell Key Preserve, Pinellas County, Florida. The start and end of the beach transects are noted as are the locations of all beached bird carcasses found during the 2004 beach surveys.

walk and the return trip. Normally the walk south was done along the high tide line while the return trip was done along the edge of vegetation on the upper beach. During nesting season, no intrusions were made into the nesting area so distances from the vegetation often overlap with the initial southern survey. Every effort was made to minimize disturbance of roosting and nesting birds.

Dead bird carcasses that still contained tissues and organs were collected and returned to the Florida Wildlife Conservation Commission, Florida Wildlife Research Laboratory, for necropsy. Organs collected for brevetoxin analysis (Naar et al. 2002) included kidney, liver, and stomach contents with brain and lung tissue archived for future analyses. Feathers were also collected for future analyses that include stable isotopes.

RESULTS AND DISCUSSION

Twelve species are known to nest on Shell Key and include Black Skimmer (*Rhynchops niger*), Least Tern (*Sterna a. antillarum*), Royal Tern (*Sterna maxima*), American Oystercatcher (*Haematopus palliatus*),

Willet (*Catoptrophorus semipalmatus*), Snowy Plover (*Charadrius alexandrinus*), Wilson's Plover (*C. wilsonia*), and Laughing Gull (*Larus atricilla*). A complete description of the Preserve and its Environmental Management Plan can be found at: <http://www.co.pinellas.fl.us/bcc/Environment/pagesHTML/envLands/el7000.html>

Thirty-five bird carcasses were found on surveys conducted from March 2004 through November 2004 (Table 1). Surveys were not done in September and December. The season average is therefore 2.43 carcasses per survey which, based on an area of approximately 0.078 km², extrapolates to 31 birds/km². Based on linear distance traveled, the 2004 Shell Key deposition rate was 0.96 birds per km. This rate is considerably higher than 0.21 birds per km on southern Massachusetts's beaches in 2003-2004 (Harris et al., in press), but is in line with the deposition rate of 1.00 bird per km found on Florida's Gulf Coast from 1975-1983 (Simons 1985). In our study Laughing Gulls comprised approximately 63% of the total, with Black Skimmers and Brown Pelicans (*Pelecanus occidentalis*) adding another 11% and 9%, respectively. Numbers of bird carcasses increased during late summer and fall (Fig. 2) largely due to increased numbers of dead Laughing Gulls (Table 1). Eight of the 35 birds, all Laughing Gulls, showed signs of predation as the cause of death. These birds were found during August through November surveys, a time when migrating raptors are common along the southwest Florida coasts. Peregrine Falcons (*Falco peregrinus*), Merlins (*Falco columbarius*), Sharp-shinned and Cooper's Hawks (*Accipiter striatus* and *A. cooperii*) and a pair (male and female) of Northern Har-

Table 1. Shell Key Beached Bird Survey, 2004 summary data.

| Date | # Beached birds | Species |
|-------------|-----------------|--|
| 28 March | 1 | Green Heron (<i>Butorides virescens</i>) |
| 18 April | 1 | Common Loon (<i>Gavia immer</i>) |
| 29 April | 2 | Black Skimmer |
| 12 May | 2 | 1 Brown Pelican ¹ , 1 Black Skimmer |
| 25 May | 0 | |
| 22 June | 2 | 1 Black Skimmer, 1 Laughing Gull |
| 11 July | 2 | 1 Laughing Gull, 1 Royal Tern ¹ |
| 21 July | 2 | 1 Laughing Gull, 1 live Laughing Gull (died enroute) |
| 1 August | 5 | 4 Laughing Gulls, 1 Brown Pelican |
| 11 August | 3 | 2 Laughing Gulls, 1 Brown Pelican |
| 22 August | 4 | 2 Laughing Gulls, 2 Royal Terns ¹ |
| 3 October | 5 | 5 Laughing Gulls (took third for necropsy ¹) |
| 17 October | 4 | 3 Laughing Gulls, 1 unidentified |
| 14 November | 2 | 2 Laughing Gulls |

¹Bird carcass transferred to FWRI for necropsy and brevetoxin analysis.

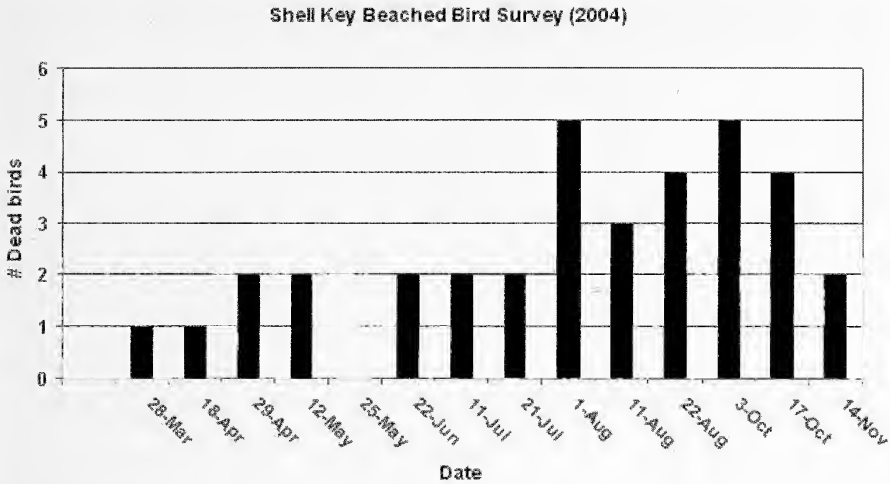


Figure 2. The seasonal distribution of beached bird carcasses found during the 2004 Shell Key Preserve surveys.

riers (*Circus cyaneus*) were seen on Shell Key during the fall months (pers. comm., Shell Key volunteers).

A Laughing Gull found on 22 June and a Brown Pelican found on 11 August were the only two birds with fishing gear problems. The Laughing Gull was captured alive with a hook in its bill and monofilament line entangling its wings. After removing the line and hook it was checked for injury, found to be healthy, and released. The Brown Pelican was in an advanced state of decomposition and was totally entangled in monofilament fishing line.

Six of the 35 bird carcasses were found next to one or more ghost crab (*Ocypode quadrata*) burrows. In each case crab tracks were seen leading directly to the carcass, suggesting that this crab species, which is a scavenger, uses dead birds as a resource. Most carcasses were found along the northwest coast of Shell Key (Fig. 1). The area around this northwest point is a roosting area for many species of birds and is also a nesting zone for Black Skimmers and other species. Tidal currents converge around this point so it may also be a depositional site for carcasses that are carried onto the beach from other areas.

Five carcasses were fresh enough to contain sufficient organs and tissues for brevetoxin analysis. The ELISA method we used detects all forms of brevetoxin and has a limit of detection of approximately 10 ng/g of tissue. Most samples were below the detection limits of the assay (Table 2) but tissues from two Royal Terns and the kidney from one Laughing Gull returned positive results. The positive values in Table 2 should be viewed with caution as the results have not been analytically con-

Table 2. Levels of brevetoxin (PbTx) found in various tissues of bird carcasses collected on Shell Key during the 2004 beach surveys.

| Species | Date collected | Tissue | PbTx (ng/g) |
|---------------|----------------|----------------------------------|-------------------------|
| Brown Pelican | 12 May | Brain, lung, spleen | |
| | | Stomach contents, kidney | All < DL |
| Royal Tern | 11 July | Kidney, liver, testes, heart | All < DL |
| | | Muscle | 14.1 |
| | | Stomach lining | 32.5 |
| | | Intestinal lining | 26.1 |
| | | Lung | 33.1 |
| Laughing Gull | 21 July | All tissues and stomach Contents | < DL |
| Royal Tern | 22 August | Muscle, viscera | < DL |
| | | Liver | 26.3(40.5) ¹ |
| | | Stomach lining | 14.0 |
| | | Kidney | 12.5 |
| Laughing Gull | 3 October | Intestinal contents, gonads | |
| | | Heart, stomach, muscle, lung | All <DL |
| | | Kidney | 16.2 |

¹Replicate samples.

firmed, but they can be viewed as minimal values suggesting a baseline body burden. Since we did not have a red tide bloom in the area throughout the 2004 survey period, any body burden of toxin in seabirds would have to result from accumulation in prey based on background levels (1000 cells per liter; Tester and Steidinger 1997) of *Karenia brevis*, or from prey items carrying a long-term body burden of toxin from the 2003 red tides (L. Flewelling, pers. comm.). Since brevetoxin is a lipid soluble toxin (Baden 1983) it could bio-accumulate and persist in fish and other organisms, but its duration or potency in this form is still unknown.

We speculate that if prey items carry a long-term body burden of brevetoxin, then avian migrants, which may also suffer from exposure to other types of phycotoxins (saxitoxin, domoic acid) in their home regions, may become further debilitated upon exposure to local Florida red tides. We plan to continue the SEANET surveys over the foreseeable future, and, if additional volunteers are found, expand the program to other beaches along the Florida Gulf coast.

ACKNOWLEDGMENTS

Sincere thanks to the PCEM staff (Cathy Flegel, Kristen Penney Sommers, and Pam Leasure) for help in establishing the survey and in providing access via County boats. Also thanks to the "Twiners"—the dedicated group of volunteers who check the nesting colonies and repair twine and stakes twice monthly during nesting season; to Joyce King and other volunteers from the St. Petersburg Audubon Society for assistance in identifications and counts during the winter bird surveys; to Captain Alva Sholty, owner

and operator of the Shell Key Shuttle based at the Merry Pier, Pass-A-Grill, Florida for providing transportation to the island without charge; to Barbara Ranck for coordinating monthly schedules; and to Leanne Flewelling, FWRI/FFWCC, for assistance with brevetoxin analyses and comments on the manuscript.

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FIELD OBSERVATIONS

Summer Report: June-July 2005.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32: 7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: CP = county park, EOS = end of season, NP = national park, NSRA = North Shore Restoration Area, NWR = national wildlife refuge, RA = restoration area, SP = state park, SRA = state recreation area, STF = sewage treatment facility, and N, S, E, W etc., for compass directions. Bold-faced species denote birds newly reported or verified in Florida, or record counts.

SUMMARY OF THE SUMMER SEASON

This season generally was wetter and hotter than typical. Hurricane *Dennis* made landfall as a Category 3 storm between Pensacola Beach and Navarre on 10 July, after battering Cuba as a Category 4 storm on 8 July. Not surprisingly, many reports of storm-driven pelagics were received, including a few inland to Gainesville. There was a notable die-off of Greater Shearwaters along the Atlantic coast, which was also noted in states north of Florida. The mortality apparently was the result of starvation of yearlings, and has been noted off the Carolinas in previous years (*vide* David S. Lee). FOSRC rarities reported this season were the Masked Duck and state-first Varied Bunting at Sarasota, potentially “pure” Scarlet Ibis at Fort Myers, and White-faced Ibis at Tallahassee.

Table 1. Results of pelagic trips off Miami 25 Jun (R. Torres, R. Urgelles), Marathon 25 Jun (L. Manfredi, B. Mulrooney, J. Boyd et al.), up to 44 nm off Ponce Inlet 27 Jul (B. Wallace), and up to 100 nm off Ponce Inlet 29 Jul (B. Wallace).

| SPECIES | MIAMI | MARATHON | PONCE INLET | PONCE INLET |
|--------------------------|-------|----------|-------------|-------------|
| CORY'S SHEARWATER | 17 | 50 | 4 | 40 |
| GREATER SHEARWATER | 1 | 150 | 0 | 2 |
| AUDUBON'S SHEARWATER | 33 | 1 | 0 | 20 |
| WILSON'S STORM-PETREL | 21 | 1 | 10 | 4 |
| BAND-RUMPED STORM-PETREL | 0 | 1 | 0 | 0 |
| BROWN BOOBY | 0 | 2 | 0 | 0 |
| RED PHALAROPE | 0 | 0 | 1 | 3 |
| BRIDLED TERN | 96 | 40 | 8 | 15 |
| SOOTY TERN | 40 | 5 | 2 | 300 |
| BROWN NODDY | 3 | 0 | 0 | 4 |

SPECIES ACCOUNTS

- BLACK-BELLIED WHISTLING-DUCK: 10 at Lake Apopka NSRA (*Orange*) 5 Jun (H. Robinson); 15 along US-98 at Okeechobee (*Okeechobee*) 5 Jun (M. Korosy et al.); 20, including 5 chicks, at Orlando Wetlands Park (*Orange*) 12 Jun—some adults examined hollow palm snags (B. Anderson, C. Pierce); 48 at *Polk* phosphate mines 19 Jun (P. Timmer, C. Geanangel); 11 at Fort Walton Beach STF (*Okaloosa*) 21 Jun (B. Duncan); 1 at Holiday (*Pasco*) 5 Jul (R. Siedel).
- MUTE SWAN: 1 pair at Holiday (*Pasco*) produced three cygnets by 18 Jun (J. McKay, K. Tracey).
- BLUE-WINGED TEAL: 1 at St. Marks NWR (*Wakulla*) 2-5 Jun (A. Bankert, D. Simpson); 2 at Lake Apopka NSRA 26 Jun (H. Robinson); 2 broods produced at Fort Walton Beach STF 27 Jun-EOS—water levels were high as a result of 24 inches of rain in Apr (B. Duncan).
- REDHEAD: 1 at St. Marks NWR 1-3 Jun (A. Bankert, D. Simpson).
- RING-NECKED DUCK: 1 male at Lake Apopka NSRA 24 Jun (B. Anderson, A. Vinokur).
- SCAUP SPECIES: 1 near Alafia Bank (*Hillsborough*) 19 Jun (T. Mann).
- GREATER SCAUP: 1 at Fort Walton Beach STF 15 Jun-5 Jul (B. Duncan).
- LESSER SCAUP: 1 at Fort Walton Beach STF 15-27 Jun (B. Duncan, D. Ware).
- BUFFLEHEAD: 1 at Fort Walton Beach STF 15 Jun-5 Jul (B. Duncan).
- RED-BREASTED MERGANSER: 1 female at Gullivan Key, Ten Thousand Islands NWR (*Collier*) 14 Jun (T. Doyle).
- *MASKED DUCK: 1 male at Sarasota 6-7 Jun (T. Elliott et al.).
- COMMON LOON: 1 in basic plumage at St. Marks NWR 1 Jun (D. Simpson); 1 in alternate plumage at Lake Ella (*Leon*) 3-28 Jun (R. Lengacher, G. Menk); 1 in alternate plumage at St. Teresa (*Franklin*) 20 Jun (J. Murphy).
- PIED-BILLED GREBE: 10 sang in brackish marshes at Ten Thousand Islands NWR 7-13 Jun (T. Doyle).
- LARGE SHEARWATER SPECIES: 140 flew S past John U. Lloyd SP, Fort Lauderdale (*Broward*) 24 Jun (M. Berney).
- CORY'S SHEARWATER: 8 at Melbourne Beach (*Brevard*) 23 Jun (A. Bankert); 5 at Boynton Inlet (*Palm Beach*) 23 Jun, and 15 there 24 Jun (B. Hope); 60 flew S past Lloyd SP 24 Jun (M. Berney); 3 found on *Volusia* beaches 25 Jun (*vide* M. Brothers).
- GREATER SHEARWATER: 291 found (mostly dead) on *Volusia* beaches 21-27 Jun (*vide* M. Brothers; about 50 specimens to University of Florida, *vide* T. Webber); 40+ at Melbourne Beach 23 Jun (A. Bankert); 1 found dead at Amelia Island (*Nassau*) 24 Jun (P. Leary); 1 at Boynton Inlet 24 Jun (B. Hope); 1 found dead at Vilano Beach (*St. Johns*) 26 Jun (D. Reed); 6 found dead at Canaveral National Seashore (*Brevard*) 26 Jun (A. Vinokur, 5 specimens to University of Central Florida).
- SOOTY SHEARWATER: 1 at Ponce Inlet (*Volusia*) 21 Jun (*vide* M. Brothers, to University of Florida, *vide* T. Webber); 1 at Indian Harbor Beach (*Brevard*) 20 Jul (to University of Florida, *vide* T. Webber)
- AUDUBON'S SHEARWATER: 2 at Melbourne Beach 23 Jun (A. Bankert); 1 found alive at Vero Beach (*Indian River*) 28 Jul (B. Wagner).
- WILSON'S STORM-PETREL: 2 ca. 28 km off Hillsboro Inlet (*Broward*) 19 Jun (M. Berney).
- LEACH'S STORM-PETREL: 1 at Melbourne Beach 23 Jun (A. Bankert).
- BAND-RUMPED STORM-PETREL: 1 ca. 32 km off Hillsboro Inlet 19 Jun (M. Berney); 1 observed from Gulf Breeze (*Santa Rosa*) 6 Jul during Tropical Storm *Cindy* (B. Duncan, L. Duncan et al.).
- WHITE-TAILED TROPICBIRD: single adults observed 7 hours apart off Boynton Beach Inlet 9 Jul (M. Berney, B. Hope).
- MASKED BOOBY: 1 found at Panama City (*Bay*) 2 Jun later was released (N. Evou); singles at Boynton Inlet 11 & 24 Jun (B. Hope).

- BROWN BOOBY: 1 at Melbourne Beach 23 Jun (A. Bankert).
- NORTHERN GANNET: about 30 (1 adult) at St. Marks NWR 1 Jun (D. Simpson); 1 at Boynton Inlet 12 Jun (B. Hope); 1 at St. Teresa 19 Jun (J. Murphy); 1 at Alligator Harbor (*Franklin*) 11 Jul (J. Murphy); 1 immature on the water at Werner-Boyce Salt Springs SP, Port Richey (*Pasco*) 20 Jul (K. Tracey).
- AMERICAN WHITE PELICAN: 1 at Merritt Island NWR (*Brevard*) 3 Jun (A. Vinokur); 450 at *Polk* mines 23 Jul (P. Timmer, C. Geanangel).
- BROWN PELICAN: 1 adult at Tallahassee 2 Jun (P. McTarsney).
- MAGNIFICENT FRIGATEBIRD: 634 at a roost at ABC Islands, Marco Island (*Collier*) 11 Jun, and 663 there 23 Jul (T. Doyle et al.); 2 at St. Marks NWR 12 Jun (B. Phelan), and 9 there 16 Jul (M. Keys); 1 over S Merritt Island (*Brevard*) 3 Jul (D. Freeland); 150, almost all juveniles, off Honeymoon Island SP (*Pinellas*) 3 Jul (K. Tracey); 5 at Newnans Lake (*Alachua*) 10 Jul (R. Rowan, J. Bryan et al.); 1 over Micanopy (*Alachua*) 10 Jul (G. Stoccardo, C. Read); 2 at Ocala (*Marion*) 10 Jul (A. Luzader); 15 at Brooksville (*Hernando*) 10 Jul (K. Wood); 1 over Lorida (*Highlands*) 10 Jul (P. Gray); 50 at Alligator Harbor 11 Jul (J. Murphy); 3 at Mexico Beach (*Bay*) 25 Jul (E. Woodruff).
- LEAST BITTERN: 2 in song in brackish marshes at Ten Thousand Islands NWR (*Collier*) 7-13 Jun (T. Doyle); 28 at Lake Apopka NSRA 3 Jul (H. Robinson).
- GREAT BLUE HERON: 1 "Wurdemann's Heron" at Gulf Breeze 28-30 Jun (B. Duncan).
- REDDISH EGRET: 1 at Gainesville 3 Jun-11 Jul (J. Bryan, B. Carroll et al.); 1 juvenile at St. Vincent NWR 8 Jun, and 3 juveniles there 20 Jul (T. Lewis); 1 dark morph at Alligator Point (*Franklin*) 15 Jun (J. Dozier); 1 at St. Marks NWR 8 Jul (T. Curtis).
- *SCARLET IBIS: 1 bright scarlet adult at the rookery at Lakes Park, Fort Myers (*Lee*) during Jun (F. & S. Moore, photo to FOC).
- *WHITE-FACED IBIS: 1 adult at Springhill Road STF (*Leon*) 5 Jun (T. Curtis).
- GLOSSY IBIS: 130 at a rookery at Hudson (*Pasco*) 30 Jul (K. Tracey).
- ROSEATE SPOONBILL: 7 at *Polk* mines 19 Jun, and 10 there 10 Jul (P. Timmer, C. Geanangel); 2 at Fort Walton Beach STF 21 Jun (B. Duncan); 1 at Homestead (*Miami-Dade*) 12 Jul (R. Diaz).
- OSPREY: 102 at Lake Apopka NSRA 3 Jul (H. Robinson).
- SWALLOW-TAILED KITE: 25 E of Green Cove Springs (*Clay*) 22 Jun (L. McCullagh); 856 at Lake Apopka NSRA 17 Jul (H. Robinson).
- WHITE-TAILED KITE: 1 at Kissimmee Prairie Preserve SP (*Okeechobee*) 17 Jul (R. Bjork et al.).
- SNAIL KITE: 1 pair nested and apparently fledged 1 young (last seen as a large nestling 12 Jul) at Inverness Pool (*Citrus*) 6 Jun-12 Jul (F. Aumack); 1 along Peavine Road (*Okeechobee*) 24 Jul (A. Darrah).
- MISSISSIPPI KITE: 1 at Merritt Island NWR 1-4 Jun (T. Dunkerton, photos to FOC); 1 pair at S Jacksonville (*Duval*) 7 Jun-17 Jul nested unsuccessfully (J. Cocke); duos E of Green Cove Springs 15 Jun and 17 Jul, and 5 there 22 Jun (L. McCullagh); 5 N of Belleview (*Marion*) 20 Jun (S. Benedetto).
- BALD EAGLE: 1 nestling fledged from a very late nesting attempt at Hudson in early Jul (K. Tracey).
- COOPER'S HAWK: 1 pair in St. Petersburg (*Pinellas*) fledged 2 young and the adults built a second nest (that was quickly deserted when the female disappeared) 4 Jun (E. Haney)—this may be the first report anywhere on double-brooding; 1 juvenile at Golden Gates Estates (*Collier*) 13 Jun (T. Doyle); 14 at Lake Apopka NSRA 31 Jul (H. Robinson); at least 3 nest attempts in Cape Coral (*Lee*) this summer (*vide* C. Ewell); 1 juvenile summered at W Kendall (*Miami-Dade*; J. Boyd).
- SHORT-TAILED HAWK: 2 or 3 dark morphs at Archbold Biological Station (*Highlands*) 2 Jul (B. Pranty et al.); singles at Lake Apopka NSRA 19 Jun and 31 Jul (H. Robinson); 1 juvenile light morph at Casselberry (*Seminole*) 21 Jul (A. Vinokur); 1 dark morph at Wekiwa Springs SP (*Orange*) 23 Jul (C. Pierce).
- AMERICAN KESTREL: 1 at Lake Apopka NSRA 26 Jun (H. Robinson).

- BLACK RAIL: 1 at *Polk* mines 10 Jul (P. Timmer, C. Geanangel).
KING RAIL: 175 at Lake Apopka NSRA 31 Jul (H. Robinson).
AMERICAN COOT: 2 at Lake Jackson 5 Jun, and 3 others there 25 Jun; no breeding evidence was observed (G. Menk); 1 pair at Holiday produced two chicks by 18 Jun (J. McKay, K. Tracey); 2 pairs fed young at Lake Woodruff NWR (*Volusia*) 25 Jun (S. Benedetto).
LIMPKIN: 1 at Archbold Biological Station 14 Jun (G. Woolfenden).
BLACK-BELLIED PLOVER: 1 in alternate plumage with 6 in basic plumage at Little Estero Lagoon (*Lee*) 21 Jun (C. Ewell); 1 at Crandon Beach (*Miami-Dade*) 30 Jun (R. Diaz).
WILSON'S PLOVER: 1 at Crandon Beach 30 Jun (R. Diaz); 100+ at Bird Islands, Nassau Sound (*Duval*) 12 & 24 Jul (P. Leary); 65 at Huguenot Memorial Park (*Duval*) in Jul (R. Clark).
SEMIPALMATED PLOVER: 3 at Crandon Beach 30 Jun (R. Diaz); 70 at Merritt Island NWR 29 Jul (D. Freeland).
PIPING PLOVER: 1 at Crandon Beach 20 Jul (R. Diaz); 2 at Bird Islands 24 Jul (P. Leary).
AMERICAN OYSTERCATCHER: 3 adults and 23 juveniles at Little Estero Lagoon 5 Jul included 2 banded in North Carolina and 1 in Virginia (C. Ewell).
AMERICAN AVOCET: 1 at Snake Bight, Everglades NP (*Monroe*) 13 Jun (A. Bankert); 32 at *Polk* mines 23 Jul (P. Timmer, C. Geanangel).
GREATER YELLOWLEGS: 1 at Fort Walton Beach STF 15 Jun (B. Duncan); 1 at Springhill Road STF 5 Jul (G. Menk).
LESSER YELLOWLEGS: up to 14 at Fort Walton Beach STF 21-27 Jun (B. Duncan); 1 in mid-*Pinellas* 9 Jul (J. Fisher); 1 at Lake Apopka NSRA 11 Jul (H. Robinson); 1 ca. 65 nm off Ponce Inlet 29 Jul (B. Wallace).
SOLITARY SANDPIPER: 1 at Lake Apopka NSRA 23 Jul (H. Robinson); 1 over Archbold Biological Station 25 Jul (G. Woolfenden).
SPOTTED SANDPIPER: 6 at Springhill Road STF 21 Jul (G. Menk); 1 at Spring Hill (*Hernando*) 24 Jul (A. & B. Hansen); 6 at Merritt Island NWR 28 Jul (T. Dunkerton).
WHIMBREL: 1 flew N past Playalinda Beach (*Brevard*) 3 Jun (A. Vinokur); 1 at Honey-moon Island SP (*Pinellas*) 10 Jul (E. Kwater); 1 at Green Key 28 Jul (K. Tracey).
MARBLED GODWIT: 1 at Fort Walton Beach STF 5 Jul (B. Duncan); 7 in alternate plumage at Little Estero Lagoon 14 Jul (C. Ewell); 7 at Fred Howard Park, Tarpon Springs (*Pinellas*) 18 Jul (K. Tracey).
RUDDY TURNSTONE: 7 at Crandon Beach 30 Jun (R. Diaz).
RED KNOT: 150 in basic plumage and 1 in alternate plumage at Little Estero Lagoon 5 Jul (C. Ewell); 120 (including 1 banded in Argentina) at Bird Islands 24 Jul increased to 700 (including 2 banded in Chile) by the end of Jul (P. Leary).
SANDERLING: 4, including 1 in alternate plumage, at Crandon Beach 4 Jul (R. Diaz).
SEMIPALMATED SANDPIPER: 4 at Springhill Road STF 11 Jul (G. Menk); 1 in alternate plumage at Little Estero Lagoon 14 Jul (C. Ewell).
SEMIPALMATED/WESTERN SANDPIPERS: 160 in basic plumage at Little Estero Lagoon 5 Jul (C. Ewell).
WESTERN SANDPIPER: 3 in alternate plumage at Little Estero Lagoon 5 Jul (C. Ewell).
LEAST SANDPIPER: 2 at Springhill Road STF 5 Jul (G. Menk); 4 at Lake Apopka NSRA 17 Jul (H. Robinson); 8500 at *Polk* mines 23 Jul (C. Geanangel, P. Timmer).
WHITE-RUMPED SANDPIPER: 5 at Fort De Soto Park (*Pinellas*) 1-2 Jun (L. Atherton et al.); 11 at Fort Walton Beach STF 15 Jun (B. Duncan).
PECTORAL SANDPIPER: 1 at Fort Walton Beach STF 15 Jun (B. Duncan); 80+ near Belle Glade (*Palm Beach*) 31 Jul (M. Berney).
DUNLIN: 1 at Fort De Soto Park 1 Jun (A. Bankert, D. Simpson); 1 at St. Marks NWR 4-5 Jun (D. Simpson, A. Bankert).
STILT SANDPIPER: 1 at Fort Walton Beach STF 5 Jul (B. Duncan); 2 at *Polk* mines 23 Jul (P. Timmer, C. Geanangel).

- SHORT-BILLED DOWITCHER: 36 in basic plumage at Little Estero Lagoon 21 Jun, and 125 (100 in basic plumage) there 6 Jul (C. Ewell); 1 in alternate plumage at Crandon Beach 8 Jul (R. Diaz).
- RED-NECKED PHALAROPE: 2 at Fort Walton Beach STF 21 Jun-5 Jul (B. Duncan, D. Ware).
- LAUGHING GULL: 8000, including fledged young, at Huguenot Park in Jul (R. Clark).
- LESSER BLACK-BACKED GULL: 2 immatures at Crandon Beach 4 Jul (R. Diaz); up to 6 at Huguenot Park all Jul (R. Clark).
- GREAT BLACK-BACKED GULL: 3 immatures at Crandon Beach 4 Jul (R. Diaz).
- GULL-BILLED TERN: 2 at Lloyd SP 11 Jun (M. Berney); up to 4 at *Polk* mines 19 Jun-23 Jul (P. Timmer, C. Geanangel); 1 at Lake Apopka NSRA 20 Jul (H. Robinson).
- CASPIAN TERN: 1 at Lake Apopka NSRA 5 Jun (H. Robinson).
- ROYAL TERN: 1100, including 40+ chicks, at Huguenot Park in late Jul (R. Clark).
- SANDWICH TERN: 1 at Crandon Beach 16 Jul (R. Diaz); 200 at Bird Islands 24 Jul (P. Leary).
- ROSEATE TERN: 1 at Lloyd SP 11 Jun (M. Berney); 1 at Boynton Inlet 12 Jun (B. Hope).
- COMMON TERN: up to 10 at Bald Point 9 Jun-4 Jul (J. Dozier, J. Murphy); 1 at Boynton Inlet 12 Jun (B. Hope); 2 at Huguenot Park 1 Jul (R. Clark); 55 at *Polk* mines 10 Jul (P. Timmer, C. Geanangel); 1 at Boynton Inlet 10 Jul (R. Diaz); 1 in basic plumage at Altamonte Springs (*Seminole*) 13 Jul (A. Vinokur).
- ARCTIC TERN: 1 at Boynton Inlet 11 Jun (B. Hope).
- FORSTER'S TERN: 1 at Gainesville 11 Jul (C. Lockwood); 920 at *Polk* mines 23 Jul (P. Timmer, C. Geanangel); 1 at Lake Apopka NSRA 31 Jul (H. Robinson).
- LEAST TERN: 30 at a Publix supermarket roof at Tallahassee 5 Jun (G. Menk); 274 at *Polk* mines 19 Jun (P. Timmer, C. Geanangel); up to 225 at Key Biscayne (*Miami-Dade*) 15-21 Jul (R. Diaz).
- BRIDLED TERN: 2 ca. 20 km off Hillsboro Inlet (*Broward*) 19 Jun (M. Berney); 130+ from Boynton Beach Inlet 9 Jul (M. Berney, B. Hope et al.); 2 at Boynton Inlet 10 Jul (R. Diaz); 1 at Alligator Harbor 10 Jul, and 3 there 11 Jul (J. Murphy); 1 at Jupiter Inlet Colony (*Palm Beach*) 11 Jul (J. & L. Hailman); 4 at Alligator Point 12 Jul (J. Murphy).
- SOOTY TERN: 1 at Lake Apopka NSRA 11 Jun (H. Robinson); 1 found on a *Volusia* beach 25 Jun (*vide* M. Brothers); 45 at Pensacola Beach (*Escambia*) 6 Jul (L. Catterton et al.); 100+ from Boynton Beach Inlet 9 Jul (M. Berney, B. Hope et al.); 2 off Crandon Beach 9 Jul (R. Diaz); 11 at Alligator Harbor 10 Jul, and 24 there 11 Jul (J. Murphy); 2 at Newnans Lake 10 Jul (S. Collins, G. Parks); 1 at Honeymoon Island SP 10 Jul (E. Kwater); 5-6 at Boynton Inlet 10 Jul (R. Diaz); 1 at Tallahassee 11 Jul (M. Smith); 12 at Alligator Point 12 Jul (J. Murphy); 1 at Ocala (*Marion*) 13 Jul (to University of Florida, *vide* T. Webber); 2 salvaged at the Apalachicola Bay Bridge (*Franklin*) 14 Jul (T. Lewis, specimens to University of Florida).
- BLACK TERN: 1 at Bald Point 4 Jul (J. Murphy); 2 juveniles at Springhill Road STF 11 Jul (G. Menk); 1 juvenile at Alligator Point 27 Jul (R. McGregor); 1 at Merritt Island NWR 29 Jul (D. Freeland).
- BROWN NODDY: 1 at Indiatlantic (*Brevard*) 12 Jun (to University of Florida, *vide* T. Webber); 2 at Boynton Beach Inlet 9 Jul (M. Berney, B. Hope et al.); 6 at Boot Key (*Monroe*) 9 Jul (A. Wilson); 1 at Lloyd SP 10 Jul (R. Diaz).
- BLACK SKIMMER: 1 at Orlando Wetlands Park 12 Jun (B. Anderson, C. Pierce); 690 at *Polk* mines 10 Jul (P. Timmer, C. Geanangel); 300 at Bird Island 24 Jul—the breeding colony was washed out by spring tides (P. Leary); 4 at Plantation (*Broward*) ca. 20 km inland 30 Jul (M. Berney).
- WHITE-CROWNED PIGEON: 68 at Southern Glades Wildlife and Environmental Area (*Miami-Dade*) 12 Jul (R. Diaz).
- PEACH-FACED LOVEBIRD: 2 at St. Petersburg Beach (*Pinellas*) in Jun (*vide* R. Smith).
- BLACK-HOODED PARAKEET: 3 at New Port Richey (*Pasco*) 17-18 Jul (R. Smart).
- WHITE-WINGED DOVE: 29 at Brandon (*Hillsborough*) 20 Jul (D. Powell).
- BURROWING OWL: 19 at Kissimmee Prairie Preserve 13 Jul (P. Miller).

- WHIP-POOR-WILL: 1 heard singing at Bald Point 5 Jun, and one heard and another seen there 7-16 Jun (J. Dozier).
- BELTED KINGFISHER: 1 flew S past St. Marks NWR 8 Jun (J. Dozier); 1 at Ocklawaha (*Marion*) 30 Jun (A. Luzader); 2 at Merritt Island NWR 8 Jul, and 7 there 29 Jul (D. Freeland); 1 at McIntosh (*Marion*) 10 Jul (A. Luzader); 1 at Anclote Gulf Park (*Pasco*) 10 Jul (K. Tracey); 2 at Lake Apopka NSRA 20 Jul (H. Robinson).
- WESTERN KINGBIRD: 1 in mid-*Pinellas* 2 Jun (J. Fisher); 1 at Bald Point 5 Jun (J. Dozier).
- EASTERN KINGBIRD: 2 in mid-*Pinellas* were feeding young by 4 Jun but the nest failed by 11 Jun. The pair renested and were feeding young by 8 Jul but this nest too failed (J. Fisher).
- YELLOW-THROATED VIREO: 2 males sang at Mead Garden, Winter Park (*Orange*) 10 Jun-EOS (B. Anderson et al.).
- RED-EYED VIREO: 1 at Coconut Point (*Brevard*) 26 Jul (A. Bankert).
- BLACK-WHISKERED VIREO: 1 sang in mid-*Pinellas* 6 Jun (J. Fisher).
- PURPLE MARTIN: 7 pairs bred in natural cavities at Viera in Jun (D. Freeland); a "few" migrants at Tavernier (*Monroe*) 24 Jun (B. Mulrooney).
- TREE SWALLOW: singles at Lake Apopka NSRA 6, 11, & 28 Jul (H. Robinson); 1 in the Everglades Agricultural Area (*Palm Beach*) 22 Jul (B. Roberts, photo to FOC).
- NORTHERN ROUGH-WINGED SWALLOW: 1 or more at Lake Apopka NSRA 19 Jun-6 Jul (H. Robinson).
- BANK SWALLOW: singles at Lake Apopka NSRA 12 Jun and 3 Jul, and up to 2 there 17 Jul-EOS (H. Robinson); 1 in the Everglades Agricultural Area 22 Jul (B. Roberts, photo to FOC).
- CLIFF SWALLOW: 1 at Lake Apopka NSRA 3 Jul, and 2-3 there 23-31 Jul (H. Robinson).
- BARN SWALLOW: 2 at Research Road, Everglades NP (*Miami-Dade*) 4 Jun (B. Roberts); 2 at Eco Pond, Everglades NP (*Monroe*) 5 Jun (B. Roberts); 1 in mid-*Pinellas* 19 Jun (J. Fisher); 1 at Archbold Biological Station 15 Jul (G. Woolfenden); 260 at Lake Apopka NSRA 23 Jul (H. Robinson).
- HOUSE WREN: 1 at Clearwater (*Pinellas*) 26 Jun (E. Haney).
- BLUE-GRAY GNATCATCHER: 1 at Lake Apopka NSRA 17 Jul (H. Robinson).
- AMERICAN ROBIN: singles at Cedar Key 2 Jun and 6-11 Jul (D. Henderson).
- GRAY CATBIRD: 1 at Lake Apopka NSRA to 12 Jun (H. Robinson); 1 at Gainesville 29 Jul (J. Hintermister).
- COMMON MYNA: 1 at Lake Apopka NSRA 11 Jul (H. Robinson) established the first for *Orange*.
- BLUE-WINGED WARBLER: 1 at Ocklawaha Prairie Restoration Area (*Marion*) 21 Jul (A. Luzader, details to FOC).
- NORTHERN PARULA: 2 at Lake Apopka NSRA 1 Jul (H. Robinson).
- YELLOW WARBLER: 1 at Cedar Key 25 Jul (D. Henderson); 1 at Lake Jackson (*Leon*) 26 Jul (G. Menk); 3 at Lake Apopka NSRA 31 Jul (H. Robinson).
- PRAIRIE WARBLER: 7 males sang at Ten Thousand Islands NWR 7-13 Jun (T. Doyle); 1 at Lake Apopka NSRA 2-23 Jul, and 2 there 31 Jul (H. Robinson); 1 at Mead Garden 27 Jul (A. Vinokur).
- CERULEAN WARBLER: 1 juvenile at S Jacksonville 30 Jul (J. Cocke).
- BLACK-AND-WHITE WARBLER: 1 male at *Seminole* Environmental Center 9 Jul (A. Vinokur); 1 at Mead Garden 12 Jul (A. Vinokur); 1 at San Felasco Hammock 13 Jul (S. Collins); 1 at Paynes Prairie Preserve SP (*Alachua*) 13 Jul (M. Joos); 1 at Cedar Key 27 Jul (D. Henderson).
- AMERICAN REDSTART: 1 at Gainesville 9 Jun (G. Parks); 1 at Kissimmee Prairie Preserve SP 16 Jul (P. Miller); 1 at Crawfordville (*Wakulla*) 23 Jul (R. Christen); 1 female at Mead Garden 23 Jul, and 2 females there 25 Jul (A. Vinokur); 1 female at Bald Point 24 Jul (J. Murphy); 1 at Ocala NF (*Marion*) 24 Jul (A. & P. Stodola); 2 at Fort George Island (*Duval*) 27 Jul (R. Clark); 2 at Cedar Key 27 Jul (D. Henderson).

- SWAINSON'S WARBLER: 1 male sang at Tallahassee 26 Jun (G. Menk).
- LOUISIANA WATERTHRUSH: 1 at Tallahassee 5 Jul (F. Rutkovsky); 1 at *Seminole* Environmental Center 9 Jul (A. Vinokur); 1 at Newnans Lake 10 Jul (J. Hintermister, L. Davis); singles at Mead Garden 12 & 29 Jul (A. Vinokur); 1 at Lake Apopka NSRA 31 Jul (H. Robinson).
- HOODED WARBLER: 1 male in mid-*Pinellas* 25 Jul (J. Fisher).
- YELLOW-BREASTED CHAT: 2 at Lake Woodruff NWR 25 Jun (S. Benedetto).
- BLUE GROSBEAK: 25 at Lake Apopka NSRA 19 Jun & 1 Jul (H. Robinson).
- INDIGO BUNTING: 27 at Lake Apopka NSRA 5 Jun (H. Robinson); 1 male sang at Oakland Nature Preserve (*Orange*) 12 Jul (T. Rodriguez).
- PAINTED BUNTING: 1 at Belleview (*Marion*) 29 Jul (A. Luzader); up to 3 summered at Lake Apopka NSRA (H. Robinson).
- ***VARIED BUNTING** (*Passerina versicolor*): 1 male that flew into a window at Siesta Key (*Sarasota*) 1 Jun furnished the first Florida record (M. van Deventer, photos to FOC, specimen to Archbold Biological Station).
- DICKCISSEL: 89 singing males at Lake Apopka NSRA 5 Jun had declined to 4 there by 31 Jul (H. Robinson).
- BOBOLINK: 1 at Lake Apopka NSRA 5 Jun (H. Robinson); 1 at Cedar Key 18 Jun (R. Robinson).
- RED-WINGED BLACKBIRD: 1550 at Lake Apopka NSRA 5 Jun increased to **303,000** by 17 Jul (H. Robinson).
- COMMON GRACKLE: 26 at Lake Apopka NSRA 5 Jun increased to **117,000** by 17 Jul, then declined to 1200 by 31 Jul (H. Robinson).
- BOAT-TAILED GRACKLE: 430 at Lake Apopka NSRA 5 Jun increased to **167,000** by 14 Jul, then declined to 120 by 31 Jul (H. Robinson).
- SHINY COWBIRD: 1 male at Bald Point to 7 Jun (J. Dozier, specimen to Tall Timbers Research Station); 2 males at Fort De Soto Park 2 Jun (L. Atherton); 2 at Flamingo, Everglades NP (*Monroe*) 5 Jun (B. Roberts); 1 at Cedar Key 2 Jul (D. Henderson); up to 7 at Redlands (*Miami-Dade*) to 3 Jul (R. Torres, M. Faherty, R. Diaz); up to **13** (3 Jul) summered at Lake Apopka NSRA (H. Robinson).
- BRONZED COWBIRD: up to 6 at Redlands to 12 Jul (R. Torres, M. Faherty et al.), including 1 displaying male and 1 female 12 Jul (R. Diaz, photos to FOC).
- BROWN-HEADED COWBIRD: 1 male sang at Kissimmee Prairie Preserve SP 21 Jun (P. Miller).
- ORCHARD ORIOLE: 24 at Lake Apopka NSRA 1 Jul (H. Robinson).
- PURPLE FINCH: 1 at Alachua 2 Jul (D. Werner, photos to Rex).
- HOUSE FINCH: single females in 3 sites in mid-*Pinellas* 2-6 Jul (J. Fisher); 1 at Lake Apopka NSRA 4 Jul (B. Anderson); up to 6 (including a pair that fed a fledgling) at Mead Garden 4 Jul-EOS (A. Vinokur, B. Anderson et al.); 1 female at Lake Apopka NSRA 14 Jul (H. Robinson); 1 juvenile at Altamonte Springs 19 Jul (A. Vinokur); 1 male at Lakeland (*Polk*) 29 Jul (T. Palmer); up to 6 (including 2 yellow morphs) summered at Altamonte Springs (P. Hueber).
- AMERICAN GOLDFINCH: 1 at Gainesville 1 Jun (L. Davis).
- PIN-TAILED WHYDAH: 1 juvenile at Captiva Island (*Lee*) 14 Jul-EOS (V. McGrath et al., photos to FOC by C. Ewell).

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Spring 2005 reports not submitted previously: Mallard: 2 apparently wild birds at St. Vincent NWR (*Franklin*) 20 May (Barbara Stedman); Brown Pelican: 9 (3 adults and 6 juveniles) over Lake Wales Ridge State Forest (*Polk*) 21 Apr (Bill Pranty); Booby species: 1 juvenile, thought to be a Brown Booby, at St. Vincent NWR 21 May (B. Stedman); White-tailed Kite: 2 juveniles 6 km W of US 27 along the *Broward-Palm Beach* line 30 May (David Simpson); American Woodcock, 1 male displayed at St. Vincent NWR 21 May (B. Stedman); Acadian Flycatcher: 1 sang at St. Vincent NWR 21 May (B. Stedman); Shiny Cowbird: 1 male at St. Vincent NWR 21 May (B. Stedman).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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- (1) be double-spaced throughout, including tables and figure captions;
- (2) include the scientific name at the first mention of each species;
- (3) include capitalized standardized English names for all birds, but lower case for English names of other organisms;
- (3) include metric units for all measurements;
- (4) use the form "7 June 2003" for all dates;
- (5) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
- (6) use the following abbreviations: s (second), min (minute), h (hour);
- (7) preferentially use active voice.

Submit manuscripts for *Florida Field Naturalist* to the Editor, Scott Robinson, Florida Museum of Natural History, P.O. Box 117800, University of Florida, Gainesville, FL 32611; Phone: 352-392-1721, ext. 509; e-mail: srobinson@flmnh.ufl.edu. Monograph-length manuscripts may be submitted for consideration to Reed F. Noss, Editor of Special Publications. Books and other materials for review should be submitted to: Reed Bowman, Associate Editor for Reviews. Field Observations should be submitted to the Chair of the Field Observations Committee, Bill Pranty. Reports of rare birds in Florida should be submitted to the Managing Secretary of the FOS Records Committee, Reed Bowman.



Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 2

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The *Florida Field Naturalist* is published quarterly (February, May, August, and November) by the Florida Ornithological Society. It is printed by E. O. Painter Printing Co., P.O. Box 877, DeLeon Springs, Florida 32130. The permanent address of the Florida Ornithological Society is Department of Ornithology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611. The Florida Ornithological Society web site can be found at www.fosbirds.org

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 2

MAY 2006

PAGES 37-68

Florida Field Naturalist 34(2):37-47, 2006.

APPLE SNAIL DENSITIES IN HABITATS USED BY FORAGING SNAIL KITES

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Abstract.—Despite their dietary specialization and endangered status, the use of wetland habitats by Snail Kites (*Rostrhamus sociabilis*) has not been associated with a range of densities of its exclusive prey, the Florida apple snail (*Pomacea paludosa*). We present data that suggest to us that the conservation and management of the network of wetlands that supports kites requires an assessment of snail density as well as relying on Snail Kite behavior and hydrology as has been done in the past. We report snail densities in wet-prairie habitats estimated from field surveys in 1995-2004 in association with presence/absence data on foraging kites. In 2002-2003 we also measured snail densities and associated numbers of foraging kites in a systematic survey in two wetland units of the Everglades. There was a positive association between snail density and the number of foraging kites (Spearman $r = 0.67$, $n = 12$, $P = 0.016$). Our data also suggest that kites, at least at some scales, choose areas in which to forage partly based on snail density. Both the presence/absence data and systematic kite survey data suggest that snail densities < 0.14 snails/m² do not support foraging kites. Here we report a range of snail densities typical of wet-prairie habitats within which kites were observed foraging successfully. We conclude with recommendations that habitat quality assessments for Snail Kites and other snail predators should include density estimates for apple snails, because observations of low (or no) predator use do not necessarily reflect a low density of prey.

Snail Kites (*Rostrhamus sociabilis*) are raptors that hunt for prey in wetland habitats in South and Central America, Cuba, and Florida (Sykes et al. 1995). All three recognized subspecies, *R. s. plumbeus*,

R. s. sociabilis, and *R. s. major*, rely on several species of *Pomacea* snails for food, although alternative prey such as freshwater crabs may be a significant portion of their diet, e.g., as much as 25% for kites foraging in South America (Beissinger 1990). In Florida only one subspecies of Snail Kite (*R. s. plumbeus*) exists as a single closed population (Bennetts and Kitchens 1997) and it appears to rely much less on alternative prey compared to the species' populations farther south (Sykes and Kale 1974, Beissinger 1990, Sykes et al. 1995). Since only one native species of apple snail occurs in Florida (*Pomacea paludosa*), much of what we can learn about Florida Snail Kites and their conservation could be obtained through understanding the distribution and abundance of this one prey species while avoiding subjective interpretations regarding prey choice and availability common to most predators (see Johnson 1980). It seems surprising that no data have been reported that relate snail density to the distribution and abundance of kites in Florida, especially given that *R. s. plumbeus* has been listed as endangered for over 35 years (Sykes et al. 1995).

Lack of data on Florida apple snails in habitats used by kites likely stems from the difficulty (in time and labor) of estimating snail density in wetlands (Darby et al. 1999). As an alternative to direct measures of snail abundance, apparent spatial and temporal variation in snail abundance have been made indirectly through hydrology and observations of kites, especially their response to drying events (Steiglitz and Thompson 1967, Sykes 1979, Beissinger 1988, 1995). This link, however, appears to have had limited value as we have accumulated evidence on snail demographics. First, calls to avoid drying events in support of kites were premised on unsubstantiated evidence that dry downs directly kill apple snails (see Darby et al. 2003). We now know that adult-sized snails survive at a rate of 100% to 75% after 1 month to 3 months in dry marsh conditions (Darby and Percival 2000), which is consistent with dry down tolerance in other *Pomacea* snails (Cowie 2002). Therefore, not all drying events have substantial impacts on snails. Second, although snails in dry marsh become temporarily unavailable to foraging kites (Sykes 1979), the reported departure of kites from dry wetland habitats (Takekawa and Beissinger 1989) may reflect limitations of their foraging behavior, not necessarily a decrease in snail density. Third, the highly nomadic Snail Kite (see Bennetts and Kitchens 1997) has been shown to leave one wetland to explore the potential forage base of another, even though foraging success decreased after the move (Bennetts and Kitchens 2000). This suggests that kite departures and arrivals to and from different wetlands, even in the absence of drying events, tells us little about relative snail abundance. Even if some aspects of kite foraging (e.g., capture rates) could be linked to snail density, natural resource managers should not have to depend on kite use

in any particular time frame as an indicator of habitat quality (i.e., an absence of kites does not mean an absence of snails). Clearly, effective conservation of this endangered raptor requires that we have data on the density and distribution of their nearly exclusive prey.

After eight years of method development and testing hypotheses regarding the effects of hydrology and habitat structure on snail demography, we can now report several snail density estimates from areas in which Snail Kites were observed foraging. As an indication of what constitutes an insufficient forage base, we also have snail density estimates from nearby sites within the same wetland units where we did not see kites. In 2004, we also conducted a small scale quantitative assessment of the relationship between snail density and the number of foraging kites in two wetland units designated as critical habitat by the US Fish and Wildlife Service in 1977 (Federal Register 42: 40685-40688). These data provide, for the first time, a range of snail densities in which foraging Snail Kites can be found, and some indication as to a minimum snail density sufficient to support foraging Snail Kites.

STUDY SITES AND METHODS

Study sites.—We sampled snail density and observed foraging Snail Kites from 1995 to 2004 in 30 sites in five wetlands throughout the range of the Florida Snail Kite population as reported by Bennetts and Kitchens (1997) (Fig. 1). All sampling sites were wet-prairie habitats characterized as shallow marsh dominated by emergent macrophytes such as grasses, sedges, rushes, and other wetland plants with stems and leaves above water level (Loveless 1959). Emergent vegetation of the littoral zone of Lake Kissimmee consisted primarily of *Panicum hemitomon*, *Panicum repens*, and *Pontederia cordata*. The remaining wetlands sampled were shallow marshes dominated by *Eleocharis* spp. and *Panicum hemitomon*. The Blue Cypress Water Management Area (BCWMA) is part of the Upper St. Johns River basin. Water Conservation Area 3A (WCA3A) and WCA1 are impounded units within the Everglades ecosystem. WCA1 resides within the boundaries of the A.R.M. Loxahatchee National Wildlife Refuge (LNWR). We also sampled in LNWR impoundments (IM) C6, C7 and C8 that are managed to attract wetland avifauna for viewing by the general public.

Estimates of snail density.—Apple snail densities were estimated using a 1-m² × 60-cm high throw trap sampled with dip nets as per Darby et al. (1999). Once the throw trap was placed over the vegetation, it was quickly pushed down into the substrate to prevent snails from escaping. All plants were removed from the trap and the uprooted material was searched thoroughly for snails. Traps were then swept 20 times with dip nets. If an apple snail was collected, the sweeps count would start over until 20 clean sweeps were completed. After sweeping with dip nets, the trap was searched by hand for 30 seconds to find any snails that might have fallen into depressions left by uprooting vegetation or that were pushed up against the trap walls. We estimated the capture probability of snails by randomly placing from 0-3 marked snails in each trap prior to disturbance of the vegetation. Whether or not marked snails had been placed in the trap and/or the number of marked snails were unknown to everyone but the person who had placed them in order to minimize observer expectancy bias (Balph and Balph 1983, Darby et al. 1999). The reported snail density estimates were adjusted for capture probability by dividing the mean raw density estimate by the mean capture probability for a

*Locations Approximate
Not to Scale*

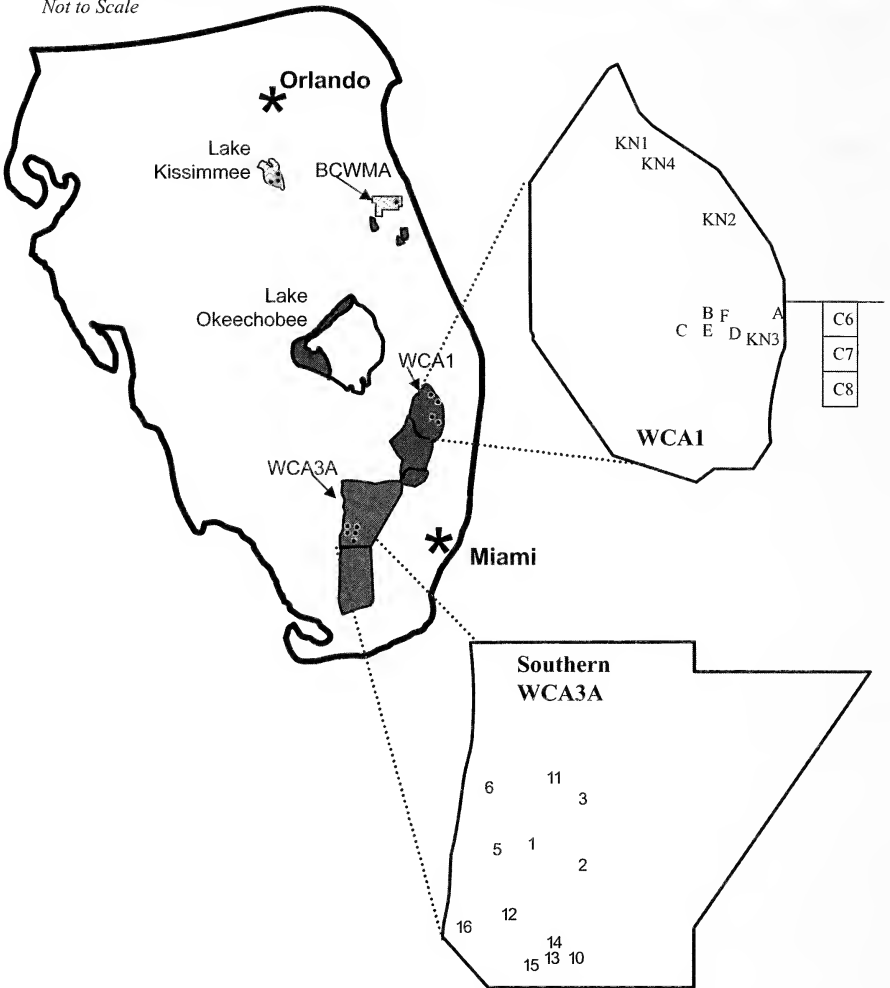


Figure 1. Location of wetland units and sites sampled for snail density estimates reported. Dark gray areas represent critical habitat as designated by USFWS (see text). Sampling sites are represented as black dots (in some cases representing two nearby sites) with more detailed representation of sites in WCA3A (letter designations), WCA1 (letter designations) and LNRW impoundments (C6-C8).

given site. Standard errors for adjusted snail density estimates were calculated based on Loery et al. (1997) as presented in Bennetts et al. (2006).

Counts of foraging Snail Kites.—For 12 out of the 30 sites, we only had a record of the presence or absence of foraging Snail Kites documented by crews sampling for snails, and therefore no indication as to the number of unique individuals (i.e., no systematic count was done). These include three sites in Lake Kissimmee, two sites in

BCWMA, and seven sites in LNWR (including four in WCA1). These data are reported separately and were not included in the test for an association between numbers of foraging kites and snail density. For the remaining 18 sites in WCA3A and WCA1 sampled in 2002-2003, we have a record of the number of individual kites foraging at one time. We estimated the number of Snail Kites within a 1- km² area centered on each of our snail sampling sites during the same period in which we collected snail abundance data. Snail kites are conspicuous and relatively habituated to airboats. Thus, given the open habitat and relatively small size of our sampling units, we were able to conduct what we believe was a reasonable "census" (i.e., complete count) at each site, using systematic transects conducted by airboat.

Using a global positioning system (GPS) for guidance, transects were spaced approximately 200 m apart. Conducting an entire survey required approximately 30 minutes to complete. Under these conditions, kites could be observed with little difficulty. The short time interval and small spatial scale made it unlikely that we double counted. Given these conditions, we do not believe that estimation of detection probabilities (e.g., using distance sampling) was warranted. In most cases, the number counted also corresponded well to the number of nests we documented to be in the area. The exceptions to this were a few sites that had no known nests, but a small (1 or 2) number of foraging kites.

Only the data from the 2002-2003 seasons in WCA3A and WCA1 were included in a quantitative analysis of kite counts and snail density since all the other data were only records of Snail Kite presence or absence. We used Spearman rank correlation to test for a positive association between the number of foraging Snail Kites and snail density.

RESULTS

Snail density estimates (adjusted for capture probability) ranged from 0 to 1.8 snails per m² (Tables 1 and 2). We did not observe foraging kites at any location with snail densities at or below 0.14 snails per m². We observed only one Snail Kite foraging in WCA1 in the two years we sampled (2002-2004), and this site had the highest snail density estimated for WCA1 (Table 1). Conversely, the two sites in WCA3A with the lowest densities of snails are the only two sites sampled in which we did not observe foraging kites in WCA3A. During our systematic 1-km² surveys, densities of foraging kites >5 per km² were only observed where snail densities exceeded 0.25 snails/m².

Our analysis from the systematic surveys in WCA3A indicated a positive association between the number of foraging Snail Kites and apple snail densities (Spearman $r = 0.67$, $n = 12$, $P = 0.016$) (Fig. 2). If WCA1 were included in this analysis, the association is stronger (Spearman $r = 0.85$, $n = 18$, $P < 0.001$). However, 5 of 6 sites sampled in WCA1 had no foraging kites and very few snails; therefore, the stronger association may be strongly influenced by the overall low densities of snails we have observed in WCA1. The presence-absence Snail Kite records from seven other sites in LNWR support the assertion that LNWR (including WCA1) has a relatively low forage base (Table 2). Sites from other wetlands in which we sampled snails and that supported foraging kites (Lake Kissimmee, BCWMA) consistently had densities >0.14 snails/m² (Table 2).

Table 1. The number of foraging Snail Kites per km² and associated apple snail densities per m² in WCA1 (letter designated sites) and WCA3A (number designated sites).

| Wetland | Site | Year | Foraging Kites | Snail Density Mean \pm SE |
|---------|------|------|----------------|-----------------------------|
| WCA1 | A | 2002 | 0 | 0.00 \pm 0.00 |
| WCA1 | F | 2003 | 0 | 0.01 \pm 0.01 |
| WCA1 | D | 2003 | 0 | 0.01 \pm 0.01 |
| WCA1 | E | 2003 | 0 | 0.03 \pm 0.01 |
| WCA3A | 11 | 2003 | 0 | 0.10 \pm 0.01 |
| WCA3A | 3 | 2002 | 0 | 0.13 \pm 0.02 |
| WCA1 | B | 2002 | 0 | 0.14 \pm 0.01 |
| WCA3A | 6 | 2002 | 4 | 0.18 \pm 0.02 |
| WCA3A | 2 | 2002 | 2 | 0.20 \pm 0.04 |
| WCA1 | C | 2002 | 2 | 0.22 \pm 0.01 |
| WCA3A | 1 | 2002 | 2 | 0.25 \pm 0.04 |
| WCA3A | 14 | 2003 | 14 | 0.32 \pm 0.01 |
| WCA3A | 5 | 2002 | 4 | 0.38 \pm 0.06 |
| WCA3A | 15 | 2003 | 7 | 0.61 \pm 0.03 |
| WCA3A | 13 | 2003 | 8 | 0.89 \pm 0.03 |
| WCA3A | 12 | 2003 | 1 | 1.04 \pm 0.03 |
| WCA3A | 16 | 2003 | 15 | 1.18 \pm 0.04 |
| WCA3A | 10 | 2002 | 12 | 1.77 \pm 0.25 |

DISCUSSION

The positive association between the number of foraging Snail Kites and snail density was not surprising given the nearly exclusive reliance of this raptor on a single prey. At the extreme, we would not expect kites to commonly attempt to forage in habitats devoid of snails. Although our quantitative assessment of kite foraging was limited to two wetland units (WCA3A and WCA1), our data do support the idea

Table 2. 1995-2004 records of foraging Snail Kite presence/absence in sites for which we have snail density estimates.

| Wetland | Site | Year | Foraging Kites | Snail Density Mean \pm SE |
|---------|------|------|----------------|-----------------------------|
| LNWR | IMC6 | 2004 | 0 | 0.00 \pm 0.00 |
| LNWR | IMC7 | 2004 | 0 | 0.00 \pm 0.00 |
| WCA1 | KN3 | 2004 | 0 | 0.03 \pm 0.01 |
| WCA1 | KN4 | 2004 | 0 | 0.08 \pm 0.01 |
| LNWR | IMC8 | 2004 | 0 | 0.09 \pm 0.01 |
| WCA1 | KN1 | 2004 | 0 | 0.12 \pm 0.01 |
| WCA1 | KN2 | 2004 | 0 | 0.12 \pm 0.01 |
| LKISS | 7 | 2002 | ≥ 1 | 0.16 \pm 0.04 |
| BCWMA | 1 | 1996 | ≥ 1 | 0.22 \pm 0.03 |
| LKISS | 2 | 2002 | ≥ 1 | 0.29 \pm 0.01 |
| BCWMA | 2 | 1996 | ≥ 1 | 0.60 \pm 0.08 |
| LKISS | 5 | 1995 | ≥ 1 | 0.92 \pm 0.18 |

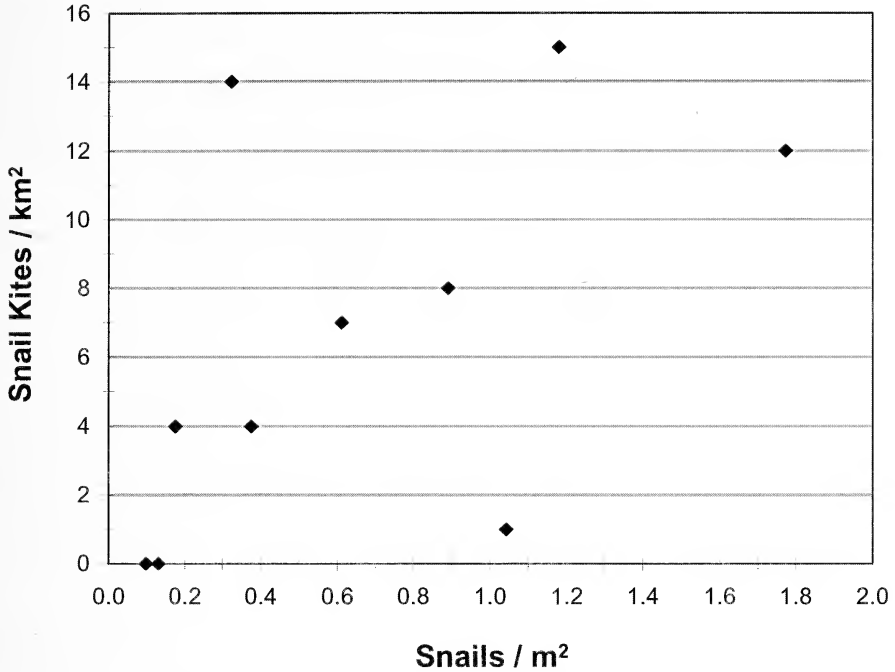


Figure 2. Number of Snail Kites counted within 1 km² in Water Conservation Area 3A in relation to the mean number of apple snails per m² of prairie habitat.

that at a regional scale Snail Kites concentrate in wetland areas with higher snail density (WCA3A). Although food abundance has been linked to habitat use at a broad scale, once in an area there may be habitat attributes that affect availability that dictate forage patch selection at a more refined scale (Orians and Wittenberger 1991). Bennetts et al. (2006) showed that Snail Kites captured fewer snails from habitat patches with relatively dense vegetative structure and high snail densities compared to more open habitat with similar or lower snail densities. Avoidance of more dense structure reflected lower visibility of the water surface associated with higher stem densities and/or structural attributes of different macrophytes (see Bennetts et al. 2006). In this study, we purposefully limited our analyses to habitats with similar structure (moderate stem density wet prairie) to control for characteristics of habitat that might affect vulnerability of snails to predation by kites. Therefore, the numbers of foraging kites were most likely related to snail densities and not to accessibility to the snails.

The snail densities estimated during this study fall within the range reported in previous studies (Darby et al. 1999, 2004). Among all our data reported here and elsewhere, we have rarely encountered

snail densities $>1.5/m^2$. The exceptions include three sites on Lake Kissimmee in 1995 (Darby et al. 2004) and some spring fed rivers north of the kite's current range (Carrao et al. 2006). [Historically Snail Kites had been documented near springs of the Florida panhandle (Sykes 1984).] In addition, in all sampling efforts from 1996-2003, we consistently found one or more sites in WCA3A with >1.0 snail per m^2 (Darby et al. 1997, 1999, this study). Snail Kites have consistently foraged and established nests in WCA3A during the period to which our density data apply (J. Martin, V. Dreitz and W. Kitchens, U.S. Geological Survey, Gainesville, FL, unpublished data). In contrast, it appears overall that WCA1 supports relatively lower snail densities and, based on our own observations, little to no kite use. This is consistent with the overall less frequent use of WCA1 by Snail Kites for either foraging or nesting indicated by USFWS reports (USFWS A.R.M. Loxahatchee Annual Narrative Reports 1996-2004) as compared to kite surveys in WCA3A in the same period (J. Martin, V. Dreitz and W. M. Kitchens, unpublished data). Based on Sykes (1984) and Bennetts (unpublished data), the relatively greater concentration of kites nesting and foraging in WCA3A compared to WCA1 has been consistent since the 1970s.

Our data suggest that a density of fewer than approximately 0.14 snails per m^2 may be a minimum threshold to support one or more foraging kites. Although we could have reported many other sites containing snails that did not contain kites, the data from which we estimated this threshold were from sites near those in which we found foraging kites over the observation period. In other words, kites were in the vicinity and low snail density sites were well within the range of routine kite movements. Sykes et al. (1995) estimated that most kites forage within 2 km of their nest and daily flight distances measured by Darby et al. (1996) were frequently between 2 and 5 km on Lake Kissimmee and in WCA3A. Our systematic counts included Site 3 in WCA3A, a low snail-density site with no foraging kites, which was 3.5 and 4.8 km from Sites 1 and 2, respectively, where kites were foraging. Similarly, Site C, the only WCA1 site with foraging kites, was 2.5 km from Site B, a low snail-density site with no foraging kites. Casual observation of kites over several months in WCA3A (no record for WCA1) following our systematic counts were consistent with the data; kites were still in the vicinity, but not observed in site 3. We recognize that our data do not reflect systematic tracking of kite movements coupled to snail densities from locations selected for foraging compared to those passed over; this would require an intensive effort of sampling for snails nearly impossible to achieve with our equipment and personnel. However, both the systematic counts and presence/absence records for several wetland units consistently show kites foraging in sites with snail density >0.14 snails/ m^2 , but not in sites with lower snail densities. We

see these data as a preliminary indication of what constitutes a sufficient forage base. In addition, our data suggest that a sufficient snail supply for several nesting pairs of kites, pertinent given their characterization as loosely colonial nesters (Sykes et al. 1995), would be approximately 0.25 snails per m^2 .

Caution should be exercised with respect to interpreting kite use of an area as any indication of relative snail abundance or habitat quality in general. Although there was a positive association between foraging kites and snail density, we observed several kites foraging in a relatively low snail-density site (WCA3A Site 6), and only one kite foraging in a site with snail density $>1.0/m^2$. The movement patterns of these raptors reflect nomadic tendencies that do not necessarily reflect foraging conditions. At any one time there most likely exist many high snail-density sites that for a variety of reasons simply had not yet been discovered by foraging kites. Once kites establish a nest, which some in our survey had done, movements may be constrained by the need for making frequent visits to feed brooding mates and hatchlings. As such birds may forage in areas with lower snail density than they might otherwise if not constrained by parental duties. Short-term observations of kites foraging in low-density sites may also reflect the period of time required for kites to assess low profitability before moving to a more productive foraging site (Bourne 1985). For these reasons, we in no way want to suggest that observations of Snail Kites are reliable indicators of relative snail abundance between different locations.

The temporal and spatial scales at which Snail Kite movements and demography occur far exceed the scale represented by snail density estimates reported here and elsewhere over the past 10 years. Although a more reliable assessment of habitat quality for kites, estimating snail density may simply be too labor and time intensive to be a routine (i.e., seasonal or even annual) component of a monitoring program tied to wetlands habitat management for a species as mobile as the kite. Monitoring kite use of any particular wetland unit certainly does provide some indication of habitat suitability; i.e., successful foraging and nesting tells us that a sufficient forage base exists. However, it is equally clear that kite use alone does not reflect relative habitat quality among sites or within a site over time, especially if we consider differences in habitat structure. As we continue to test hypotheses regarding hydrology and habitat structure on snails and how these ultimately affect Snail Kite foraging success, we can identify a range of hydrologic conditions and plant community types that reflect relative habitat quality for these species (e.g., Darby and Percival 2000, Karunaratne 2004, Bennetts et al. 2006). Ultimately, however, snail density estimates will be an essential component of conceptual and quantitative models to understand kite demography, movements and habitat use.

We have reported a range of snail densities typical of wet prairie habitats within which kites were observed foraging successfully. In addition, we now have some indication of a density below which kites appear to find an area unprofitable in terms of hunting for snails. We recommend that habitat quality assessments associated with management and restoration efforts in support of Snail Kites and other snail predators include sampling for apple snails, because a observations of low (or no) predator use do not necessarily reflect a low density of prey.

ACKNOWLEDGMENTS

This research was funded through grants from the U.S. Fish and Wildlife Service, U.S. Geological Survey, Florida Fish and Wildlife Conservation Commission, Florida Wildlife Foundation, St. John's River Water Management District and South Florida Water Management District. We appreciate the field assistance of Tanya Alvarez, Amy Busch, Jessica (Cervený) Karunaratne, Sara LaPorte, Jason Liddle, Jennifer (DuPree) Liddle, Dave Melow, Donald Napier, Alex Ren, Steven Slack, Tiffany Trent and Patricia Valentine-Darby.

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BATS OF ARCHBOLD BIOLOGICAL STATION AND NOTES ON SOME ROOST SITES

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Abstract.—Four species of bats were captured at Archbold Biological Station including evening bats (*Nycticeius humeralis*, n = 17), Brazilian free-tailed bats (*Tadarida brasiliensis*, n = 17), northern yellow bats (*Lasiurus intermedius*, n = 13) and Seminole bats (*Lasiurus seminolus*, n = 2). Maternity roosts of northern yellow bats were documented in Spanish moss (*Tillandsia usneoides*), and a solitary adult male was observed nearby roosting under a palm frond in a cabbage palm (*Sabal palmetto*). A mixed colony of 254 Brazilian free-tailed and evening bats was observed using a large slash pine (*Pinus elliptii*) snag, representing one of the few documented records of Brazilian free-tailed bats using such a natural roost.

Layne (1999) reports six species of bats from Archbold Biological Station (ABS) and surrounding area that include: big brown bats (*Eptesicus fuscus*), northern yellow bats (*Lasiurus intermedius*), Seminole bats (*Lasiurus seminolus*), evening bats (*Nycticeius humeralis*), eastern pipistrelles (*Pipistrellus subflavus*), and Brazilian free-tailed bats (*Tadarida brasiliensis*). These species are considered common in Florida (Jennings 1958). With the exception of the Brazilian free-tailed bat, all bat species known from ABS use natural roosts at some period during the year (Barbour and Davis 1969). My objective through this study was to document the presence of bats in natural areas during the summer maternity period in south-central Florida and document their use of roost sites.

STUDY AREA AND METHODS

This study was conducted at Archbold Biological Station (ABS) from April 2002 to September 2003. ABS is located approximately 120 km south of Orlando at the southern end of the Lake Wales Ridge. The climate of the area is characterized as sub-tropical with hot, wet summers and mild, dry winters with a mean annual temperature of 22°C (Winsberg 1990). Archbold Biological Station covers 2101 ha with approximately 95% comprised of undisturbed natural habitat in which the natural vegetation and hydrology has not been altered. The vegetation of ABS was described by Abrahamson et al. (1984) and consists primarily of xeric habitat, intermixed with seasonal wetlands and bayhead swamps. At ABS, ca. 83% of the land has been burned within the past 20 years with prescribed fire or from wildfires.

Mist-netting was conducted from March-July of 2003 to coincide with the expected maternity period of bats. Mist nets (6.0, 9.0 and 12.0 m) were double stacked and placed across road corridors, trails, canopy gaps, and road rut ponds. In each location, four double-stacked mist-nets were placed perpendicular or parallel to one another. Around snags,

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mist-nets were set in a triangular formation. Nets were raised at sunset and monitored for 1.5-2.5 hours. Captured bats were weighed to the nearest 0.5 g, sexed, and aged.

Roost searches were conducted randomly throughout the Station from April 2002 to October 2003, for about 3-4 hours per month. No systematic searches were conducted for roost sites, but efforts focused on areas with numerous snags, cabbage palms (*Sabal palmetto*), and large concentrations of Spanish moss (*Tillandsia usneoides*). Reports of bat roosts from field workers also were investigated. Bats occupying a roost site were verified by visual observation (Spanish moss and sable palm) or mist-netting (snags). The general characteristics of each roost were measured and include: roost type, host tree species (for Spanish moss roosts), diameter at breast height (for snags), roost height above ground, roost height to understory vegetation, length of roost (for Spanish moss roosts), width of roost (for Spanish moss roosts), distance to water, and distance to edge.

RESULTS

Four species of bats were captured including evening ($n = 17$), northern yellow ($n = 13$), Brazilian free-tailed ($n = 17$), and Seminole ($n = 2$) bats. Adults and juveniles of each species were captured indicating that all four species rear young in the area. The reproductive period of pregnancy (April-May), birth (late May), lactation (late May-June), and the young taking flight (late June) were synchronized among the four species. An average of 2.19 (SE = 1.79; Range 0 to 20) bats/hour were captured. The highest capture rates were recorded in areas with large trees and canopy cover. No bats were captured in recently burned or open areas with few large trees dominated by an understory of oaks <3 m.

Maternity roost sites ($n = 5$) of northern yellow bats were located in Spanish moss hanging from sand live oaks (*Quercus geminata*) along a sandy fire-line adjacent to a 36.4 ha lake. All roost sites were located in a small buffer strip (8-20 m wide) of sand live oak and saw palmetto (*Serenoa repens*) between a sandy road and the lake. Roost height averaged 2.23 m (SE = 0.06) above the ground and 1.57 m (SE = 0.18) above the nearest vegetation. The average length and width of the roosts were 0.98 m (SE = 0.13) and 0.44 m (SE = 0.08), respectively. The clumps of Spanish moss used for roosting were about 2-3 times larger than other clumps of Spanish moss in the area. All roosts were within 1.06 m (SE = 0.35) of the sandy road and <11.0 m (SE = 2.40) from the lake. Change in roost site was common among the northern yellow bats roosting in Spanish moss. On one occasion, three females with non-volant young were observed in separate roosts but none of the roosts was occupied the next day indicating the females used more than one roost.

A maternity roost containing Brazilian free-tailed and evening bats was located in a slash pine (*Pinus elliottii*) snag created by a lightning strike in an old field. The snag was 12.8 m in height and 51.0 cm in dbh. The upper-third of the main bole contained loose bark, multiple limbs, and woodpecker holes. Roost heights ranged between 6.7-8.8 m with the bats using multiple roost locations in the upper portion of the

snag including loose bark, small fissures, and senescent limbs. Twelve juvenile Brazilian free-tailed and 3 juvenile evening bats were captured in mist nets set around the snag on 28 July 2003. At least 10 more bats escaped from the nets before they could be removed. An emergence count conducted on 2 August 2003 revealed 254 bats (species undetermined) leaving the roost between 2020 and 2045.

A male northern yellow bat roosted on the underside of a partially dead frond of a cabbage palm ca. 12 km northwest of ABS along the edge of Lake August in a residential lawn from 26-28 August 2003. The bat was resting on the brown portion of the frond, which provided excellent cryptic coloration to the bat.

DISCUSSION

The four species documented from this survey were reported to be the most common bats in southeast Florida (Hutchinson 2004). In general, the bat fauna of south Florida is low in diversity compared to other regions of the United States, possibly due to the lack of caves (Humphrey 1975). The eastern pipistrelle and big brown bats, both of which occur infrequently in the area (Layne 1992a,b; Hutchinson and Roberts 2001) were not captured at ABS. The capture of Brazilian free-tailed bats from a snag represents one of the few known uses of such a natural roost by this species in the southeastern United States. Lowery (1974) reported of hollow trees being used by Brazilian free-tailed bats as maternity roosts in Louisiana. In the Southeast this species typically roosts in attics and other structures (Barbour and Davis 1969). Numerous snags in various stages of decay are present in the immediate area of the roost and bats have been reported from other nearby snags (Fred Lohrer, ABS, pers. comm.).

Lewis (1995) suggested that foliage- and cavity-roosting bats are more likely to switch roosts more often than are cave- or structure-roosting species, because cave and structure roosts are more permanent. Northern yellow bats using Spanish moss switched roosts often during the maternity season and carried their non-volant young to alternative roosts, possibly to allow for different microclimate conditions. The location of roosts on the southwest side of the lake and the overhanging limbs from the senescent sand live oaks shielded the roost from direct sunlight until late afternoon. All roosts were fully or partially shaded until ca. 1730 before being exposed to direct sunlight, which is about 3.0-3.5 hours before the bats take flight. Spanish moss also appears to protect adults and young during periods of intense rainfall.

The concomitant occurrence of the reproduction period of bats and the beginning of fire season in April may result in some mortality to bats that select roost sites in natural habitat. The least commonly captured bat from the survey, the Seminole bat, is known to roost prima-

rily near the tips of pine needles (Menzel et al. 1999), suggesting that prescribed or natural fire may impact populations or alter roost sites of this species as pine trees often suffer high damage or mortality during fires in the area. Bat mortality is most likely to occur during intense head fires that move rapidly, scorch the canopy, produce intense heat, and create large smoke plumes. The observations of Saugey et al. (1998) in Arkansas indicate that red bats (*Lasiurus borealis*) manage to evade slow moving back-fires. However, it is doubtful if a lactating female bat would have time to move more than one non-volant young during a rapid-moving head fire through scrub, scrubby flatwoods, or flatwoods habitat. Regardless, the use of prescribed fire during the growing season is the primary tool used by land managers in Florida to maintain habitat for listed species of flora and fauna. Further research using radio-telemetry may further reveal the impacts of fire on solitary- and colonial-roosting bats during growing season burns.

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NOTES

A SPECIMEN OF A MIGRANT CLAPPER RAIL
FROM THE INTERIOR OF SOUTHERN FLORIDAGLEN E. WOOLFENDEN¹ AND STORRS L. OLSON²
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A specimen of the Clapper Rail (*Rallus longirostris*) collected in the interior of the southern Florida peninsula adds further evidence that this maritime species at least occasionally occurs inland and that Atlantic Coast breeders may migrate across Florida to winter along the coast of the Gulf of Mexico.

On 13 September 2004, Matthew B. Toomey and Christopher Valligny, two students associated with Archbold Biological Station, collected a freshly dead specimen of a large *Rallus*, that had been impaled on a barbed wire fence in a small fresh-water marsh along the north side of highway SR 74 about 2 km east of road CR 731, near Rainey Slough in Glades County, Florida (lat 26°57'N, long 81°28'W). Glades County lies in the longitudinal middle of the Florida peninsula along the west shore of Lake Okeechobee. The individual (male, testes 7 × 3 mm), prepared as a study skin (GEW 5953), is in fresh Basic I plumage (Humphrey and Parkes 1959).

The specimen is identifiable as a *R. longirostris* and not the similar fresh-water inhabiting *R. elegans* by the gray cheeks and margins of the dorsal feathers, and in lacking the russet lesser wing coverts of the latter species (Eddleman and Conway 1998). It is recognizable as the northernmost subspecies, *R. l. crepitans*, which breeds along the Atlantic Coast from Connecticut to South Carolina by having the dorsal feathers with very light, almost bluish-gray margins with decidedly olivaceous centers. The belly and lower breast are white, with traces of fulvous wash only on the neck and upper breast. These fulvous feathers of the adult plumage include some that are still growing. The specimen is fully adult in size although it probably had been capable of flight for no more than two months. It represents the southernmost known occurrence for the subspecies *R. l. crepitans*.

Several other specimens provide evidence that some Atlantic Coast Clapper Rails (*R. l. crepitans* and *R. l. waynei*) winter along the Gulf Coast of Florida. For Gulf Coast counties, Crawford et al. (1983) list non-breeding specimens of *R. l. crepitans* from Wakulla and Franklin counties and specimens of *R. l. waynei* from Franklin and Pinellas counties. Three specimens support the opinion that Atlantic Coast Clapper Rails reach the Gulf Coast by flying across northern and central peninsular Florida. One *R. l. crepitans* was taken at the WDBO tower in Orange County in fall (11 September 1969), and two *R. l. waynei* were taken at Tallahassee in Leon County, one in fall (6 October 1965), the other in spring (9 April 1980) (Crawford et al. 1983). *R. l. crepitans* breeds on the Atlantic Coast far north of Florida, and the Glades county specimen was probably a migrant as opposed to a wanderer when collected (13 September 2004). The occurrence supports the idea that Atlantic Coast Clapper Rails migrate across peninsular Florida to winter along the east shore of the Gulf of Mexico, and extends the trans-peninsular migratory pathway farther south than previously known.

The specimen (GEW 5953) is housed with the bird collections at Archbold Biological Station. We thank Andrew W. Kratter for lending specimens to GEW from the collections at the Florida Museum of Natural History at the University of Florida.

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**KILLING OF TUFTED TITMOUSE NESTLINGS
BY A RED-BELLIED WOODPECKER**

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In March 2005 we placed two identically sized wooden nest boxes (15 × 14 cm with a 5.5 cm hole 21 cm from the bottom) 3.5 and 3.8 meters high, one on a slash pine (*Pinus elliotii*) and one on a laurel oak (*Quercus laurifolia*), 10.4 meters apart, in the backyard of a single family home in a subdivision in suburban Orange County, Florida. We monitored the boxes by using a ladder and opening the hinged top of each. On 12 April 2005, we observed an adult Tufted Titmouse (*Baeolophus bicolor*) in one of the boxes, and an Eastern Screech-Owl (*Megascops asio*) in the other. Two weeks later titmice were observed visiting the first box and feeding nestlings. A look inside the box on 3 May 2005 showed at least five young, looking fully feathered.

Three days later, on 6 May 2005, we and the home-owner observed a commotion at the box from the house, with a titmouse clinging to the entrance hole. On reaching the foot of the tree we saw a young titmouse on the ground, which then flew uncertainly to a bush. Thinking that fledglings were emerging, we stayed to watch. At that point, a male Red-bellied Woodpecker (*Melanerpes carolinus*) flew from the box. We placed the young titmouse high at a fork of a tree. As we returned to the house to continue watching, a second fledgling flew from the ground to a tree.

We watched over the course of another hour, during which time the woodpecker returned repeatedly to the box, calling and removing feathers from the nest. It also went to the box with the Eastern Screech-Owl, which contained three nestlings, and tapped at the entrance hole, but did not go in. The first fledgling titmouse eventually flew higher into a tree.

On 10 May 2005 we again examined the box and two young titmice were found dead inside, each with puncture holes in its head. The titmice were not harmed by the owls that occupied the other box the entire time the titmice were incubating and feeding the young.

Shackelford et al. (2000) and Hazler et al. (2004) report the Red-bellied Woodpecker as a predator of many animals but they did not report predation of Tufted Titmouse.

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FIELD OBSERVATIONS

Fall Report: August-November 2005.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32: 7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: CP = county park, EOS = end of season, NP = national park, NWR = national wildlife refuge, RA = restoration area, SP = state park, SRA = state recreation area, STF = sewage treatment facility, and N, S, E, W etc., for compass directions. Bold-faced species denote birds newly reported or verified in Florida, or record counts.

SUMMARY OF THE FALL SEASON

For the second fall season in a row, Florida was ravaged by hurricanes, although not nearly as badly as 2004—or farther west this year. Hurricanes *Katrina* (25-26, 29 Aug), *Ophelia* (7 Sep), *Rita* (20 Sep), and *Wilma* (24 Oct) all affected the state and its avifauna. Worst was *Katrina*, which heavily damaged the w. Panhandle coast while devastating New Orleans and environs, but *Wilma* also caused great damage in the Keys and s. peninsula. The Duncans report that the effects of multiple recent hurricanes are converting oak hammocks to oak scrub habitat along the w. Panhandle coast, while much of Flamingo, Everglades N.P. was flattened by *Wilma*.

FOSRC rarities reported this season were the Ross’s Goose at Lake Apopka; Manx Shearwater at New Smyrna Beach; two White-faced Ibises in the Panhandle; Zone-tailed Hawk at Curry Hammock; Lesser Sand-Plover (first Florida record and report) at St. Marks; Common Black-headed Gull at Cutler’ Sulphur-bellied Flycatcher, Thick-billed Vireo, and MacGillivray’s Warbler at Cape Florida; and Tropical-type kingbird at Fort De Soto. A Harris’s Hawk, presumably an escapee, was photographed at St. Petersburg, which furnished the first verifiable state record.

And lastly, one of Florida’s most ardent and best-loved bird conservationists, Rich Paul, died of cancer on 1 Nov at the age of 59. This one’s for you, Rich.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 1 pair and 9 young at Viera Wetlands (*Brevard*) 8 Aug (D. Freeland), and 15 (2 pairs with young of 3 and 8) there 10 Sep (A. Vinokur); 1 pair with young at Emeralda Marsh Conservation Area (*Lake*) 11 Aug (P. May); 2 at Withlacoochee River Park (*Pasco*) 20 Aug (R. Smith); **300** SE of Fort Drum (*Okeechobee*) 4 Nov (P. & L. Gray); 2 pairs with a total of 20 young at Lorida (*Highlands*) 7 Nov (P. & L. Gray et al.); 204 at Lake Apopka NSRA (*Orange*) 25 Nov (H. Robinson).

- FULVOUS WHISTLING-DUCK: 5 at Emeralda Marsh Conservation Area 20 Sep (P. May).
- SNOW GOOSE: 1 at Bald Point (*Franklin*) 24 Oct (J. Murphy); 2 adult white morphs at Lake Apopka NSRA 15 Nov, and 3 juvenile white morphs there 18 Nov (H. Robinson); 5 (1 white, 4 blue) at Cape Canaveral (*Brevard*) 15 Nov (T. Dunkerton); 8 at St. Marks NWR 28 Nov (J. Dozier); 1 at Merritt Island NWR (*Brevard*) 29 Nov (K. Allie); 3 (2 white, 1 blue) at Chieffland (*Levy*) 30 Nov (J. Stephens).
- *ROSS'S GOOSE: 1 at Lake Apopka NSRA (*Lake*) 18 Nov (D. Goodwin, G. Basili et al.).
- *ROSS'S × SNOW GOOSE: 1 apparent hybrid adult at St. Marks NWR 19 Nov-EOS (T. Curtis et al.).
- WOOD DUCK: 2 at Frog Pond WMA (*Miami-Dade*) 11 Nov (J. Boyd); 6 at Francis Taylor WMA (*Miami-Dade*) 13 Nov (J. Boyd).
- GADWALL: 20 at Emeralda Marsh CA 1 Nov (P. May); 1 hen at Eagle Lakes Park (*Collier*) 7 Nov (S. Carbol).
- AMERICAN BLACK DUCK: 1 at Lake Apopka NSRA 30 Oct (H. Robinson); 1 at Merritt Island NWR 13-15 Nov (T. Dunkerton et al., photos to FOC by A. Vinokur).
- MOTTLED DUCK: 1 at downtown Pensacola (*Escambia*) 18 Aug (B. and L. Duncan); 1 at Fort Walton Beach STF (*Okaloosa*) 1 Sep (B. Duncan); 1 in N *Escambia* 6 Nov (L. Catterton).
- BLUE-WINGED × CINNAMON TEAL: 2 (male and female) at Alachua 10-20 Sep—the drake looked like a Cinnamon Teal but both birds had brown irides (B. Wallace et al., photos to FOC).
- CINNAMON TEAL: 1 male at Emeralda Marsh CA 15 Oct (D. Freeland, M. Gardler et al.); 2 males at Merritt Island NWR 24 Nov (A. Vinokur et al.); 1 at St. Marks NWR 25 Nov (A. Vinokur et al.).
- NORTHERN SHOVELER: 2 at Merritt Island NWR 31 Aug (T. Dunkerton); 600 at *Polk* mines 12 Nov (P. Fellers, E. Lane).
- NORTHERN PINTAIL: 5000 at Merritt Island NWR 15 Nov (D. Freeland, M. Gardler).
- GREEN-WINGED TEAL: 2300 at *Polk* mines 12 Nov (P. Fellers, E. Lane); 600 at Merritt Island NWR 15 Nov (D. Freeland, M. Gardler).
- GREATER SCAUP: up to 3 (18 Nov) at Lake Apopka NSRA 9 Nov-EOS (H. Robinson).
- WHITE-WINGED SCOTER: 1 male at Black Point (*Miami-Dade*) 18 Nov (R. Torres).
- BLACK SCOTER: 1 adult female at Hobie Beach (*Miami-Dade*) 25 Nov (R. Torres); 3 males in mid *Pinellas* 28 Nov-EOS (Judy Fisher); 40 at Bald Point 29 Nov (J. Murphy).
- BUFFLEHEAD: 4 at Gainesville 19 Nov-EOS (L. Hensley et al.); 2 at Kennedy Space Center (*Brevard*) 18 Nov (D. Freeland).
- COMMON GOLDENEYE: 1 at Gainesville 19 Nov (L. Hensley); 2 at Lake Apopka NSRA 22 Nov (H. Robinson).
- HOODED MERGANSER: 1375 *Polk* mines 12 Nov (P. Fellers, E. Lane).
- RED-BREASTED MERGANSER: 5 at Gainesville 19 Nov (L. Hensley).
- PACIFIC LOON: 1 molting out of alternate plumage at Gulf Breeze (*Santa Rosa*) 31 Aug (B. and L. Duncan).
- PIED-BILLED GREBE: 110 at Viera 20 Nov (L. Manfredi et al.).
- HORNED GREBE: 4 at Black Point 30 Nov (R. Torres).
- CORY'S SHEARWATER: 26 observed from Boynton Beach Inlet (*Palm Beach*) 20 Sep (M. Berney).
- GREATER SHEARWATER: 1 at Indian Harbor Beach (*Brevard*) 26 Aug (*fide* T. Webber; UF 44948).
- SOOTY SHEARWATER: 3 at Bill Baggs Cape Florida SP (*Miami-Dade*) 26 Aug (R. Diaz).
- *MANX SHEARWATER: 1 at New Smyrna Beach (*Volusia*) 7 Sep (*fide* T. Webber; UF 44922).
- AUDUBON'S SHEARWATER: 1 at Satellite Beach (*Brevard*) 20 Aug (*fide* T. Webber; UF 44901); 2 observed from Boynton Beach Inlet 20 Sep (M. Berney).
- WILSON'S STORM-PETREL: 1 at Pensacola Bay, Gulf Breeze 29 Aug (B. and L. Duncan et al.).

- WHITE-TAILED TROPICBIRD: 1 at Indiatlantic Beach (*Brevard*) 26 Aug (*vide* T. Webber; UF 44929); 1 at Pensacola Beach (*Escambia*) 30 Aug died later (*vide* B. Duncan, specimen to University of Florida).
- AMERICAN WHITE PELICAN: 40 at St. Marks NWR 30 Aug (R. McGregor); 250 over Fort De Soto 27 Oct (J. Gaetzi et al.); 150 at Everglades City (*Collier*) 8 Nov (D. Suitor); 25 at Gainesville 29 Nov (*vide* M. Meisenburg).
- BROWN PELICAN: 2 at Lake Pierce (*Polk*) 10 Aug (J. DuBois); 3 at *Polk* phosphate mines 7 Sep, and 5 there 12 Nov (P. Fellers et al.).
- ANHINGA: a nest with 3 nestlings at St. Vincent NWR 12 Sep (T. Lewis); 2 downy chicks at Paynes Prairie Preserve SP 16 Oct (S. Howell et al.).
- MAGNIFICENT FRIGATEBIRD: 7 at St. Marks NWR 27 Aug (T. Curtis); 9 at Alligator Point (*Franklin*) 29-30 Aug (J. Murphy et al.); 1 female S of Sebring (*Highlands*) 21 Sep (C. Weekley et al.); 1 at Kennedy Space Center 19 Nov (D. Freeland); 2 at Ponce Inlet (*Volusia*) 29 Nov (M. Brothers).
- AMERICAN BITTERN: 1 at Emeralda Marsh CA 11 Aug (P. May); 22 at Lake Apopka NSRA 23 Oct & 9 Nov (H. Robinson).
- GREAT BLUE HERON: 34 headed S over Jupiter Inlet Colony (*Palm Beach*) 29 Sep (J. Hailman).
- GREAT WHITE HERON: 1 at Cape Canaveral (*Brevard*) 17 Sep (E. Kwater).
- REDDISH EGRET: 3 dark morphs at St. Marks NWR 27 Oct (J. Cavanagh).
- CATTLE EGRET: 18 at Springhill Road STF (*Leon*) 17 Nov-EOS (G. Menk).
- GLOSSY IBIS: 7 at Cape Florida 25 Aug (R. Diaz).
- *WHITE-FACED IBIS: 1 in N *Escambia* 30 Aug (L. Catterton, details to FOC); 1 at St. Marks NWR 20 Nov (T. Curtis).
- ROSEATE SPOONBILL: 1 at Silver Springs (*Marion*) 6 Aug (A. Luzader); 1 at Belleview (*Marion*) 8 Aug (A. Luzader); 4 near Winter Haven (*Polk*) 15 Aug (J. DuBois); 17 at Cedar Key 21 Aug (R. Rowan, S. Collins et al.); 17 at Fort George Island (*Duval*) 28 Aug (R. Rowan); 20 at Gulf Harbors, New Port Richey (*Pasco*) 31 Aug (K. Tracey); 1 at Fort Walton Beach STF (*Okaloosa*) 9-16 Sep (D. Ware et al.); 97 at Fernandina Beach (*Nassau*) 9 Sep (P. Leary); 2 at Kanapaha Prairie (*Alachua*) 17 Sep (M. Meisenburg, J. Bryan); 1 at Emeralda Marsh CA 18 Oct (P. May); 3 in *Okeechobee* 24 Oct (G. Quigley).
- TURKEY VULTURE: 1076 headed SE over Lake Apopka NSRA 30 Oct (H. Robinson).
- SWALLOW-TAILED KITE: 341 at Lake Apopka NSRA 3 Aug had dwindled to 5 there 25 Aug (H. Robinson); 1 at Apalachicola (*Franklin*) 11 Aug (J. Dozier).
- WHITE-TAILED KITE: 1 at Kissimmee Prairie Preserve SP (*Okeechobee*) 2 Oct (P. Miller).
- SNAIL KITE: 1 at Kissimmee Prairie Preserve 11 Nov (P. Miller); 1 S of La Belle (*Hendry*) 20 Nov (V. McGrath).
- MISSISSIPPI KITE: 15 nestlings blown out of nests in the Panhandle or at Gainesville in Jul during Hurricane *Dennis* were released at a staging area at Tram Road STF, Tallahassee 17 Aug (*vide* G. Menk); 1 at Lake Apopka NSRA 28 Aug (H. Robinson); 1 juvenile being fed at High Springs (*Alachua*) 17 Sep (M. Manetz et al.).
- BALD EAGLE: 109, mostly immatures, at Lake Apopka NSRA 13 Nov (H. Robinson).
- NORTHERN HARRIER: 1 at Lake Apopka NSRA 10 Aug (H. Robinson).
- SHARP-SHINNED HAWK: 1 at Lake Apopka NSRA 10 Aug (H. Robinson).
- HARRIS'S HAWK** (*Parabuteo unicinctus*): 1 without bands or jesses at St. Petersburg (*Pinellas*) 13 Nov (D. Margeson, photos to FOC) provided the first verifiable record.
- RED-SHOULDERED HAWK: 84 at Lake Apopka NSRA 15 Nov (H. Robinson).
- BROAD-WINGED HAWK: 75 in a kettle near Dunedin Hammock 15 Oct (S. Peacock).
- SHORT-TAILED HAWK: 1 at Wekiwa Springs SP 1 Aug (R. Rowan, S. Collins et al.); 1 at Belleview 2 Aug (A. Luzader); 1 dark morph at Little Haiti (*Miami-Dade*) 6 Aug (A. Harper); 1 light morph at Kendall (*Miami-Dade*) 8 Aug (B. Boeringer); 1 dark morph at Port Charlotte (*Charlotte*) 11 Sep (J. Bouton); 1 light morph at New Port Richey (*Pasco*) 12 Sep, and 2 dark morphs there 20 Sep (K. Tracey); 1 at O'Leno SP

- (*Columbia*) 17 Sep (C. Parenteau); 1 light morph at Lake Apopka NSRA 8 Oct, and 1 dark morph there 27 Nov (H. Robinson); 1 at Saddle Creek Park (*Polk*) 24 Oct (P. Fellers, L. Albright); 1 at Micanopy (*Alachua*) 25 Oct (D. Steadman); 1 dark morph at Lettuce Lake Park (*Hillsborough*) 5 Nov (B. Ahern); 1 dark morph over Faka Union Canal (*Collier*) 8 Nov (D. Sutor); 1 at Alachua 27 Nov (M. Walsh-McGehee); 1 at Winter Haven (*Polk*) 30 Nov (P. Fellers).
- SWAINSON'S HAWK: 1 light morph at Frog Pond WMA 6-24 Nov (M. Berney et al.), and 4 hawks there 19 Nov (J. Boyd); 1 juvenile light morph at Lake Apopka NSRA 15 Nov-EOS (H. Robinson).
- *ZONE-TAILED HAWK: 1 at Curry Hammock SP (*Monroe*) 26 Oct (M. Hedden, details to FOC).
- RED-TAILED HAWK: 1 apparent Krider's morph at Clam Bayou, St. Petersburg 26 Nov (D. Margeson, photo to FOC).
- GOLDEN EAGLE: 1 at St. Marks NWR 4 Nov (T. Curtis).
- CRESTED CARACARA: at least 4 pairs at Kissimmee Prairie Preserve all season (P. Miller).
- MERLIN: 3 at Lake Apopka NSRA 22 Sep, and 6 there 2 Nov (H. Robinson); 14 at Bald Point in 3 hours 1 Oct (A. & J. Wraithmell); 3 at Mead Garden 2 Oct (B. Anderson).
- PEREGRINE FALCON: 7 at Bald Point in 3 hours 1 Oct (A. & J. Wraithmell); 10 at St. George Island (*Franklin*) 5 Oct (J. Cavanagh).
- BLACK RAIL: 1 at Werner-Boyce Salt Springs State Park, Bayonet Point (*Pasco*) 17 Sep (R. Smart); 1 at Blackpoint Wildlife Drive, Merritt Island NWR 15 Nov (M. Gardler).
- KING RAIL: 295 at Lake Apopka NSRA 15 Aug (H. Robinson).
- SORA: 238 at Lake Apopka NSRA 18 Oct (H. Robinson).
- PURPLE GALLINULE: 2 juveniles at St. Marks NWR 22 Sep (B. Ahern); 18 at Emeraldal Marsh CA 18 Oct (P. May).
- COMMON MOORHEN: 875 at Emeraldal Marsh CA 15 Oct (D. Freeland, M. Gardler et al.).
- AMERICAN COOT: 10 (including young) at New Port Richey 2 Aug (R. Smart).
- LIMPKIN: 16 near the Sarasota Celery Fields (*Sarasota*) 20 Nov (J. Dubi et al.); 25 in one flooded field near Devil's Garden (*Hendry*) 20 Nov (V. McGrath).
- SANDHILL CRANE: singles at St. Marks NWR 16 Oct (T. Curtis) & 27 Oct (J. Cavanagh); 1 at Gulf Breeze 23 Oct (L. Duncan); 227 southbound over Lake Apopka NSRA 30 Nov (H. Robinson).
- BLACK-BELLIED PLOVER: 55 at Huguenot Memorial Park (*Duval*) 26 Aug (R. Clark); 107 at Fernandina Beach 9 Sep (P. Leary); 11 at Lake Apopka NSRA 11 Nov (H. Robinson).
- AMERICAN GOLDEN-PLOVER: 1 at Alachua 13-24 Sep (P. Burns et al.); 1 at Ponce Inlet (*Volusia*) 13 Sep (M. Brothers); 1 at Crandon Beach 15 Sep (R. Diaz); singles at St. Marks NWR 21 Sep & 29-30 Nov (J. Cavanagh); 1 at Fernandina Beach 22 Sep (P. Leary); 1 at Cutler Ridge (*Miami-Dade*) 23 Oct (M. Berney, B. Roberts); 1 at Springhill Road STF 3 Nov (G. Menk); 1 in N *Escambia* 6 Nov (L. Catterton); 1 at Viera 13 Nov (D. Freeland, L. Manfredi et al.).
- *LESSER SAND-PLOVER (*Charadrius mongolus*): 1 at St. Marks NWR 17-21 Sep (T. Curtis, B. & L. Duncan et al., photos to FOC) provided the first Florida report and record.
- WILSON'S PLOVER: 114 at Huguenot Park 26 Aug (R. Clark); **375** at Dunedin Causeway 11 Nov (M. Gardler).
- SEMPALMATED PLOVER: 1 at Belleview 6 Aug (A. Luzader); 53 at *Polk* mines 29 Aug (P. Fellers); 300 at Gulf Harbors 31 Aug (K. Tracey); 225 at Huguenot Park 8 Sep (R. Clark); 3 at Alachua 11-18 Sep (S. Collins et al.).
- PIPING PLOVER: 17 (2 banded, 1 in Michigan, 1 in Newfoundland) at Bird Islands, Nassau Sound (*Duval*) 16 Oct (P. Leary); 21 at Disappearing Island (*Volusia*) 30 Nov (M. Brothers).
- AMERICAN OYSTERCATCHER: 1 at Pensacola Beach 23 Sep (A. Sheppard); 116 in the Amelia River (*Nassau*) 16 Oct (P. Leary).
- BLACK-NECKED STILT: 1100 at the Everglades Agricultural Area (*Palm Beach*) 21 Aug (D. Freeland, M. Gardler et al.).

- AMERICAN AVOCET: 1 at Fred Howard Park 15 Aug (M. Gardler); 10 at the Everglades Ag Area 27 Aug (B. Hope); 2 at St. Marks NWR 11 Oct (*vide* A. Wraithmell); 1 at Tierra Verde (*Pinellas*) 24 Oct (L. Atherton); 7 at St. George Island 4 Nov (J. Dozier); 342 at *Polk* mines 12 Nov (P. Fellers, E. Lane); 1 at Moon Lake Park (*Pasco*) 22 Nov (K. Tracey).
- SOLITARY SANDPIPER: 6 at S Fort Myers (*Lee*) 6 Aug (C. Ewell).
- WILLET: 350 at Huguenot Park 8 Sep (R. Clark); 118 at Fernandina Beach 9 Sep (P. Leary); 250+ at Black Point Wildlife Drive 13 Nov (A. Vinokur).
- SPOTTED SANDPIPER: 1 at Lake Apopka NSRA 15 Aug (H. Robinson); 1 at Emeraldal Marsh CA 18 Aug (P. May); 1 at J.B. Starkey Wilderness Park (*Pasco*) 29 Aug was the first there (K. Tracey).
- UPLAND SANDPIPER: 15 at the Everglades Ag Area 14 Aug, and 31 there 27 Aug (M. Berney); 38 in S *Miami-Dade* 24 Aug (L. Manfredi).
- WHIMBREL: 3 at Huguenot Park 26 Aug (R. Clark); 4 at Fernandina Beach 9 Sep (P. Leary); 1 at St. Vincent NWR 15 Sep (T. Lewis); 2 at New Port Richey (*Pasco*) 24 Sep (K. Tracey).
- LONG-BILLED CURLEW: 1 at Tigertail Beach, Marco Island (*Collier*) 31 Aug (T. Below), and possibly the same at Caxambas Pass (*Collier*) 2 Sep (D. Suito); 1 at Destin 6 Sep (D. Muth); 1 at Huguenot Park 6-11 Sep (E. Kwater et al.).
- HUDSONIAN GODWIT: 1 juvenile at Cutler Ridge (*Miami-Dade*) 8 Aug (R. Torres); 1 in mostly alternate plumage at Marco Island 15 Sep (S. Carbol).
- MARbled GODWIT: 1 in Nassau Sound 20 Aug (P. Leary); 101 at Caxambas Pass 2 Sep (D. Suito); 1 at St. Vincent NWR 8 Sep (T. Lewis); 4 at New Port Richey 24 Sep (K. Tracey); 7 at Huguenot Park 23 Oct (B. Richter); 47 at Dunedin Causeway 11 Nov (M. Gardler).
- RED KNOT: 600 at Fort George Inlet 20 Aug (P. Leary); 116 at Little Estero Lagoon (*Lee*) 20 Aug (C. Ewell); 400 at St. Marks NWR 20 Sep (A. Vinokur, D. Richardson).
- SANDERLING: 1 at Alachua 5 Sep (P. Burns, B. Wallace).
- LEAST SANDPIPER: 1 at Emeraldal Marsh CA 18 Aug (P. May); 500 S of La Belle 14 Nov (V. McGrath et al.).
- WHITE-RUMPED SANDPIPER: 3 at Ormond Beach (*Volusia*) 8 Sep (M. Brothers); up to 8 at Alachua 10-18 Sep (J. Hintermister, A. Vinokur et al.); 4 at Ponce Inlet 13 Sep (M. Brothers); 1 at the Everglades Ag Area 17-18 Sep (B. Hope, M. Berney); 9 at St. Marks NWR 20 Sep (A. Vinokur, D. Richardson); 1 at Fort De Soto Park 13 Oct (A. Vinokur, D. Richardson).
- BAIRD'S SANDPIPER: 1 at Destin (*Okaloosa*) 6 Sep (D. Muth); 2 at Alachua 12-18 Sep (B. Wallace et al., photos to FOC); 1 at Lake Apopka NSRA 8 Oct (H. Robinson).
- PEEP SPECIES: 10,500 at *Polk* mines 29 Aug (P. Fellers).
- PECTORAL SANDPIPER: 1 at St. Vincent NWR 8 Sep (T. Lewis); 62 at Huguenot Park 8 Sep (R. Clark).
- PURPLE SANDPIPER: 1 at Ponce Inlet 17 Nov (M. Brothers).
- STILT SANDPIPER: 1 at St. Vincent NWR 11 Aug (T. Lewis); 480 at the Everglades Ag Area 21 Aug (D. Freeland, M. Gardler et al.).
- BUFF-BREASTED SANDPIPER: singles at the Everglades Ag Area 14 & 21 Aug, 8 there 27 Aug, and 17 there 18 Sep (B. Hope, M. Berney); 1 at Marco Island 31 Aug furnished the first for *Collier* (T. Below, photo to FOC); singles at St. Vincent NWR 2 & 15 Sep (T. Lewis); 1 at St. Marks NWR 5 Sep (M. Kiser); 2 at Fernandina Beach 6-10 Sep (P. Leary); up to 4 at Alachua 10-18 Sep (S. Collins, B. Wallace et al.); 1 at Viera 10 Sep (A. Vinokur, T. Dunkerton); 2 at Cutler Ridge 16-17 Sep (M. Wheeler et al.); 10 at St. Marks NWR 20 Sep (A. Vinokur, D. Richardson); 1 at Fort George Inlet 25 Sep (P. Leary).
- RUFF: singles at the Everglades Ag Area 21 Aug and 18 Sep (B. Hope, M. Berney et al.); 1 at Merritt Island NWR 27 Aug (A. Vinokur [photo to FOC], D. Richardson).
- SHORT-BILLED DOWITCHER: 110 at Huguenot Park P 26 Aug (R. Clark); 50 at Springhill Road STF 10 Nov (A. Wraithmell).

- LONG-BILLED DOWITCHER: 4 at Springhill Road STF 30 Sep (J. Cavanagh); 242 at *Polk* mines 12 Nov (P. Fellers, D. Brooke); 100+ at Kissimmee Prairie Preserve 19 Nov (G. Quigley).
- WILSON'S SNIPE: 1 at Emeraldal Marsh CA 13 Sep (P. May); 7 at Lake Apopka NSRA 22 Sep (H. Robinson).
- WILSON'S PHALAROPE: 30 at the Everglades Ag Area 27 Aug (B. Hope); 1 at Merritt Island NWR 27-31 Aug (A. Vinokur et al.); 1 at St. Marks NWR 29 Aug (T. Curtis); 4 at Cutler Ridge 16 Sep (R. Torres); 1 at Flamingo, Everglades NP (*Monroe*) 16 Oct (J. Boyd); 1 at Springhill Road STF 20 Oct (G. Menk).
- RED-NECKED PHALAROPE: 1 in N *Escambia* 30 Aug (L. Catterton); 1 at Ponce Inlet 13 Sep (M. Brothers); 14 off Miami 16 Sep (R. Torres et al.).
- RED PHALAROPE: 1 at Melbourne Beach 24 Oct (A. Bankert).
- POMARINE JAEGER: 105 at Delray Beach (*Palm Beach*) 13 Nov (B. Hope); 100 at Coconut Point (*Brevard*) 27 Nov (A. Bankert).
- PARASITIC JAEGER: 1 observed from Boynton Beach Inlet 20 Sep (M. Berney); 40 at Coconut Point 27 Nov (A. Bankert).
- LAUGHING GULL: 1 with orange bill and legs at Bunche Beach (*Lee*) 30 Sep (K. Bowman, photo to FOC).
- FRANKLIN'S GULL: 1 at St. Marks NWR 16 Oct (T. Curtis); 1 at Shell Point Beach (*Wakulla*) 19 Oct (S. McCool); 1 at Fort De Soto 20 Oct (L. Atherton, photos to FOC); 5 at Cutler Ridge 22 Oct had increased to 18 (6 adults and 12 juveniles) by 13 Nov (M. Berney et al., photos to FOC); 2 at Ponce Inlet (*Volusia*) 29 Oct (A. Vinokur et al.) and 1 there 4 Nov (M. Brothers); 1 in *Walton* 1 Nov (D. Simbeck); 1 at Bunche Beach 9 Nov (V. McGrath); 1 at Lake Apopka NSRA 11 Nov, and 12 there 15 Nov (H. Robinson); 1 at Dunedin Causeway (*Dunedin*) 12 Nov (E. Kwater); 1 at Jetty Park 13 Nov (A. Vinokur, photo to FOC).
- *BLACK-HEADED GULL: 1 first-winter at Cutler Ridge 19-23 Oct (R. Torres et al., photos to FOC by M. Berney).
- HERRING × GREAT BLACK-BACKED GULL: 1 hybrid adult possibly of this parentage at Lighthouse Point Park (*Volusia*) 28-29 Oct (M. Brothers et al., photos to FOC by A. Vinokur).
- LESSER BLACK-BACKED GULL: 1 at St. George Island (*Franklin*) 1 Aug (T. Lewis); 3 at Huguenot Park 26 Aug (R. Clark), and 106 there 23 Oct (B. Richter); 1 adult at Canaveral NS (*Brevard*) 27 Aug (A. Vinokur, D. Richardson); 83 in Nassau Sound 6 Nov (P. Leary); 1 second-winter at Dunedin Causeway 11 Nov (M. Gardler); 35 at Jetty Park 13 Nov (A. Vinokur, D. Richardson); 1 adult at Lake Apopka NSRA 30 Nov (H. Robinson).
- GREAT BLACK-BACKED GULL: 1 at Crandon Beach 15 Sep (R. Diaz).
- GULL-BILLED TERN: 8 at Gulf Harbors 31 Aug (K. Tracey); 1 at Merritt Island NWR 10 Sep (A. Vinokur, T. Dunkerton).
- CASPIAN TERN: 230 at *Polk* mines 12 Nov (P. Fellers, E. Lane).
- ROYAL TERN: 1 at Lake Pierce (*Polk*) 15 Aug (J. DuBois); 3000 at Huguenot Park and Nassau Sound 7 Sep (E. Kwater); 1 juvenile begged from an adult at Prairie Lake (*Seminole*) 8 Sep (A. Vinokur).
- SANDWICH TERN: 100 at St. Marks NWR 27 Aug (T. Curtis); 400 at Huguenot Park and Nassau Sound 7 Sep (E. Kwater); 400 at Fort De Soto Park 5 Nov (P. Sykes).
- COMMON TERN: up to 9 at Crandon Beach 17-27 Aug (R. Diaz); 1500 at Huguenot Park and Nassau Sound 7 Sep (E. Kwater); 40 at Ponce Inlet 1 Oct (A. Vinokur).
- LEAST TERN: 260+ at Crandon Beach 15 Aug (R. Diaz).
- BRIDLED TERN: 5 off Crandon Beach 26 Aug (R. Diaz); 2 at Ochlockonee Bay (*Wakulla*) 28 Aug (J. Dozier); 4 at St. Marks NWR 28 Aug (T. Curtis); 3 at Gulf Breeze 29 Aug (B. and L. Duncan et al.); 3 at Navarre (*Santa Rosa*) 29 Aug (D. Muth); 6 in *Walton* 30 Aug (J. Bortle); 1 inside Boynton Beach Inlet 20-24 Sep (M. Berney, B. Hope); singles at Jupiter Inlet Colony (*Palm Beach*) 20 & 28 Sep (J. & E. Hailman); 1 flew down the Loxahatchee River toward the ocean 23 Sep (J. & E. Hailman); 1 at New Pass (*Sarasota*) 24 Oct (J. Dubi); 1 at Canaveral NS 1 Oct (B. Anderson).

- SOOTY TERN: 100+ off Crandon Beach 26 Aug (R. Diaz); 7 in Biscayne Bay (*Miami-Dade*) 27 Aug (R. Diaz), and 8 there 20 Sep (A. Harper); 1 at St. Marks NWR 28 Aug (J. Dozier); 10 at Gulf Breeze 29 Aug (B. and L. Duncan et al.); 1 at Navarre 29 Aug (D. Muth); 3 in *Walton* 30 Aug (J. Bortle); 7 at Huguenot Park and Nassau Sound 7 Sep (E. Kwater); 10 at Ponce Inlet 8 Sep (M. Brothers); 10 off Cocoa Beach 8 Sep (D. Freeland); 85 at Boynton Beach Inlet 20 Sep (M. Berney); 1 inland at Sawgrass Mills (*Broward*) 24 Oct (M. Berney).
- BLACK TERN: 2 at Ten Thousand Islands NWR (*Collier*) 10 Aug (T. Doyle); 57 at Fred Howard Park 15 Aug (M. Gardler); 30-70 daily along the Gandy Causeway (*Pinellas*) 15-19 Aug (D. Goodwin); 100 at St. Vincent NWR 16 Aug (T. Lewis); 223 at Gulf Harbors 31 Aug (K. Tracey); 500 at Huguenot Park and Nassau Sound 7 Sep (E. Kwater).
- BROWN NODDY: 1 at Gulf Breeze 29 Aug (B. & L. Duncan et al.); 1 at Boynton Beach Inlet 20 Sep (M. Berney).
- BLACK SKIMMER: 656 at *Polk* mines 29 Aug (P. Fellers); 450 at Fred Howard Park 11 Nov (M. Gardler); 375 at Dunedin Causeway 11 Nov (M. Gardler).
- WHITE-WINGED DOVE: 50 at Kissimmee Prairie Preserve 2 Oct (P. Miller); 1 at Weeki Wachee 7-9 Oct (M. Gardler); 26 at Bald Point 24 Oct (J. Dozier); 1 at Ponce Inlet 29 Oct (A. Vinokur et al.); 1 at Honeymoon Island SP 13 Nov (L. Kenney); 300+ at Mims (*Brevard*) 15 Nov (M. Gardler); 2 at Marco Island 22 Nov (S. Carbol).
- KEY WEST QUAIL-DOVE: 1 adult male at John Pennekamp Coral Reef SP (*Monroe*) Apr-Nov (J. Duquesnel, photo to FOC).
- BUDGERIGAR: 12 at Hudson Beach (*Pasco*) 19 Nov (K. Tracey).
- BLACK-HODEED PARAKEET: 2 at New Port Richey and 4 at Bayonet Point 11 Aug (K. Tracey); 40+ in mid *Pinellas* 6 Sep (Judy Fisher); 40 along Dunedin Causeway 7 Sep (M. Gardler).
- MONK PARAKEET: 60 at Hudson Beach 19 Nov (K. Tracey).
- BLACK-BILLED CUCKOO: 1 at St. George Island 30 Sep (J. Cavanagh); 1 at Lake Apopka NSRA 21 Oct (H. Robinson).
- YELLOW-BILLED CUCKOO: 1 at Lake Apopka NSRA 5 Nov (D. Reed); 1 at Tallahassee 14 Nov (R. Lengacher); 1 at Hatbill Park (*Brevard*) 17-19 Nov (A. Bankert et al.).
- GROOVE-BILLED ANI: 1 at Lake Apopka NSRA 12 Oct (H. Robinson); 1 at Bald Point 22 Oct (J. Murphy); 1 at Fort Walton Beach STF 27 Oct-11 Nov (B. Duncan et al.).
- BURROWING OWL: 11 at Range 70, Eglin AFB (*Okealoosa*) 5 Nov (L. Fenimore).
- SHORT-EARED OWL: 4 at Lake Apopka NSRA 20 Nov (H. Robinson).
- LESSER NIGHTHAWK: 3 at Bald Point 8 Nov, with 1 there to 10 Nov (J. Dozier); 6 at Frog Pond WMA 13 Nov (J. Boyd); 1 at Apalachicola 23 Nov (K. McMullen).
- COMMON NIGHTHAWK: 136 at the Everglades Ag Area 21 Aug (D. Freeland et al.); 100 flying W at Alligator Point 1 Sep (J. Dozier); 430 in W *Pasco* 1 Sep (K. Tracey); 250 at Temple Terrace (*Hillsborough*) 1 Sep (B. Ahern); 250 at Tampa 3 Sep (D. Suitor); 1 at Tallahassee 3 Nov (A. Wraithmell).
- CHUCK-WILL'S-WIDOW: 83 at Key Largo (*Monroe*) 11 Sep (B. Mulrooney); 1 at Ponce Inlet (*Volusia*) 8 Nov (M. Brothers).
- WHIP-POOR-WILL: 1 at Crawfordville (*Wakulla*) 4 Sep (S. McCool); 1 at Alligator Point 10 Sep (D. Murphy).
- CHIMNEY SWIFT: 1000s at Jupiter Inlet Colony 24 Oct in the eye of Hurricane *Wilma* (J. & E. Hailman); 1 in mid *Pinellas* 7 Nov (Judy Fisher).
- BUFF-BELLIED HUMMINGBIRD: 1 at Gainesville 27 Sep-EOS (H. Bellot).
- RUBY-THROATED HUMMINGBIRD: 15 at Mead Garden 2 Oct (B. Anderson).
- BLACK-CHINNED HUMMINGBIRD: 1 at Alligator Point 10 Oct (J. Murphy).
- RUFIOUS HUMMINGBIRD: 1 adult male at Gainesville 14 Aug (H. Bellot).
- SELASPHORUS SPECIES: 2 at Merritt Island 19 Aug (B. Paxson, photo to FOC); 2 at Castellow Hammock Park (*Miami-Dade*) 11 Sep-15 Oct (R. Torres et al.); 1 at Alligator Point 10 Oct (J. Murphy); 1 in *Leon* 19 Oct (J. Armstrong).

- HUMMINGBIRDS: a yard at Valrico (*Hillsborough*) supported 7 Ruby-throated, 1 Black-chinned, and 1 Rufous (with a band) the first week of Nov, in addition to an unidentified *Selasphorus* 23-27 Sep (S. Backes).
- BELTED KINGFISHER: 1 at Mead Garden 6 Aug (B. Anderson).
- OLIVE-SIDED FLYCATCHER: singles at Gulf Breeze 2, 10, 15, 23 & 29 Sep (B. Duncan).
- EASTERN WOOD-PEWEE: 1 at Mead Garden 2 Nov (B. Anderson); 1 at Lake Apopka NSRA 9 Nov (H. Robinson).
- YELLOW-BELLIED FLYCATCHER: singles at Tallahassee 2 Sep (R. Lengacher) & 3 Sep (F. Rutkovsky); 2 at Spanish River Park (*Palm Beach*) 29 Sep (B. Hope); 1 at Paynes Prairie Preserve SP 8 Oct (J. Bryan); 1 at Lake City 8 Oct (J. Krummrich); 1 at Lake Apopka NSRA 8 Oct (H. Robinson); 1 at St. Marks NWR 22 Oct (T. Curtis).
- ALDER FLYCATCHER: 1 heard calling at Fort George Island 15 Sep (R. Clark); 1 heard at Cape Florida 25-29 Sep (R. Diaz, M. Davis, L. Golden); 1 heard at Southern Glades WEA (*Miami-Dade*) 30 Sep-1 Oct (L. Manfredi, audiotape to FOC); 1 heard at Key West (*Monroe*) 28 Oct (A. Harper).
- WILLOW FLYCATCHER: 1 heard at Lake Apopka NSRA 21 Aug (H. Robinson).
- LEAST FLYCATCHER: 2 at Lake Apopka NSRA 31 Aug (H. Robinson); singles at St. Marks NWR 20 Sep (J. Dozier), 27 Oct (J. Cavanagh), & 23 Nov (K. McMullen).
- VERMILION FLYCATCHER: 1 juvenile male at Lake Apopka NSRA 2 Oct, and an adult male there 25 Nov (H. Robinson); 1 at Bald Point 15 Oct (J. Murphy); 1 at St. Marks NWR 6 Nov (T. Curtis); 1 at Fort Walton Beach STF 15 Nov (P. Baker); 2 at Alligator Lake Park (*Columbia*) 30 Nov (D. Robbins).
- ASH-THROATED FLYCATCHER: 1 at Lake Apopka NSRA 12 Oct (H. Robinson); 1 at Tavernier (*Monroe*) 25 Oct (B. Mulrooney); 1 at Fort Walton Beach STF 2 Nov (B. Duncan); 1 at Merritt Island NWR 25 Nov (A. Bankert).
- GREAT CRESTED FLYCATCHER: 1 at Lake Marion Creek (*Polk*) 19 Nov (P. Fellers).
- BROWN-CRESTED FLYCATCHER: 1 at Lake Apopka NSRA 20 Nov (H. Robinson).
- *SULPHUR-BELLIED FLYCATCHER: 1 banded at Cape Florida 8 Oct (R. Diaz et al., photos to FOC).
- *TROPICAL-TYPE KINGBIRD: 1 at Fort De Soto Park 18 Aug (L. Atherton, photos to FOC).
- WESTERN KINGBIRD: 1 St. Marks NWR 5 Sep (E. Woodruff); 8 at Bald Point 24 Oct, and 1 there 9 Nov (J. Murphy); 1 near Devil's Garden (*Hendry*) 14 Nov (V. McGrath et al.); 1 at Talbot Island SP (*Duval*) 27 Nov (P. Leary).
- EASTERN KINGBIRD: 1 at St. Marks NWR 24 Nov (T. Curtis).
- GRAY KINGBIRD: 1 at South Bay (*Palm Beach*) 21 Aug (D. Freeland, M. Gardler); 1 at Lake Apopka 25 Aug (H. Robinson); 1 at Melbourne Beach 22 Oct (A. Bankert); 1 at the Seminole Indian Reservation (*Hendry*) 20 Nov (V. McGrath).
- SCISSOR-TAILED FLYCATCHER: 1 at Lake Wales (*Polk*) 18 Oct (J. DuBois); 5 in the W Panhandle variously 22-31 Oct (*vide* B. Duncan); 1 at Crawfordville 22 Oct (S. McCool); up to 2 at Bald Point 22-24 Oct (J. Murphy, J. Dozier); 1 at Sanibel Lighthouse (*Lee*) 28 Oct (C. Ewell); 2 near J.N. "Ding" Darling NWR (*Lee*) 29 Oct (A. Thornton); 2 at Cypress Isle, Lake Istokpoga (*Highlands*) 5 Nov (M. McMillian); 1 at Fort De Soto Park 10 Nov (L. Atherton); 3 S of La Belle 14 Nov (V. McGrath et al.); 3 at Thonotosassa (*Hillsborough*) 29 Nov (B. & L. Cooper).
- *THICK-BILLED VIREO: 1 banded at Cape Florida SP 7 Nov (R. Diaz et al., photos to FOC).
- BELL'S VIREO: 1 at Hugh Taylor Birch SP (*Broward*) 1-15 Oct (M. Berney et al.); 1 at Key West 27-28 Oct (A. Harper); 1 at Southern Glades WEA 25 Oct-11 Nov (L. Manfredi, J. Boyd).
- WARBLING VIREO: 1 at Spanish River Park 10 Oct (B. Hope).
- PHILADELPHIA VIREO: 1 at Dunedin Hammock 26 Sep (M. Gardler); 1 at Delray Beach 28 Sep (B. Hope); 1 at Gainesville 4 Oct (P. Burns, G. Parks); 1 in mid *Pinellas* 6 Oct (Judy Fisher); 1 at Lake Apopka NSRA 8 Oct (H. Robinson); 2 at San Felasco Hammock Preserve SP 10 Oct (R. Rowan); 1 at Alligator Point 11 Oct (J. Murphy); 1 at Tallahassee 24

- Oct (R. Lengacher); 1 at Birch SP 16 Oct (M. Berney); 1 at Eco Pond 16 Oct (J. Boyd); 1 at W Kendall (*Miami-Dade*) 17 Oct (J. Boyd); 1 at Mead Garden 22 Oct (A. Vinokur); 1 at Bonner Park 22 Oct (K. Nelson); 1 at Fort De Soto 23 Oct (L. Atherton).
- RED-EYED VIREO: 25 at Mead Garden 6 Aug (B. Anderson).
- BLUE JAY: 123 at Lake Apopka NSRA 16 Oct (H. Robinson).
- NORTHERN ROUGH-WINGED SWALLOW: 3000 S of Matanzas Inlet (*St. Johns*) 30 Oct (R. Smith); 20+ at Newnans Lake 30 Oct (R. Rowan); 1 at Paynes Prairie Preserve SP 5 Nov (A. Kent, E. Scales); 2 at Lake Apopka NSRA 13 Nov (H. Robinson).
- BANK SWALLOW: 250 at the Everglades Ag Area 14 Aug (B. Hope); 264 at Lake Apopka NSRA 7 Sep (H. Robinson).
- CLIFF SWALLOW: 1 at Lake Apopka NSRA 7 Aug (H. Robinson); 1 near Gainesville 14 Sep (A. Vinokur, T. Dunkerton); 4 at Weekiwachee Preserve 19 Sep (A. & B. Hansen); 18 at Bald Point 1 Oct (A. & J. Wraithmell).
- CAVE SWALLOW: 14 of the Mexican race at Lake Apopka N.S.R.A. 28 Oct, and 1 there to 4 Nov (H. Robinson); 2 of the Mexican race at Lighthouse Point Park 22 Nov (M. Brothers).
- BARN SWALLOW: 2400 at the Everglades Ag Area 21 Aug (D. Freeland, M. Gardler et al.); 1000 at Bald Point 6 Sep (J. Dozier); 2400 at Lake Apopka NSRA 7 Sep, and 3 there 30 Nov (H. Robinson); 173 at Werner-Boyce Salt Springs SP 24 Sep (K. Tracey); 100s at Jupiter Inlet Colony 24 Oct in the eye of Hurricane *Wilma* (J. & E. Hailman); several at Kissimmee Prairie Preserve 2 Nov (P. Miller); 14 at *Polk* mines 12 Nov (P. Fellers, E. Lane); 5 at Emeraldal Marsh CA 15 Nov (P. May); 1 at Springhill Road STF 30 Nov (A. Wraithmell).
- CAROLINA CHICKADEE: 1 at Greynolds Park (*Miami-Dade*) 17 Sep-EOS (J. King, A. Harper).
- TUFTED TITMOUSE: 1 at AD Barnes Park (*Miami-Dade*) to 1 Oct (J. Boyd et al.).
- WHITE-BREASTED NUTHATCH: 1 at San Felasco Hammock 1 Oct (B. Christensen).
- HOUSE WREN: 1 at Emeraldal Marsh 13 Sep (P. May); 354 at Lake Apopka NSRA 21 Oct (H. Robinson).
- WINTER WREN: 1 at O'Leno SP 27-30 Nov (P. Burns).
- MARSH WREN: 2 at Lake Apopka NSRA 2 Oct, and 211 there 9 Nov (H. Robinson); 1 at Cape Florida 8 Oct, and 2 there 6 Nov (R. Diaz).
- GRAY-CHEEKED THRUSH: 7 heard over Spring Hill 29 Sep (M. Gardler).
- SWAINSON'S THRUSH: 45 heard over Spring Hill 29 Sep (M. Gardler).
- WOOD THRUSH: 2 banded at Wekiwa Springs SP (*Seminole*) 15 Oct (B. Anderson); 2 in mid *Pinellas* 16 Oct (Judy Fisher); 1 banded at Cape Florida 17 Oct (M. Davis et al.); 1 at Gulf Breeze 22-26 Nov (S. Duncan).
- AMERICAN ROBIN: 1 at Gainesville 9 Sep (M. Manetz); 4000 at a roost at Hal Scott Preserve (*Orange*) 19 Nov (A. Vinokur).
- COMMON MYNA: 1 at Bradenton Beach (*Manatee*) 6 Aug-EOS (Jeff Fisher).
- CEDAR WAXWING: 1 juvenile at Alligator Point 23 Oct (S. McCool); 4 at Cape Florida 6 Nov (R. Diaz).
- BLUE-WINGED WARBLER: 1 at Tallahassee 30 Aug (F. Rutkovsky); 1 in mid *Pinellas* 8 Sep, and 2 there 17 Sep (Judy Fisher); 1 at AD Barnes Park 10 Sep (R. Torres); 1 at Emeraldal Marsh 13 Sep (P. May); 1 at San Felasco Hammock 14 Sep (A. Vinokur); 1 at Cape Florida 23 Sep (R. Diaz et al.); 1 at Saddle Creek Park 24 Sep (A. Vinokur, D. Richardson); 1 at St. George Island 30 Sep (J. Cavanagh); 1 at Six Mile Cypress Slough Preserve, Fort Myers 5 Oct (C. Ewell).
- GOLDEN-WINGED WARBLER: singles at Tallahassee 5 Sep (F. Rutkovsky), 7-8 Sep (D. & S. Jue), & 3 Oct (B. Henderson); 5 at Cape Florida variously 15 Sep-18 Oct (R. Diaz et al.); 1 at Salt Springs SP 17 Sep, and 3 there 8 Oct (K. Tracey); 1 at St. George Island 30 Sep (J. Cavanagh); 1 at Saddle Creek Park 4 Oct (P. Fellers); 1 at Fort De Soto 6 Oct (L. Atherton); singles in mid *Pinellas* 6 & 8 Oct (Judy Fisher); 2 at Birch SP 15 Oct (M. Berney); 1 at Evergreen Cemetery (*Broward*) 15-16 Oct (B. Roberts, M. Berney).

- BLUE-WINGED × GOLDEN-WINGED WARBLER: 1 Lawrence's intergrade at Paynes Prairie Preserve 29 Sep-1 Oct (C. Burney, J. Stahl et al.); 1 Brewster's intergrade at Gainesville 16 Oct (L. Hensley).
- TENNESSEE WARBLER: 5 at Saddle Creek Park 16 Oct (P. Fellers); 12 at Salt Springs SP 8 Oct (K. Tracey); 1 at Tallahassee 7 Nov (R. Lengacher); 4 in mid *Pinellas* 9 Nov (Judy Fisher).
- ORANGE-CROWNED WARBLER: 1 at Gainesville 17 Sep (M. Manetz et al., details to FOC); 1 female *celata* at Castellow Hammock Park 25 Nov (B. Ahern, D. Powell).
- NASHVILLE WARBLER: 1 at Fort George Island 24 Sep (R. Clark); 1 at Mead Garden 24 Sep (A. Vinokur); 1 at George English Park (*Broward*) 24 Sep (M. Stickel, M. Berney); 1 at Paynes Prairie Preserve 29 Sep (C. Burney); singles at Cape Florida 29 Sep (L. Golden) & 1 Oct (B. Roberts); 2 at Birch SP 1 Oct, and 1 there 19 Oct (J. Pesold et al.); 1 at Evergreen Cemetery 1 Oct (M. Berney); 1 at Lake Apopka NSRA 26 Oct (H. Robinson); 1 at Sanibel Lighthouse 28 Oct (C. Ewell); 2 at Key Largo 1-5 Nov (B. Mulrooney et al.); 1 at St. Marks NWR 1 Nov (J. Cavanagh); 1 at Newnans Lake 24 Nov (A. Kratter).
- NORTHERN PARULA: 1 at Tallahassee 7 Nov (R. Lengacher); 1 at Spring Hill 14 Nov (A. & B. Hansen); 1 at Magnolia Park (*Orange*) 19 Nov (A. Vinokur).
- YELLOW WARBLER: 2 at Lake Apopka NSRA 3 Aug, and 84 there 22 Sep (H. Robinson); 56 at Emeraldal Marsh 18 Aug (P. May).
- CHESTNUT-SIDED WARBLER: 1 at Gainesville 19 Aug (R. Robinson); 16 at Salt Springs SP 8 Oct (K. Tracey).
- MAGNOLIA WARBLER: 1 at Fort George Island 26 Nov (R. Clark).
- CAPE MAY WARBLER: 1 at Newnans Lake 12 Nov (T. Spahr, R. Rowan).
- BLACK-THROATED BLUE WARBLER: 1 in mid *Pinellas* 22 Aug (Judy Fisher); 500 at Coconut Point 14 Oct (A. Bankert); 1 at Gulf Breeze 12 Nov (B. Duncan); 1 at Cedar Key 18 Nov (D. Henderson).
- YELLOW-RUMPED WARBLER: 1 adult male Audubon's race at Fort De Soto Park 28 Sep (L. Atherton et al., photos to FOC).
- BLACK-THROATED GRAY WARBLER: 1 at Eglin AFB (*Okaloosa*) 8 Sep (J. Kowalski); 1 at Gainesville 9 Oct (R. Rowan); 1 at New Port Richey 31 Oct-EOS (J. McKay et al., photo to FOC by K. Tracey); 1 at Fort Walton Beach STF 7-11 Nov (B. Duncan, D. Ware et al.).
- BLACK-THROATED GREEN WARBLER: 8 at Dunedin Hammock 23 Oct (M. Gardler).
- TOWNSEND'S WARBLER: 1 at Fort De Soto Park 3-4 Sep (L. Atherton et al., photos to FOC); 1 banded at Cape Florida SP 4 Nov (R. Diaz et al., photos to FOC).
- BLACKBURNIAN WARBLER: 1 at Frog Pond WMA 19 Nov (R. Torres).
- PRAIRIE WARBLER: 2 at Mead Garden 8 Aug (B. Anderson); 16 at Lake Apopka NSRA 10 & 21 Aug (H. Robinson); 9 at Emeraldal Marsh 11 Aug (P. May).
- BAY-BREASTED WARBLER: 12 at Dunedin Hammock 23 Oct (M. Gardler).
- BAY-BREASTED × YELLOW-RUMPED WARBLER: 1 apparent hybrid at Lake Apopka NSRA 16 Oct, thought to be of this parentage, was similar to a Bay-breasted Warbler but had a bright yellow rump (A. Vinokur, B. Pranty et al.).
- BLACKPOLL WARBLER: 1 at George English Park (*Broward*) 24 Sep (M. Stickel, M. Berney); 1 at Fort De Soto 6 Oct (L. Atherton); 1 at Maitland 5 Oct (A. Vinokur); 1 Mead Garden 6 Oct (B. Anderson); 3 at Paynes Prairie 7-8 Oct (A. Kent, A. Kratter); 8 at W Kendall 7 Oct (J. Boyd); 15 at Birch SP 8 Oct (M. Berney); 14 at Evergreen Cemetery 8-9 Oct (M. Berney); 10 at Melbourne Beach 24 Oct (A. Bankert); 1 at Merritt Island NWR 5 Nov (B. Anderson).
- CERULEAN WARBLER: 1 at Birch SP 13 Aug (M. Berney); 1 at Alderman Ford Park (*Hillsborough*) 28 Aug (D. Goodwin, E. Haney); 1 at Cape Florida 29 Aug (R. Diaz et al.); 1 in mid-*Pinellas* 8 Sep (Judy Fisher); 1 at Fort George Island 15-17 Sep (R. Clark); 1 at Greynolds Park 7 Oct (J. King).

- PROTHONOTARY WARBLER: 1 at Emeralda Marsh 25 Aug (P. May); 7 at Saddle Creek Park 24 Sep (A. Vinokur, D. Richardson); 1 at Gulf Breeze 10 Nov (B. Duncan).
- WORM-EATING WARBLER: 1 banded at Wekiwa Springs SP 28 Aug (A. Boyle); 8 at Saddle Creek Park 24 Sep (A. Vinokur, D. Richardson).
- SWAINSON'S WARBLER: 2 in *Leon* 20 Aug (R. McGregor); singles at Cape Florida 10 Sep (G. Jones) and 1 Oct (B. Roberts); 1 at AD Barnes Park 17 Sep (B. Roberts); 1 at Birch SP 9 Oct (M. Berney).
- OVENBIRD: 3 at Lake Apopka NSRA 28 Aug, and 50 there 22 Sep (H. Robinson); 1 at Emeraldalda Marsh 6 Sep (P. May).
- NORTHERN WATERTHRUSH: 15 at Hague 10 Sep (M. Manetz); 120 at Lake Apopka NSRA 22 Sep (H. Robinson); 4 at Paynes Prairie 5 Nov (M. Manetz, A. Kent et al.); 1 at Dunedin Hammock 8 Nov (M. Gardler).
- LOUISIANA WATERTHRUSH: 23 at Lake Apopka NSRA 21 Aug (H. Robinson); 1 at Gainesville 16 Oct (R. Rowan).
- KENTUCKY WARBLER: 1 banded at Wekiwa Springs SP 28 Aug (A. Boyle); 1 at Alderman Ford Park 28 Aug (D. Goodwin, E. Haney) singles at Fort George Island 9 & 15 Sep (R. Clark); 1 at Delray Beach 13 Sep (B. Hope); 1 at San Felasco Hammock 14 Sep (A. Vinokur, T. Dunkerton).
- CONNECTICUT WARBLER: 1 banded at Cape Florida 21 Sep (R. Diaz et al.).
- MOURNING WARBLER: singles banded at Cape Florida 21 Sep and 8 Oct (R. Diaz et al.); 1 at Spanish River Park 28 Sep (B. Hope); 1 at Evergreen Cemetery 29 Sep (M. Stickel); 1 at Jacksonville 4 Nov (J. Cocke, P. Powell).
- *MACGILLIVRAY'S WARBLER: 1 at Cape Florida 22 Sep (R. Diaz, details to FOSRC).
- HOODED WARBLER: 1 at Flatwoods Park (*Hillsborough*) 5 Nov (B. Ahern).
- WILSON'S WARBLER: 1 female at Fort De Soto Park 3 Sep (L. Atherton et al.); singles at Fernandina Beach 15 Sep and 5 Nov (P. Leary); 1 at Evergreen Cemetery 17 Sep (R. MacGregor, M. Berney, M. Stickel); up to 2 at Paynes Prairie Preserve SP 1-7 Oct (J. Bryan, M. Manetz, A. Kratter); 1 at Lake Apopka NSRA Oct (H. Robinson); 1 at Salt Springs SP 8 Oct (K. Tracey); 1 at Birch SP 15 Oct (M. Stickel, B. Roberts); 1 at Mead Garden 17 Oct (A. Vinokur); 1 male at Cape Florida 11 Nov (R. Diaz).
- CANADA WARBLER: 1 banded at Cape Florida 5 Sep (M. Davis, L. Golden); 1 at Delray Beach 13 Sep (B. Hope); 1 at Waldo (*Alachua*) 23 Sep (R. Norton); 1 at Saddle Creek Park 24 Sep (A. Vinokur); 1 at Gainesville 2 Oct (R. Rowan); 1 at Miami Shores (*Miami-Dade*) 3 Oct (A. Harper).
- YELLOW-BREASTED CHAT: 3 at Lake Apopka NSRA 21 Aug (H. Robinson); 1 at Ponce Inlet 15 Sep (M. Brothers); 1 at St. Augustine 19-21 Sep (J. Kern); 1 at Paynes Prairie Preserve SP 8 Oct (B. Christensen et al.); 1 at Melbourne Beach 22 Oct (A. Bankert); 1 at Gainesville 11 Nov (T. Spahr); 5 at Frog Pond WMA 13 Nov (M. Berney et al.); 1 at Southern Glades WEA 19 Nov (J. Boyd).
- WESTERN Tanager: 1 female at Coconut Point 2 Sep (A. Bankert); 1 at Matheson Hammock 10 Sep (J. Boyd et al.); 1 at Fort George Island 17 Sep (R. Clark); 1 female at Pinecraft Park, Sarasota 7 Oct (J. Dubi, J. Palmer); 1 female at Mead Garden 24 Oct (A. Vinokur, photos to FOC).
- CHIPPING SPARROW: 1 at Alligator Point 5 Sep (J. Murphy); 1 at Kissimmee Prairie Preserve 16 Sep (P. Miller); 1 at St. Augustine 23 Sep (J. Kern).
- CLAY-COLORED SPARROW: 1 at Ponce Inlet 21 Sep (M. Brothers); 2 at Fort Walton Beach STF 19 Oct (B. Duncan); 2 at Paynes Prairie Preserve SP 30 Oct (M. Manetz); singles at Bald Point 10 & 22 Oct (J. Murphy); 1 at St. George Island 24 Oct (A. Knothe); 1 at W Kendall 25 Oct (J. Boyd); 1 at Sanibel Lighthouse 26-28 Oct (C. Ewell et al.); up to 3 at Frog Pond WMA 29 Oct-19 Nov (J. Boyd); 1 at Hague 30 Oct (B. Carroll); 1 at Honeymoon Island SP 5 Nov (K. Nelson); up to 2 at Lake Apopka NSRA 7 Nov-EOS (H. Robinson); 1 at Castellow Hammock Park 25 Nov (B. Ahern, D. Powell).

- FIELD SPARROW: 1 at Frog Pond WMA 29 Oct (J. Boyd); 2 at Weekiwachee Preserve 23 Nov-EOS (A. & B. Hansen).
- VESPER SPARROW: 1 at Bald Point 26 Oct (J. Dozier); 1 at Frog Pond WMA 13-19 Nov (A. Harper, J. Boyd).
- LARK SPARROW: 1 at Lake Apopka NSRA 21 Aug (H. Robinson); 1 at St. Sebastian River Preserve SP (*Brevard*) 22 Aug (D. Simpson); 1 juvenile at Weeki Wachee 25 Aug (M. Gardler); 1 at Alachua 11 Sep (A. Luzader et al.); 2 at Bald Point 9-12 Sep (J. Dozier); 5 at Kissimmee Prairie Preserve 24 Sep (G. Quigley); 1 juvenile at St. Marks NWR 27 Oct (J. Cavanagh); 1 at Sanibel Lighthouse 28 Oct (W. Winton); 1 juvenile at Honeymoon Island SP 6 Nov (K. Nelson); 1 at Lemon Bay Preserve, Venice (*Sarasota*) 6-10 Nov (B. & M. Dunson, photo to FOC).
- GRASSHOPPER SPARROW: 7 at Weekiwachee Preserve 13 Nov (M. Gardler).
- HENSLow'S SPARROW: up to 3 at Hague 10-16 Nov (C. Burney, J. Stahl et al.); 1 at Bald Point 29 Nov (J. Murphy).
- LE CONTE'S SPARROW: up to 2 at Hague 11-16 Nov (R. Rowan, M. Manetz et al.).
- SEASIDE SPARROW: 1 at Ponce Inlet 11 Sep (M. Brothers); 1 juvenile banded at Cape Florida 12 Sep (M. Davis et al.).
- SONG SPARROW: 1 at Fort De Soto Park 11 Nov (L. Atherton et al.).
- LINCOLN'S SPARROW: 1 at Birch SP 15 Oct (M. Berney, M. Stickel); 1 at St. Marks NWR 16 Oct (T. Curtis); 1 at Tavernier (*Monroe*) 25 Oct (B. Mulrooney); up to 3 at Hague 29 Oct-16 Nov (C. Burney, J. Stahl et al.); 1 banded at Cape Florida SP 4 Nov (R. Diaz et al.); 1 at Frog Pond WMA 6-19 Nov, with 4 there 13 Nov (M. Berney, J. Boyd et al.); up to 2 (20 Nov) at Lake Apopka NSRA 7-22 Nov (H. Robinson); 2 at Merritt Island NWR 25 Nov (A. Bankert); 1 at Seven Springs (*Pasco*) 28 Nov (K. Tracey).
- SWAMP SPARROW: 478 at Lake Apopka NSRA 30 Nov (H. Robinson).
- WHITE-THROATED SPARROW: 1 at Salt Springs SP 10 Nov (K. Tracey); 1 at Cape Florida 11 Nov (R. Diaz).
- WHITE-CROWNED SPARROW: 2 at Cape Florida 25 Oct (O. Weldon); 1 at Southern Glades WEA 25 Oct (L. Manfredi).
- DARK-EYED JUNCO: 1 at St. Vincent NWR 11 Nov (T. Lewis).
- NORTHERN CARDINAL: 1 yellow-colored male at Coral Springs (*Broward*) 31 Oct (S. Radzi, photo to FOC).
- ROSE-BREASTED GROSBEAK: 1 juvenile male at Honeymoon Island SP 24 Nov (K. Nelson).
- BLUE GROSBEAK: 4 at Emeraldal Marsh CA 6 Sep (P. May); 1 female at Weekiwachee Preserve 4 Nov (A. & B. Hansen); 1 at Gainesville 11 Nov (T. Spahr); 1 at Bald Point 26 Nov (J. Dozier et al.); 1 female at Cedar Key 26 Nov (D. Henderson).
- INDIGO BUNTING: 115 at Emeraldal Marsh CA 18 Oct (P. May); 300 at Hague 22 Oct (M. Manetz, A. Kent); 2 at St. George Island 4 Nov (J. Dozier); 1 at Tallahassee 7 Nov (R. Lengacher).
- PAINTED BUNTING: 1 female-plumaged at Bald Point 9 Sep (J. Dozier); 1 male at Mead Garden 9 Oct (A. Vinokur, B. Anderson).
- DICKCISSEL: 1 at Castellow Hammock Park 11-13 Sep (R. Torres et al.); 1 at Jetty Park (*Brevard*) 16 Nov (J. Gaetzi); 3 at Lake Apopka NSRA 18 Nov (G. Basili).
- BOBOLINK: 2 at Lake Apopka NSRA 15 Aug (H. Robinson); 25 at Emeraldal Marsh CA 30 Aug (P. May); 800+ at a rice field south of CR-880 17 Sep (M. Berney); 3 at St. Marks NWR 16 Oct (T. Curtis); 2 at Cape Florida 11 Nov (R. Diaz); 1 at the Sarasota Celery Fields 13 Nov (J. Dubi).
- YELLOW-HEADED BLACKBIRD: 1 at Fort Walton Beach STF 13 Sep (D. Ware); 1 at Hague 11-12 Nov (M. Manetz et al.).
- SHINY COWBIRD: 1 at Cedar Key 21 Aug (R. Rowan et al.); 1 male at Lake Apopka NSRA 12 Sep-28 Oct (H. Robinson).
- BRONZED COWBIRD: 2 at Cedar Key 21 Aug (S. Collins et al.); 4 at Eagle Lakes Park 13 Nov (*vide* C. Ewell).

ORCHARD ORIOLE: 1 adult female at Cape Florida 13 Aug (R. Diaz); 1 juvenile male at Altamonte Springs 5 Sep (P. Hueber).

BALTIMORE ORIOLE: 1 at St. Augustine 16 Sep (J. Kern).

HOUSE FINCH: 1 female in mid *Pinellas* 24-27 Aug (Judy Fisher); flocks of 4 and 10 at Lake Apopka NSRA 3 Sep (B. Anderson et al.); 12 at Mead Garden 2 Oct (B. Anderson); 3 males at Wilbur-by-the-Sea (*Volusia*) 11 Oct (M. Brothers); 1 singing male at Cape Coral (*Lee*) 4 Nov established a new location (J. Greenlaw).

ZEBRA FINCH: 1 at Lake Apopka NSRA 7 Sep (H. Robinson).

EURASIAN GOLDFINCH: 1 at Milton (*Santa Rosa*) early-26 Aug (M. Schiller).

PIN-TAILED WHYDAH: 1 alternate-plumaged male at Sanibel Lighthouse 11 Sep (V. McGrath); up to 2 (female and male) at Lake Apopka NSRA 22 Sep (H. Robinson).

MUNIA SPECIES: 1 juvenile at Frog Pond WMA 28 Aug (J. Boyd).

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Summer 2005 observation not reported previously: HEERMANN'S GULL: 1 adult in alternate plumage on the old causeway to St. George Island (*Franklin*) ~9 Jun (Wylie Watt, photos to FOC) had been seen there a few days earlier (Jack Dozier).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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The *Florida Field Naturalist* is a fully refereed journal emphasizing biological field studies and observations of vertebrates, especially birds, in and near Florida and the nearby West Indies. We welcome submission of original manuscripts containing new information from these areas. **We encourage electronic submission of manuscripts.** Please consult recent issues of the journal for style, especially noting that manuscripts should:

- (1) be double-spaced throughout, including tables and figure captions;
- (2) include the scientific name at the first mention of each species;
- (3) include capitalized standardized English names for all birds, but lower case for English names of other organisms;
- (3) include metric units for all measurements;
- (4) use the form "7 June 2003" for all dates;
- (5) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
- (6) use the following abbreviations: s (second), min (minute), h (hour);
- (7) preferentially use active voice.

Submit manuscripts for *Florida Field Naturalist* to the **New Editor**, Scott Robinson, Florida Museum of Natural History, P.O. Box 117800, University of Florida, Gainesville, FL 32611; Phone: 352-392-1721, ext. 509; e-mail: srobinson@flmnh.ufl.edu. Monograph-length manuscripts may be submitted for consideration to Reed F. Noss, Editor of Special Publications. Books and other materials for review should be submitted to: Reed Bowman, Associate Editor for Reviews. Field Observations should be submitted to the Chair of the Field Observations Committee, Bill Pranty. Reports of rare birds in Florida should be submitted to the Managing Secretary of the FOS Records Committee, Reed Bowman.



Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 2

MAY 2006

PAGES 37-68

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 3

SEPTEMBER 2006

PAGES 69-114



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The *Florida Field Naturalist* is published quarterly (February, May, September, and November) by the Florida Ornithological Society. It is printed by E. O. Painter Printing Co., P.O. Box 877, DeLeon Springs, Florida 32130. The permanent address of the Florida Ornithological Society is Department of Ornithology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611. The Florida Ornithological Society web site can be found at www.fosbirds.org

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 3

SEPTEMBER 2006

PAGES 69-114

Florida Field Naturalist 34(3):69-102, 2006.

FIFTEENTH REPORT OF THE FLORIDA ORNITHOLOGICAL SOCIETY RECORDS COMMITTEE: 2003-2005

The Florida Ornithological Society Records Committee (FOSRC) critically reviews all written sight reports and specimens and/or photographic records (including audio recordings) submitted to it to determine the validity of the reports. The Committee's findings are published periodically in the *Florida Field Naturalist* (FFN). Of the 82 reports received and logged from June 2002 through September 2005, 80 were reviewed; 56 were accepted, 20 were not accepted, and four were not resolved and are still under consideration: White-tipped Dove (*Leptotila verreauxi*, 03-504), Yellow-green Vireo (*Vireo flavoviridis*, 04-526), Say's Phoebe (*Sayornis saya*, 05-561), and Golden-crowned Sparrow (*Zonotrichia atricapilla*, 05-562). Two additional reports were catalogued, but not acted upon by the Committee: South Polar Skua (*Catharacta maccormicki*, 04-540), which was observed outside of Florida's territorial waters and was forwarded to the Bahamas Avian Records Committee for review, and Heermann's Gull (*Larus heermanni*, 03-508), which was considered to be the same individual as that in a previously resolved report. In addition, the committee considered six reports submitted prior to June 2002 that previously had been either not resolved or tabled in anticipation of additional evidence, and three reports that were re-evaluations of previous resolved reports. Of the six unresolved reports, two were accepted and four were not accepted. Of the three previously resolved reports, the committee decided that the new evidence did not warrant re-evaluation of one record and two were changed from Accepted to Not Accepted. In one of these latter instances (91-222), an alternative species identification was considered and accepted, but a new catalog number was not assigned. In addition, the committee considered evidence that an exotic species was established in Florida and this report was accepted. Thus, of all reports considered, new or re-evaluated, previously unresolved, and exotics that have become established, a total of 86 reports were resolved, of which 60 (70%) were accepted and 26 (30%) were not accepted. Of the reports accepted, 43 (72%) included photographs. However, photographs are not always diagnostic; of the reports that were not accepted, seven (30%) included photographs.

In 1998, the FOSRC adopted the "Verified Species" listed in *Florida Bird Species: an Annotated List* (Robertson & Woolfenden, 1992, F.O.S. Spec. Pub. 6) as its baseline scientific list of Florida's avifauna ("State List"). This list consisted of 461 species. The FOSRC publishes updates to the State List from time to time based upon its Final Decisions and other activity. Since the publication of Robertson and Woolfenden (1992), hereinafter referred to as (R&W 1992), and prior to this report, a total of 25 species has been added to the official FOSRC state list. In this report, we add 11 new species to the state list, but also remove two for which prior evidence has been re-evaluated. The list of species added to the official FOSRC state list since publication of R&W (1992) are (those new to this re-

port marked with an *): Red-necked Grebe, *Podiceps grisegena* (01-437); Short-tailed Shearwater, *Puffinus tenuirostris* (02-468); Rough-legged Hawk, *Buteo lagopus* (00-415); Zone-tailed Hawk, *Buteo albonotatus* (00-433); *Eurasian Kestrel, *Falco tinnunculus* (03-512); Northern Lapwing, *Vanellus vanellus* (99-401); South Polar Skua, *Stercorarius maccormicki* (FFN 23:38-43); Heermann's Gull, *Larus heermanni* (01-452); Gray-hooded Gull, *Larus cirrocephalus* (99-396); California Gull, *Larus californicus* (99-392); *Slaty-backed Gull, *Larus schistisagus* (03-509); Elegant Tern, *Sterna elegans* (00-430, 02-477, 02-486); Thick-billed Murre, *Uria lomvia* (00-419); White-tipped Dove, *Leptotila verreauxi* (95-337); Black-hooded Parakeet, *Nandayus nenday* (04-546); Snowy Owl, *Bubo scandiacus* (00-406); Vaux's Swift, *Chaetura vauxi* (FFN 24:122-134); *Broad-billed Hummingbird, *Cyanthus latirostris* (04-549); Broad-tailed Hummingbird, *Selasphorus platycercus* (00-409); Allen's Hummingbird, *Selasphorus sasin* (97-380); Western Wood-Pewee, *Contopus sordidulus* (FFN 24:122-134); Cuban Pewee, *Contopus caribaeus* (FFN 24:122-134); Tropical Kingbird, *Tyrannus melancholicus* (00-416); Sulphur-bellied Flycatcher, *Myiodynastes luteiventris* (96-362); *Piratic Flycatcher, *Legatus leucophaeus* (91-222), re-evaluation of a report previously accepted as Variegated Flycatcher, *Empidonamus varius*; *Mangrove Swallow, *Tachycineta albilinea* (03-507); *Mountain Bluebird, *Sialia currucoides* (03-496); *Bicknell's Thrush, *Catharus bicknelli* (FFN 33:102-104); MacGillivray's Warbler, *Oporornis tolmiei* (98-385); American Tree Sparrow, *Spizella arborea* (98-386); *Varied Bunting, *Passerina versicolor* (05-574); and *Hooded Oriole, *Icterus cucullatus* (02-494). In addition, four taxonomic splits have occurred adding new species to the list: Canada Goose (*Branta canadensis*) was split into Canada Goose and *Cackling Goose (*Branta hutchinsii*), and Cackling Goose was verified from the state with this report (05-560); Rufous-sided Towhee was split into Eastern Towhee (*Pipilo erythrophthalmus*) and Spotted Towhee (*P. maculatus*), both verified from Florida; Sharp-tailed Sparrow was split into Saltmarsh Sharp-tailed Sparrow (*Ammodramus caudacutus*) and Nelson's Sharp-tailed Sparrow (*A. nelsoni*), also both verified from Florida; and Northern Oriole was split into Baltimore Oriole (*Icterus galbula*) and Bullock's Oriole (*I. bullockii*), both verified from Florida (FFN 28:138-160). However, on the basis of new evidence (Smith et al. 2000) and additional documentation, re-evaluations of records of species currently on the official FOSRC state list, resulted in the removal of two species; Loggerhead Kingbird, *Tyrannus caudifasciatus* (03-517) and Variegated Flycatcher (91-222). The recent actions of the Committee bring the number of species included on the FOSRC official state list to 495 species (see R&W 1992, FFN 23:38-43, FFN 24:122-134, FFN 28:138-160, FFN 32:7-33, this report) (Appendix 1).

The Rules and Procedures of the FOSRC (cf. the FOSRC Web page at <http://www.fosbirds.org>) state that the Committee may add species to its official state list without verifiable evidence, providing it so annotates them. However, since the new rules were adopted, no reports of species new to the state list submitted without verifiable evidence have satisfied the Committee's criteria for acceptance. Thus, all 495 species currently on the FOSRC state list are independently verifiable.

FOSRC members who evaluated these reports and their expiration date of tenure are as follows: Lyn S. Atherton (2003), Reed Bowman (2005), R. Todd Engstrom (2009), Jon S. Greenlaw (2006), Sally Jue (2010), Andy Kratter (2011), Fred E. Lohrer (2007), and Mickey C. Wheeler (2008).

In this report is a list of species known to occur in Florida that the Committee has deemed sufficiently rare or difficult to identify to warrant FOSRC evaluation. Any species included on this list should be documented by the observer. All observers are encouraged to submit these reports to the FOSRC, including those intended for publication in the *Florida Field Naturalist* or in any other publication.

While in the field, the observer should record a detailed description of all body parts (e.g., bill, legs, and feet; noting size, shape, and colors). Although a specimen or photograph and vocal recordings are preferred, a sketch of the bird and vocal descriptions are

beneficial. Even though we may assume photographs are unambiguous, it often is not the case and photographs should be accompanied by descriptions of plumage characteristics not evident in the photo, behavioral traits, details about the habitat, and other details about the observation, such as distance to the bird, weather conditions, optics etc. It is necessary to describe how all similar species were eliminated (e.g., similar members within a genus), not only those known or suspected to occur in Florida, but also any species that could possibly stray here or possibly escape from captivity. All observations should be submitted on the standard report form available from the Secretary or on the FOSRC web page at www.fosbirds.org. In addition to uniformity, the report form provides the Committee and the observer with guidelines to those criteria used by the FOSRC for its evaluation. Completed forms with supporting material should be submitted to the Secretary of the FOSRC.

Since 1994, the Committee has consisted of 7 members. Since adoption of the current FOSRC Rules and Procedures in 1998, an accepted report requires 7 accepting votes; or, 6 accepting votes and either 1 non-accept or abstain; or 5 accepts and 2 abstains. However, a report remains in circulation until it either is accepted, or it receives 7 non-accepting votes; or, 6 non-accepting votes and either 1 accept or abstain; or 5 non-accepts and 2 abstains. Prior to 1998, a unanimous vote was required to accept a report. When a report is accepted for a species new to the state, it is added to the official FOSRC state list only when its natural occurrence is probable. If supporting specimens, photographs, or audio recordings exist it is considered verifiable; otherwise it is annotated as unverifiable. When a report is not accepted, it does not necessarily mean that a species was not correctly identified. Sometimes a sighting is too brief or the written account lacks sufficient detail to eliminate all possibilities. The Committee will reconsider a report if additional information is submitted that might alter a previous decision. All supporting documentation is deposited in the FOS Archives at the Florida Museum of Natural History, Gainesville.

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ACCEPTED REPORTS

(Arranged in currently recognized nomenclature and sequence [AOU 1998, 2006])

GREEN-WINGED ("EURASIAN") TEAL, *Anas crecca crecca* (PEB, SC, AWK 05-564). An adult male in breeding plumage was observed and photographed, 15-25 February 2005, in Chapman's Pond, Gainesville, Alachua Co. Photographs diagnostic, showed clean white scapular stripe, complete absence of vertical, white breast stripe, strong facial frame, and relatively strong flank vermiculations, all characteristic of nominate *A. crecca*. No evidence of hybrid status, and no known waterfowl collections in the region. The Committee considered this report because of the possibility of a future

change in the taxonomic status of the North American and Eurasian populations by the AOU. British ornithologists already regard the Eurasian birds as distinct from the North American ones at the species level, and call the species Eurasian Teal (The British List online, www.bou.org.uk/rechrlst1dna.html). Reports previously accepted by FOSRC: none; not accepted: none.

MASKED DUCK, *Nomonyx dominicus* (EMH, 05-567). Two female-plumaged individuals associating with one another, off Wickham Road in water treatment pond, Viera, Brevard Co., 16 March 2005. Description terse, photograph of one bird submitted and diagnostic: two parallel black stripes on the head, ground color of head buffy-brown, strong blackish mottling on dorsum, heavy bill. Reports previously accepted by FOSRC: 83-045; not accepted: 90-197, 94-311.

MASKED DUCK, *Nomonyx dominicus* (RH, 05-568). A single adult male in breeding plumage on a pond in the Stonybrook subdivision off central Sarasota Parkway, Sarasota, Sarasota Co., 7 June 2005. Photographs diagnostic: heavy pale blue bill with conspicuous dark nail, extensive black half-hood on fore-part of head, rest of head and exposed body rusty brown, spiky tail. Reports previously accepted by FOSRC: 83-045, 05-567; not accepted: 90-197, 94-311.

ROSS'S GOOSE, *Chen rossii* (JAM, 03-523). Brief written description but excellent photographs of a bird observed 20 November 2003 at the Melbourne Water Treatment Plant, Brevard Co. Photographs diagnostic. All key features visible in photos including a side-by-side comparison with Lesser Snow Goose which clearly emphasized differences in body and bill size. No reason to suspect hybrid origin of birds. At publication of R&W (1992) only three occurrences of Ross's Goose known from Florida, but it appears to be increasing in its winter frequency. Reports previously accepted by FOSRC: 88-133, 92-252, 99-399, 00-423, 00-424, 01-445; not accepted: none.

ROSS'S GOOSE, *Chen rossii* (RAD, 03-524). Written description and photographs of four birds (two adults and two first-winter birds) observed 17 November 2003 on Mama Rosa Pond at the Fort Walton Beach Spray Fields, Okaloosa Co. Photographs include side-by-side comparison with Lesser Snow Geese. Previous reports include up to four birds wintering with large flocks of snow geese. No reason to suspect hybrid origin of birds. Reports previously accepted by FOSRC: 88-133, 92-252, 99-399, 00-423, 00-424, 01-445, 03-523; not accepted: none.

ACKLING GOOSE, *Branta hutchinsii* (RTE, 05-560). First state record. Specimen (TTRS 50) taken 24 December 1956 at St. Marks National Wildlife Refuge, Wakulla Co. Species is a recent split from the Canada Goose (*Branta canadensis*) complex (Banks et al. 2004). To evaluate the identity of this specimen, we used information from Wilson (2004) and measurements from Palmer (1976). Both *hutchinsii* and the smallest subspecies of Canada Goose, *B. c. parvipes*, co-occur west of Hudson Bay. The specimen was very small: wing chord 355 mm, exposed culmen 36 mm (bill stubby, triangular), body mass 1702 g (described as "very fat"). The measurements fell in the smaller end of the respective character ranges for *hutchinsii*, but well outside the respective ranges of these characters for *parvipes*. Thus, the evidence was consistent for Cackling Goose, and excluded the smallest subspecies of Canada Goose as now viewed. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

WESTERN GREBE, *Aechmophorus occidentalis* (AW, 03-497). Detailed written description and photographs of a bird observed 13 January 2003 in Fort Myers, Lee Co. Photos diagnostic, clearly showed dark lores with the black extending below the eye, ruling out a potential Clark's/Western hybrid. R&W (1992) considered Western Grebe a very rare and irregular winter visitor and although many reports (*ca* 15) exist, most cannot eliminate Clark's Grebe (*Aechmophorus clarkii*) or possible hybrids between the two species. Reports previously accepted by FOSRC: 01-446 (to genus only), 01-453; not accepted: 89-166, 91-242.

- AECHMOPHORUS GREBE** (AW, 01-446, submitted as Western Grebe, *A. occidentalis*). Written description of a bird observed 2 January 2001 in Ft. Clinch State Park, Nassau Co. Photographs thought to exist but none could be obtained. Description diagnostic of *Aechmophorus grebe*, and most characteristics seem to suggest Western Grebe rather than Clark's Grebe; however, some characteristics that might also have ruled out hybrids were not mentioned in report, such as supraloral color; thus the committee agreed to accept the observation to genus only. Reports previously accepted by FOSRC to genus only: 01-446.
- MANX SHEARWATER**, *Puffinus puffinus* (AWK, 04-553). A specimen (UF 33973) of an immature female found on the beach 1.5 km south of Lake Worth Public Beach, Palm Beach Co., 21 or 22 November 1997, bearing a British Museum of Natural History band. Photograph and discussion in Kratter et al. (2002). The Committee affirmed the identification. Reports previously accepted by FOSRC: 94-322, 97-374, 01-457; not accepted: none.
- MANX SHEARWATER**, *Puffinus puffinus* (AWK, 04-554). A specimen (UF 40551) of an immature female received in December 1998, and evidently obtained in the vicinity of Fort Lauderdale/Boca Raton area on the beach. Photograph and discussion in Kratter et al. (2002). The Committee affirmed the identification. Reports previously accepted by FOSRC: 94-322, 97-374, 01-457, 04-553; not accepted: none.
- RED-BILLED TROPICBIRD**, *Phaethon aethereus* (RAD, 03-514). Written description of a bird observed 14 September 2002 near Destin, Okaloosa Co. The bird was found on the beach after Tropical Storm Hanna. The initial report was tabled because photographs of the bird were thought to exist. Those were received and were diagnostic, and clearly showed the large red bill, black barred back, and long tail streamers. The bird was eventually released in the Tampa area. Reports previously accepted by FOSRC: 93-334, 96-368, 03-514; not accepted: 02-492.
- RED-BILLED TROPICBIRD**, *Phaethon aethereus* (RDW, 04-539). Written description and excellent photographs of a bird observed 9 April 2004, 10 nautical miles SE of Looe Key Marine Sanctuary, Monroe Co. Description and photographs diagnostic of an adult bird. Red bill, long tail streamers, barred back, and extensive black in primaries. Very rare, irregular visitor, but most reports from northeast Florida (R&W 1992). Reports previously accepted by FOSRC: 93-334, 96-368, 03-514; not accepted: 02-492.
- RED-BILLED TROPICBIRD**, *Phaethon aethereus* (AWK, 04-556). Specimen (UF 40996) of an adult female found sick at Patrick Air Force Base, Brevard Co., on 2 October 1999. Discussion and photograph in Kratter et al. (2002). The Committee affirmed the identification. Reports previously accepted by FOSRC: 93-334, 96-368, 02-514, 04-539; not accepted: 02-492.
- RED-FOOTED BOOBY**, *Sula sula* (SS, 04-528). Excellent written description and photographs of an adult bird observed 8-9 November 2003 at Boynton Inlet, Palm Beach Co. Description and photographs diagnostic, clearly showing the overall topography of the bird and bright reddish orange legs. Tail extremely worn and bird appeared to have been in molt, consistent with the observation date. Very rare summer and fall visitor; R&W (1992) cite several specimens and photographs of birds from Florida. Reports previously accepted by FOSRC: 82-013, 95-344, 98-387; not accepted: none.
- WHITE-FACED IBIS**, *Plegadis chihi* (JHH, 04-530). Written description submitted by only one observer of a bird seen by many observers 17-21 January 2004 at Alligator Lake Park, Lake City, Columbia Co. Photographs taken by other observers and not submitted with the report were obtained and reviewed by the Committee. Description and photos consistent, showing reddish tint to legs, pink facial skin, and red iris, which is diagnostic for this species. Reports previously accepted by FOSRC: 94-312, 00-427, 00-428, 02-466; not accepted: none.
- WHITE-FACED IBIS**, *Plegadis chihi* (BCM, 04-537). Written description submitted by one person, but bird observed by several people 19 April 2004, at the Okaloosa County

landfill ponds. Photographs taken by other observers and not submitted with the report were obtained and reviewed by the Committee. Descriptions and photographs diagnostic of an adult bird in breeding plumage. Reports previously accepted by FOSRC: 94-312, 00-427, 00-428, 02-466, 04-530; not accepted: none.

EURASIAN KESTREL, *Falco tinnunculus* (WCP, 03-512). First state record. Written description and photographs of an adult female observed at the Lake Apopka North Shore Restoration Area near Zellwood, Orange Co. The bird was present at the site from 26 February to 16 March 2003 and seen and photographed by many observers. Photos diagnostic of adult female. Primaries did not extend beyond the subterminal tail band and the toenails were dark, rather than light, thus distinguishing this bird from Lesser Kestrel (*Falco naumanni*). Not likely an escape because most or all would be banded or wearing jesses. Although known from several reports in North America and at least 4 reports from the northeast, this is the first confirmed report for the southeastern US (Pranty et al. 2004). Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

SURFBIRD, *Aphriza virgata* (PP, DH, RAR, 05-566). An adult, sex unknown, observed and photographed on the south jetty, Ponce de Leon Inlet, New Smyrna Beach, Volusia Co., 10-11 April 2005. Descriptions and photographs diagnostic: chunky body, gray head streaking, heavy bill, stout yellow legs, and white tail with broad, black terminal band combined to identify the bird. Reports previously accepted by FOSRC: 02-476; not accepted: none.

ICELAND GULL, *Larus glaucooides* (RAR, 03-495). Clearly written description and excellent photos of a bird observed 31 December 2002, in Huguenot Park, Jacksonville, Duval Co. The photos were diagnostic of first-winter bird, which clearly showed small head and dark bill, pink legs, uniform light color, but with distinct mottling in coverts, distinguishing it from a Thayer's Gull. Widely reported from both coasts of Florida between October and May, but R&W (1992) considered the status of this species in Florida highly uncertain. Although many reports exist, including both specimens and published photographs, Stevenson and Atherton (1984) reported that many were in fact Glaucous Gulls (*L. hyperboreus*). Two reports previously accepted by the FOSRC occurred in March in Pompano Beach, Broward Co. (1993 and 2002). Reports previously accepted by FOSRC: 93-270, 02-465; not accepted: 93-277, 98-384.

SLATY-BACKED GULL, *Larus schistisagus* (JSG, 03-509). First state record. Written description and photographs of a third-year gull seen 6 October 2002 in Key West, Monroe Co. The bird was first discovered in Key West on 21 September and was observed by many people through 17 October 2006. Photographs diagnostic of a third-year bird entering fourth-winter plumage. Plumage, bill, and leg color consistent. Dark smudge behind eye and light subterminal spotting on trailing edges of primaries diagnostic. The bird was neither large nor dark enough to be a Great Black-backed Gull and its pink legs ruled out other potentially similar species. Slaty-backed Gulls have dark bills through second-winter plumage and yellow bills as adults. This bird's bill was pinkish at the base with a forward-sloping dark band in front of the nares and a yellow tip consistent with a bird in third-year plumage. The Slaty-backed Gull is a northern Pacific species that occurs relatively frequently in western Alaska, but is very rare elsewhere in North America. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

RAZORBILL, *Alca torda* (AWK, 04-555). Specimen (UF 43059) of an adult male found weakened on 30 March 2003 at Satellite Beach, Brevard Co. It died on 31 March in captivity. A large alcid, black above, white below including undertail coverts, and with a distinctive, diagnostic large, deep black bill bearing a vertical, white arching line. Reports previously accepted by FOSRC: 85-089, 93-282; not accepted: none.

LONG-BILLED MURRELET, *Brachyramphus perdix* (AWK, 04-552). Specimen (UF 44170) of a winter-plumaged female, obtained in the Ft. Lauderdale area, Broward Co., 22

December 2003, taken to a rehabilitation center where it died. A small alcid, very short-tailed with a white scapular patch, narrow white eye crescents, blackish above, white below, and a moderately long black bill. Bill shape discounted Least Auklet (*Aethia pusilla*); long bill, black extending below eyes, lack of white semi-collar discounted other *Brachyramphus* alcids that also have some white on the scapulars. Absence of bursa and slightly enlarged ovary and oviduct suggested that it probably was an adult bird (A. W. Kratter, pers. communication). Reports previously accepted by FOSRC: 87-118, 93-281, 94-304; not accepted: none.

LONG-BILLED MURRELET, *Brachyramphus perdix* (AWK, 05-559). Specimen (UF 39297) of a male taken about 4 km west of St. Petersburg, Pinellas Co., in the Gulf of Mexico, 28 November 1994. Discussion and photograph in Kratter et al. (2002). The Committee affirmed the identification. Reports previously accepted by FOSRC: 87-118, 93-281, 94-304, 04-552; not accepted: none.

ATLANTIC PUFFIN, *Fratercula arctica* (AWK, 04-558). Specimen (UF 44357) of a hatch-year bird found at St. Augustine Beach, St. Johns Co. on 23 December 2004, as a weakened bird that died subsequently at a rehabilitation center. Photograph published on 23 December in the *Augustine Record* (newspaper, mistakenly identified as a Dovekie [*Alle alle*]). Distinctive puffin-like bill. Specimen separated from Horned Puffin (*F. corniculata*), which has no known Atlantic records, by smaller body size and bill shape. Chin and throat of the specimen are pale gray in contrast to darker dusky tones expected in the Horned Puffin. Reports previously accepted by FOSRC: 87-120; not accepted: none.

ZENAI DA DOVE, *Zenaida aurita* (MD, 04-550). An adult observed closely at Bill Baggs Cape Florida State Park, Key Biscayne, Miami-Dade Co., on 14 October 2004. MD provided a detailed report on the bird, accompanied by a copy of fieldnotes and a field sketch that was later rendered into a colored drawing "for clarity." White-tipped secondaries were noted, and are diagnostic. All other characters were consistent with the identification. This species is regarded as a rare, sporadic to occasional visitor to the Florida Keys and the southeast Atlantic coast (R&W 1992). Reports previously accepted by FOSRC: 97-379, 01-456, 02-474; not accepted: 82-018, 83-035, 88-141.

BLACK-HOODED PARAKEET, *Nandayus nenday* (WCP, 04-546). The committee reviewed a galley proof of an *in press* manuscript (subsequently published, Pranty and Lovell 2004) documenting the size and trends of populations of Black-hooded Parakeets in Florida. Using recently revised criteria specified in Appendix A3 of the FOSRC Rules and Procedures (Criteria for Establishment, www.fosbirds.org/RecordsCommittee/RulesAndProcedures.htm), the Committee concluded that the manuscript presented convincing evidence that the Black-hooded Parakeet is established in Florida. The manuscript was treated as an original report of this species in Florida and appropriately cataloged. Populations of this species have increased since the 1980s, demonstrating more rapid, almost exponential growth during the 1990s. At the same time, the apparent range of the species in Florida has expanded from being detected on only 4 Christmas Bird Counts (CBC) in the early 1980s to 16 CBCs by 2003. In all of the 10 counties that have recorded Black-hooded Parakeets, once the birds were first observed, their populations have persisted. Breeding has been reported at many of these areas. The total population size was conservatively estimated at 850 birds. Species add to the official FOSRC state list as an established exotic.

FLAMMULATED OWL, *Otus flammeolus* (RAD, EA, 02-461). Written description and photographs of a bird observed 8 January 2002 on St. George Island, Franklin Co. Photo was slightly blurry and key details were difficult to distinguish. Bill size and small ear tufts consistent with Flammulated Owl. Gray form, but with rufous edge to facial disk. After the initial review the report was tabled while the Committee evaluated the extent of rufous in gray form of Eastern and Western screech-owls. In contrast to gray-morph screech-owl, Flammulated has more distinct rusty-brown on facial disk

- that contrasts with lighter inner facial feathers. In addition, both specimens and the bird in the photographs had rufous scapular coverts. R&W (1992) reported a bird captured at Redington Beach, Pinellas Co. in November 1972. Only other verifiable report was of a bird observed 4 December 2001 at Navarre Beach, Santa Rosa Co. Reports previously accepted by FOSRC: 01-455; not accepted: none.
- LONG-EARED OWL, *Asio otus* (MGa, 03-503). Photographs and a written description of a bird observed 17 April 2003 on Garden Key, Dry Tortugas, Miami-Dade Co. Photos diagnostic and clearly showed forehead and facial disc colors that differentiate from a Stygian Owl (*A. stygius*). R&W (1992) considered this bird a casual winter visitor to Florida, but only a single specimen from Florida (MCZ 248345) can be located. A bird observed in March 1994 at Archbold Biological Station was photographed and the report published (Tarvin 1994). Another bird observed within 1000 m of the previous sighting in March 1995 might have been the same individual. Reports previously accepted by FOSRC: 94-290, 95-330; not accepted: none.
- BROAD-BILLED HUMMINGBIRD, *Cynanthus latirostris* (JRL, 04-549). First state record. An adult male was photographed at a feeder in Pensacola, Escambia Co., on 17 September 2004. Photograph and description provided all the diagnostic information necessary to identify the bird: red-billed, blue-throated, green-bodied hummingbird, with white undertail coverts (visible in photo) and a dark, notched tail (description). These features eliminate any other North or Middle American, or Caribbean hummingbird. A number of accepted records exist of this species in Louisiana. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.
- CALLIOPE HUMMINGBIRD, *Stellula calliope* (FB, 03-498). Photographs, detailed pictures of tail patterns, and measurements of a second-year male banded 10 January 2003 in Tallahassee, Leon Co. Photos diagnostic, measurements consistent with Pyle (1997), central tail feather wedge-shaped. Records of winter birds increasingly common from southeastern U.S. Several published photos (R&W 1992) and specimens of this species (TTRS 3855 [tail feathers], GEW 5901 [from FOSRC report 95-352]) in Florida exist. Many recent reports to FOSRC include detailed tail measurements and photographs. Reports previously accepted by FOSRC: 90-192, 95-350, 95-351, 95-352, 95-353, 96-357 (may have been same individual as 95-353), 96-363, 01-435, 01-436, 01-438, 02-472; not accepted: none.
- CALLIOPE HUMMINGBIRD, *Stellula calliope* (FB, 03-499). Photographs, detailed pictures of tail patterns, and measurements of a second-year male banded 28 February 2003 in Tallahassee, Leon Co. Photos diagnostic, measurements consistent with Pyle (1997), central tail feather wedge-shaped. See above for details of recent occurrences. Reports previously accepted by FOSRC: 90-192, 95-350, 95-351, 95-352, 95-353, 96-357 (may have been same individual as 95-353), 96-363, 01-435, 01-436, 01-438, 02-472, 03-498; not accepted: none.
- BROAD-TAILED HUMMINGBIRD, *Selasphorus platycercus* (FB, 04-532). Written description, photographs, and various feather and wing measurements of a bird captured and banded 30 December 2003 in Pensacola, Escambia Co. All characteristics consistent with an adult male. Full red gorget visible. Photo of attenuated P10, rufous edging to rectrices 2 and 3, make species identity clear. Records of this species and other western hummingbirds increasing in Florida, especially in the panhandle. Reports previously accepted by FOSRC: 00-409, 01-434, 02-470; not accepted: 96-385, 01-444.
- ALLEN'S HUMMINGBIRD, *Selasphorus sasin* (FB, 03-500). Photographs, detailed pictures of tail patterns, and measurements of a hatch-year male banded 20 December 2002 in Pensacola, Escambia Co. Photos diagnostic and tail measurements consistent with Pyle (1997). Clear photo showing absence of a notch in the second rectrix, which is characteristic of male Allen's and distinguishes it from Rufous Hummingbird. Unreported from Florida before the mid-1980s, several reports since then, including pub-

lished photographs: Cedar Key, Levy Co. (*American Birds* 42:371) (R&W 1992). The FOSRC concluded that measurements of the widths of rectrices are necessary to identify extralimital Rufous/Allen's hummingbirds (McKenzie and Robbins 1999). Previous reports of all green-backed hummingbirds were likely Allen's but were not accepted without tail measurements. Reports previously accepted by FOSRC: 97-380, 02-471; not accepted: 88-138, 93-276, 99-390.

ALLEN'S HUMMINGBIRD, *Selasphorus sasin* (FB, 04-533). Written description, photographs, and various feather and wing measurements of a bird captured and banded 15 December 2003 in Tallahassee, Leon Co. All characteristics diagnostic of an after-hatch-year (AHY) female. Difficult to tell from female Rufous Hummingbird, but wing length and the width of rectrix R5 were far outside the 95% confidence intervals of those measures in the larger Rufous Hummingbird. Reports previously accepted by FOSRC: 97-380, 02-471, 03-500; not accepted: 88-138, 93-276, 99-390.

ALLEN'S HUMMINGBIRD, *Selasphorus sasin* (FB, 04-534). Written description, photographs, and various feather and wing measurements of a bird captured and banded 16 February 2004, in Pensacola, Escambia Co. All characteristics diagnostic of an AHY female. Difficult to tell from female Rufous Hummingbird, but wing length and the width of rectrix R5 were far outside the 95% confidence interval of those measures in the larger Rufous Hummingbird. Reports previously accepted by FOSRC: 97-380, 02-471, 03-500, 04-533; not accepted: 88-138, 93-276, 99-390.

ALLEN'S HUMMINGBIRD, *Selasphorus sasin* (FB, 05-565). Written description, photographs, and various feather and wing measurements of a bird captured and banded 18 December 2004 in Tallahassee, Leon Co. All characteristics diagnostic of an AHY female. Difficult to separate from female Rufous Hummingbird, but wing length and width of R5, and absence of apical notch on R2 confirmed the identification. In recent years at least, this species has been regular in the Florida panhandle in winter. Reports previously accepted by FOSRC: 97-380, 02-471, 03-500, 04-533, 04-534; not accepted: 88-138, 93-276, 99-390.

SAY'S PHOEBE, *Sayornis saya* (DWD, RLD, BF, 03-520). Written descriptions by four observers and photographs of a bird observed 15 October 2003 at Pensacola Beach, Escambia Co. Descriptions and photographs diagnostic and clearly showed the cinnamon belly plumage diagnostic of this species. Very rare, irregular fall-winter visitor (R&W 1992). Reports previously accepted by FOSRC: 88-158, 98-382; not accepted: none.

SULPHUR-BELLIED FLYCATCHER, *Myiodynastes luteiventris* (MBM, LM, 05-570). A single individual, apparently hatch-year age (conspicuous, pale rictus), sex unknown, observed at "Lucky Hammock" near the entrance to Everglades National Park, Miami-Dade Co., 6-13 November 2005. Excellent photographs and description provided all diagnostic details sufficient to eliminate similar species in the genera *Myiodynastes* and *Empidonomus*, notably the convergent lateral throat streaks joining on the chin. Before 1992, only one or two unresolved reports of this species (R&W 1992). Reports previously accepted by FOSRC: 96-362, 01-439, 02-485; not accepted: none.

PIRATIC FLYCATCHER, *Legatus leucophaeus* (RB, 91-222a). First state record. Reevaluation of a previously decided report which included a written description and photographs of what seemed to be a Variegated Flycatcher (*Empidonomus varius*) seen 15 March 1991 at the Dry Tortugas, Monroe Co. A key feature that supported the original identification was the conspicuous rusty tones on upper tail coverts and tail edges. This feature mainly provided the basis for acceptance of the report, which added Variegated Flycatcher to the FOSRC official state list. However plumage characteristics, such as the distinct malar and more distinct, but restricted, streaking on the underparts, and the small all-dark bill led some (e.g., D. Lane, J. V. Remsen, A. Kratter) to question this identification, and suggested that this may be a Piratic Flycatcher [also, see Check-list of North American Birds, seventh edition, 1998: 411]. Immature (juve-

nile) Piratic Flycatchers also exhibit rusty edgings on the upper tail coverts and rectrix edges. The Committee reopened the original report, examined 15 slides archived at the Florida Museum of Natural History (FLMNH), and looked at specimens of both species from the FLMNH collections. Characters supporting Piratic Flycatcher were small size (bill-head length ratio from photos equivocal); all-black bill; ventral streaking confined to the breast, well demarcated from clear (unstreaked) abdomen; and fruit-eating behavior. The bird appeared to be in fresh plumage, with adult-like forebody plumage. The rusty edging obvious caudally implied immature plumage there. Thus, the bird appeared to be wearing a mosaic feather coat of two plumages that nobody on the Committee could account for. The key character that resolved the issue in the minds of Committee members was the distribution of emarginated (notched) outer primaries reported in the literature between the two genera in question. Specimens available to us supported the view that *Legatus* has entire, non-emarginated outer primaries, while *Empidonomus* has distinctly emarginated outer primaries. One slide taken at the Dry Tortugas (FOSA 99-222-15) showed the bird with a partly fanned outer wing that clearly revealed an entire (non-emarginated) outer primary (P10 or 9). Based on the accumulated evidence, the committee rejected the original identification of Variegated Flycatcher (see below) and removed this species from the FOSRC state list. The Committee then accepted the report as a Piratic Flycatcher. Only several records of this species from North America exist and all from either New Mexico or Texas. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

CASSIN'S KINGBIRD, *Tyrannus vociferans* (WCP, 03-516). Written description and photographs of an adult bird observed 1 March 2003 at the Lake Apopka North Shore Restoration Area near Zellwood, Orange Co. Based on observations of others, this bird was present throughout the winter at a communal flycatcher roost that often included many Western Kingbirds and Scissor-tailed Flycatchers. Photos diagnostic for species. Yellow belly and dark breast contrasted with white throat and malars. Pale terminal tail tip not visible in photographs but mentioned in written description. Prior to publication of R&W (1992) and Stevenson and Anderson (1994) only one verifiable record of this species in Florida, although a few others were reported. Reports previously accepted by FOSRC: 85-074, 89-175, 92-255, 97-375, 00-407, 00-432; not accepted: none.

FORK-TAILED FLYCATCHER, *Tyrannus savana* (WCP, 04-538). Written description submitted by one person, but bird observed by many people 23-27 July 2004 at Coquina Key, St. Petersburg, Pinellas Co. Excellent photographs clearly showed the black head, gray back, and long forked tail diagnostic of an adult bird. A regular but rare vagrant throughout Florida, but only one verifiable report prior to 1992 (R&W 1992); several published photos since then. Reports previously accepted by FOSRC: 83-039, 84-068, 86-101, 90-210, 92-259, 94-292, 95-388; not accepted: none.

THICK-BILLED VIREO, *Vireo crassirostris* (JB, LM, 04-447). A bird observed and photographed on Boot Key, Monroe Co., Florida Keys, from 2-23 October 2004. A series of excellent digital photographs, a good written account, and a tape recording of the call permitted a detailed evaluation of the report. The bird was in the white-eyed vireo group, with a relatively heavy bill, a dark eye, pale dingy yellow underparts, white wingbars, a yellow loreal-supraloral patch slightly separated from a very pale yellow spot at the upper rear corner of the eye, and a narrow subocular (whitish) arc. The dark eye, uniform pale yellow underparts to undertail coverts, and relatively heavy bill distinguished it from White-eyed Vireo (*Vireo griseus*). The similar Mangrove Vireo (*V. pallens*), another possibility considering the occurrence of the bird in the Keys, was discounted because of the reported vireo's heavier bill and olive-greenish forecrown that contrasted with the slightly grayer hindcrown and nape (thinner bill, and uniform, greenish crown and nape in *V. pallens*). The scold call was well-recorded

and diagnostic. This species continues to be very rare to rare in Florida along the seacoast, but possibly of regular occurrence, at least in recent years (R&W 1992, Stevenson and Anderson 1994). Usually occurs in winter. Reports previously accepted by FOSRC: 89-179, 90-202, 91-226, 94-308, 96-355; not accepted: 88-151, 93-279.

THICK-BILLED VIREO, *Vireo crassirostris* (JBW, CE, 05-571). A single bird observed and photographed at Ann Kolb Nature Center, Dania Beach, Broward Co., from 4-15 May 2005. Photos and description were diagnostic. White-eyed Vireo and Mangrove Vireo were discounted by combinations of plumage and structural characters pertaining to bill size, eye color, distribution of yellow on underparts, eyering pattern, and subtle color contrast between crown and nape/hindneck area. This report and the previous one (04-447) extend the occurrence range in Florida from "winter" to fall-spring. Reports previously accepted by FOSRC: 89-179, 90-202, 91-226, 94-308, 96-355, 04-447; not accepted: 88-151, 93-279.

YELLOW-GREEN VIREO, *Vireo flavoviridis* (LSA, 03-515). Written description of a bird observed 11 September 2002 at Ft. Desoto Park, Pinellas Co. Seen in vicinity of fruiting mulberry (*Morus* sp.) tree and with many Red-eyed Vireos for comparison. Bright yellow flanks, lower breast, belly and undertail coverts. Yellow-green dorsally with gray crown. Eye stripe less prominent and lower mandible distinctly horn-colored. Faint whiskers not nearly as prominent as in Black-whiskered Vireo (*V. altiloquus*). Occasional straggler to Florida, but most reports from the panhandle (R&W 1992). One specimen exists at Louisiana State University of a bird collected in 1958 in Santa Rosa Co. (LSUMZ 22492). Prior to 2000 considered a subspecies of Red-eyed Vireo (*V. olivaceus*). Reports previously accepted by FOSRC: 84-064, 86-102, 00-422; not accepted: 82-019.

YELLOW-GREEN VIREO, *Vireo flavoviridis* (BM, 04-527). Written description of a bird observed 30 August 2003 in Indigenous Park, Key West, Monroe Co. This was the second of two written reports of this species from Key West from the late summer and fall of 2003. This report was prepared only four days after sighting and the description was more detailed than the previous report, but still lacked some pertinent details. No mention of color of crown or supercilium, yellow edgings to remiges not typically "bright", as described in the report, in Yellow-green Vireo. No mention of wing bars or lack thereof. Apparently field notes were not taken because none accompanied the report. However, description was sufficient to eliminate both Black-whiskered and Red-eyed vireos. Reports previously accepted by FOSRC: 84-064, 86-102, 00-422, 03-515; not accepted: 82-019.

MANGROVE SWALLOW, *Tachycineta albilinea* (PWS, LSA, MGa, JHH, 03-507). First North American and state record. Report consisted of a manuscript (Sykes et al. 2004) and photographs of a bird observed 18-24 November 2002 at the Viera Wetlands in southern Brevard Co. Smaller overall body size and shorter wings than Tree Swallow (*T. bicolor*) or Cave Swallow (*Petrochelidon fulva*), or several other similar swallow species. White supraloral stripe joining forehead patch is characteristic of both Mangrove and White-rumped (*T. leucorrhoa*) swallows, but White-rumped is larger and about the same size as Tree Swallow. Prominent spots on rump patch distinguish *T. albilinea* from White-rumped Swallow. Tertiaries prominently edged with white on both sides; white less extensive in White-rumped Swallow. A coastal resident of Mexico, south to Panama, the species was not known in North America although its occurrence was recently predicted (see Jones 1998 and Lasley and Lockwood 1999 in Sykes et al. 2004). Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

MOUNTAIN BLUEBIRD, *Sialia currucoides* (RMD, WG, 03-496). First state record. Detailed written description and excellent photographs of a bird observed 22 December 2002 along Research Road in Everglades National Park in Miami-Dade Co. Bird first seen 18 December during Long Pine Key CBC and observed through 24 December.

Photos diagnostic, showing characteristic bluebird shape and overall gray color with relatively little blue, consistent with winter female plumage. Written description and photos emphasized long primary extension, which helped eliminate winter first-basic Eastern Bluebird (*S. sialis*) and Western Bluebird (*S. mexicana*). Although winters as far east as Kansas, Texas, and Oklahoma, casual records exist to Louisiana and Mississippi (Powers and Lombardo 1996). Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

BICKNELL'S THRUSH, *Catharus bicknelli* (CL, 04-547). First state record. An adult captured, measured, photographed, and banded on Key Largo, Monroe Co., 8 May 2002. The evidence available to the Committee consisted of measurements, photographs, and a manuscript (later published, Brand et al. 2005). Distinguishing this species from the very similar Gray-cheeked Thrush (*C. minimus*) even in the hand is problematic. Appropriate critical measurements were provided in the manuscript and in a written report. The Committee used the amount of overlap and 95% confidence limits of these critical measurements and measurement differences obtained from Lane and Jaramillo (2000), Ouellet (1993), Pyle (1997), and Rimmer et al. (2001) to evaluate this report and the next one. Plumage color provides only supplemental but non-diagnostic information, so available photographs *per se* were corroborative only. Wing chord and differences between certain primary lengths (wing shape, see Woolfenden and Greenlaw 2005) were diagnostic for Bicknell's Thrush and non-overlapping with Gray-cheeked Thrush. Supporting information was consistent with Bicknell's Thrush. The status of this species on the Florida list, ever since its split out of the Gray-cheeked Thrush complex (A.O.U. 1995), remained uncertain until now. Because this species winters in the Greater Antilles, its migration path should regularly bring individuals to Florida. New recently published information on identification criteria (see above) made it possible to critically evaluate this report. Woolfenden and Greenlaw (2005) also reviewed specimen evidence pertaining to *C. minimus* and *C. bicknelli* in Florida, and clarified the status and occurrence of both species in the state. They concluded that verifiable evidence of Bicknell's Thrush in Florida was limited to four museum specimens; in all instances the collection dates of these specimens predate this report, the first to be reviewed and accepted by the FOSRC. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

BICKNELL'S THRUSH, *Catharus bicknelli* (CL, 04-548). An adult captured, measured, photographed, and banded on Key Largo, 11 May 2002. The evidence available to the Committee consisted of measurements, photographs, and a manuscript (later published, Brand et al. 2005). See information on criteria for identification in 04-547 above. In this case, wing chord and the difference between P8-P6 were consistent with those of male Bicknell's Thrushes, but with a small overlap with the smallest Gray-cheeked Thrushes. However, all measurements fell within the 95% confidence limits of Bicknell's Thrushes, and outside the 95% limits for Gray-cheeked Thrushes. Soft part and plumage colors were consistent with colors often provided for "typical" Bicknell's Thrushes. Reports previously accepted by FOSRC: 04-547; not accepted: none.

WESTERN SPINDALIS, *Spindalis zena* subsp. (CAG, LM, 05-572). The first green-backed adult in Florida, an adult male seen by many observers at Indigenous Park, Key West, Monroe Co., from 25 October 2004 to 24 March 2005. Although the species is no longer on the state review list, the Committee chose to review this sighting because it represents a population (green-backed birds) not previously verified in Florida, and because the taxonomic status of this polytypic species may be revised. We examined one observer's description and a series of excellent photographs. We evaluated geographic variation in plumage color and pattern using the most recent source (Garrido et al. 1997). Comparative photographs of *S. z. pretrei* (Cuba) and *S. z. salvini* (Cayman Islands), including a photograph in Bradley (1985), were used as supplementary material. Black-backed races occur in the central and northern Bahamas, although some

green-backed individuals occur on Great Abaco and many on Grand Bahama (*S. z. townsendi*). The relatively bright nuchal collar, olive-green (rather than dusky-green) back, scapulars, and upper secondary coverts (“mantle” in traditional usage), and absence of a distinct blackish chest band that segregates the yellow throat from the yellow breast discount *townsendi*. The westernmost population on Cozumel Island and adjoining Quintana Roo, Mexico, is discounted by the brighter nuchal collar, smaller beak, and yellower breast in the Key West bird. The characters visible in the photographs of the Key West *Spindalis*, in particular mantle color, relatively bright nuchal collar, medium-sized bill, and clean white supercilium suggests origin from Cuba or Grand Cayman (*pretrei* or *salvini*, respectively). Individuals from the Grand Cayman population tend to have a speckled black supraloral area (anterior supercilium) and a two-toned nuchal collar, which the Key West bird evidently lacked. Thus, it is likely that the Key West *Spindalis* originated from the Cuban population. For another analysis, see Pranty and Smith (2001). In any event, the Committee did not affirm the tentative subspecies determination (JSG) provided here, but only the proposition that the bird represented a green-backed population of *S. zena*. Reports of green-backed Western *Spindalis* previously accepted by FOSRC: none; not accepted: none.

BLACK-FACED GRASSQUIT, *Tiaris bicolor* (BR, 03-518). Written description and photographs of a subadult male observed 1 September 2003 at Long Pine Key, Everglades National Park, Miami-Dade Co. Written descriptions provided by two observers. Descriptions of bird and of its vocalizations and photographs taken together diagnostic, but observers did not look beyond possible confusion with U.S. *Passerina* buntings. No questions or reservations about natural origin. Not widely kept in captivity, especially young males. Sighting occurrence coincides with period when natural dispersal is expected. R&W (1992) mention *ca* 8 reports prior to 1992 and two specimens from Florida; likely an irregular straggler or very rare winter visitor. Reports previously accepted by FOSRC: 87-126, 93-272; not accepted: 88-145, 89-161, 91-251.

BLACK-FACED GRASSQUIT, *Tiaris bicolor* (MGr, 04-535). Written description and video with audio submitted by one person, but bird observed by several people 21-24 March 2004, at Jupiter Ridge Environmental Resource, Jupiter, Palm Beach Co. Description and video diagnostic. Conical bill typical of *Tiaris*, overall plumage pattern consistent with a first-winter male beginning transition to adult plumage. Vocalization audible on tape consistent. Not widely kept in captivity, especially young males. No unresolved issues. Reports previously accepted by FOSRC: 87-126, 93-272, 03-518; not accepted: 88-145, 89-161, 91-251.

GREEN-TAILED TOWHEE, *Pipilo chlorurus* (EK, 03-511). Written description, photographs, and taped vocalizations of an adult bird observed 19 February 2004 at Honeymoon Island State Park, Pinellas Co. Photographs diagnostic showed a large, long-tailed towhee with dull green upperparts and a bright orange-rufous crown patch. Only one previous record of this species in Florida, of a bird seen by hundreds of observers from 7 January to 4 February 1990 in Polk Co. (R&W 1992). Reports previously accepted by FOSRC: 90-195; not accepted: none.

AMERICAN TREE SPARROW, *Spizella arborea* (PB, DWD, RLD). Written description by three observers and photographs of a bird observed 25-26 October 2003 at Fort Pickens, Pensacola Beach, Escambia Co. Descriptions and photographs diagnostic. The yellow lower mandible typical of this species was clearly visible as were other distinguishing marks. Listed in Appendix A of R&W (1992) as an unverified straggler, the first state record of this species was of a bird observed and photographed 15 April 1998 at St. Marks National Wildlife Refuge (Bowman 2000). This report constitutes only the second state record of this species. Reports previously accepted by FOSRC: 98-386; not accepted: 83-037.

HARRIS'S SPARROW, *Zonotrichia querula* (WCP, 03-513). Written description and photographs of an adult bird observed from 28 December 2002 to 15 February 2003 at the

Marina Isle Fish Camp on Lake Jessup, Seminole Co. Photos diagnostic of an adult bird. A large, chunky sparrow with a pink bill; brown head with a characteristic dark auricular patch, black forehead and upper crown, and white spotting on hind crown. Harris's Sparrow is a very rare and irregular winter visitor to Florida (R&W 1992). Many published photos exist, but no specimens are known from Florida. Reports previously accepted by FOSRC: 94-315, 97-378, 02-478; not accepted: none.

HARRIS'S SPARROW, *Zonotrichia querula* (CB, 04-551). A brief written description and an excellent color photograph were diagnostic for a first winter bird at Hontoon Island State Park, Volusia Co., on 25 November 2004. The photograph showed a large sparrow belonging to the crowned sparrow group (*Zonotrichia*) with a pink bill, white underparts patterned black on the chest, sides, and flanks, black crown, soft brown side of head and neck, and white wingbars. Reports previously accepted by FOSRC: 94-315, 97-378, 02-478, 03-513; not accepted: none.

VARIED BUNTING, *Passerina versicolor* (GEW, 05-574). First state record. A specimen of an adult male (GEW 6004) found dead beneath a window on 1 June 2005, Siesta Key, Sarasota Co. A manuscript (Woolfenden and van Deventer 2006) was submitted to the Committee. No historical, unverified reports of this species from Florida. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

HOODED ORIOLE, *Icterus cucullatus* (RLD, 02-494). First state record. Although this report of a bird observed 22 and 26 October 2002 in Gulf Breeze, Santa Rosa Co., provided only a brief written description, it included several photographs of the bird at a backyard feeder. These photos clearly show the orange head with black bib to upper breast, black back, white on upper coverts, but with median coverts black, and slightly decurved bill. No previous reports of Hooded Oriole from Florida. Typically winters in Mexico, but small numbers may winter in sw US; casual to e. Texas and Louisiana, but not recorded from Mississippi, Alabama, or Georgia. Reports previously accepted by FOSRC: none; not accepted: none. Added to the official FOSRC state list as a verifiable species.

BULLOCK'S ORIOLE, *Icterus bullockii*. The Committee decided to review historical records of this species in Florida. At the time that the Northern Oriole was re-split into Baltimore (*I. galbula*) and Bullock's orioles, the FOSRC evaluated the occurrence of both these species for elevation to the state list. We assumed that both would require little evaluation. Two specimens of Bullock's Oriole were easily available to the Committee, one at Archbold Biological Station (ABS) and one at Tall Timbers Research Station (TTRS). The specimen at ABS was originally collected by Dennis Paulson in Dade Co., 24 December 1956. It was cataloged in the University of Miami collection as UMRC 1437, but when that collection was dissolved, the specimen was recataloged at ABS as ABS 483. The Committee evaluated this specimen and, based on overall and ventral coloration and the lack of noticeable saw-toothed markings on the median coverts (Lee and Birch 1998, 2001), decided that the specimen was likely a female or first-winter male Baltimore Oriole. Upon evaluating the TTRS specimen, collected by Storrs Olson in Franklin Co., 17 October 1964, we also concluded that this specimen was a Baltimore Oriole. At the time we did not have additional specimens to consider, thus Baltimore Oriole was added to the state list, but Bullock's Oriole was not, pending review of additional specimens. Subsequently, several reports of Bullock's Oriole in Florida were accepted, and previously published photographs of the species in Florida were reviewed and accepted. In 2001, Bullock's Oriole was added to the state list. We reviewed four additional specimens purported to be Bullock's Oriole collected in Florida and housed in various museums. Although these were historical specimens, each was assigned a modern FOSRC catalog number. Two were accepted and two were rejected (see below, Reports Not Accepted). A review of additional specimens also was recently completed (Pranty et al. 2005).

- BULLOCK'S ORIOLE, *Icterus bullockii* (04-542). Collected 11 January 1957 near Princeton, Dade Co. In the University of Miami collection as UMRC 1403, but mistakenly referred to as UMRC 1437 in Stevenson and Anderson (1994). Moved to the Field Museum of Natural History and recataloged as FMNH 375099. This specimen was obviously a first-winter male Bullock's Oriole, with the start of a black throat, yellow supercilium, and distinct black saw-toothed patterns to the median coverts. Reports previously accepted by FOSRC: 01-443, 01-450; not accepted: 04-543, 04-545.
- BULLOCK'S ORIOLE, *Icterus bullockii* (04-544). Collected 1 October 1966 near Tallahassee, Leon Co. and housed at the Florida State University. The original catalog number FSU 6848c had been crossed out and the number 2102 penciled in on the label. The bird was identified as a male on the specimen label. This bird was fairly bright and exhibited more orange than the *I. galbula* specimens. It had the distinctive black in the throat, a yellow supercilium, and the median coverts had the distinct saw-toothed pattern typical of *I. bullockii*. Reports previously accepted by FOSRC: 01-443, 01-450, 04-542; not accepted: 04-543, 04-545.

REPORTS NOT ACCEPTED

- COMMON MERGANSER, *Mergus merganser* (02-469). Re-evaluation of a previously unresolved report. Photo of a mounted specimen purportedly collected near Aripeka, Pasco Co. The specimen was subsequently lost and not available for examination. Species identification certain, but original data about collection locale, date, etc. was also lost and information in submitted report was second-hand. Written description or notes from original collector not available, thus provenance uncertain. Reports previously accepted by FOSRC: none; not accepted: 91-241.
- RED-BILLED TROPICBIRD, *Phaethon aethereus* (02-492). Written description of bird seen 3 October 2002 at the Eglin Beach Club west jetty near Destin, Okaloosa Co. Observation under rough conditions at over 500 m. Details insufficient to eliminate immature White-tailed Tropicbird or other similar species. Tail streamers not seen and report of red bill only second-hand. Other comments vague and sometimes confusing, such as a description of the bird as "large." Evidence was insufficient to confirm identity. Reports previously accepted by FOSRC: 93-334, 96-368, 03-514, 04-539; not accepted: none.
- NORTHERN GOSHAWK, *Accipiter gentilis* (03-502). Written report prepared from memory two months after sighting of a bird observed 17 March 2003 along the St. Johns River near Switzerland, St. Johns Co. Description nearly complete, but a few key details missing, such as white undertail coverts. Evidence insufficient to confirm identity. Reports previously accepted by FOSRC: none; not accepted: none.
- BLACK-HEADED GULL, *Larus ridibundus* (02-493). Written description of a bird observed 3 October 2002 near Pensacola Beach, Escambia Co. Description insufficient to differentiate from aberrant Laughing Gulls, which occasionally have red bills and legs; no mention of tail or wing tip patterns. Reports previously accepted by FOSRC: 82-021, 91-217, 99-400, 00-410, 02-482; not accepted: none.
- THAYER'S GULL, *Larus thayeri* (02-481). Photographs and written description of a bird observed 4-13 February 2002 near Tallahassee, Leon Co. The Committee was petitioned to reevaluate this report. Additional material was provided but did not aid in resolving the bird's identity and the Committee decided not to reevaluate. Its previous review stands. Photograph shows two-tone bill with more extensive pink at base than described in written account or expected for first-winter Thayer's Gull. Back mottled, but slotchy looking rather than the neat markings typical of Thayer's Gull. Tail was as dark as primaries without a white edge. Contrast between dark secondaries and greater secondary coverts too great. Photographs and written description not sufficient to confirm identity. Reports previously accepted by FOSRC: 86-091, 99-389, 02-460; not accepted: none.

- ELEGANT TERN, *Sterna elegans* (03-505). Written description and photographs of a bird observed from 30 April to 3 May 2003 on Loggerhead Key, Dry Tortugas, Monroe Co. Bill shape and the extensive black on bill, short crest, bill not as long and decurved, suggests a Elegant-Sandwich Tern hybrid. Reports previously accepted by FOSRC: 00-430, 02-477, 02-486; not accepted: none.
- ELEGANT TERN, *Sterna elegans* (05-569). Written description of three individuals together on sandbar off Flamingo visitor center, Everglades National Park, Monroe Co., 17 April 2005. Birds were relatively distant from observer (to 400 yds) in mid-morning light, with observer looking southward into Florida Bay. Description suggestive, but conditions made it difficult to rule out *S. elegans* × *S. sandvicensis*. Some details of bill and crest shapes were undescribed. Reports previously accepted by FOSRC: 00-430, 02-477, 02-486; not accepted: 03-505.
- BROAD-BILLED HUMMINGBIRD, *Cyanthus latirostris* (04-536). Written descriptions submitted by three different observers of a bird observed 20-21 December 2003, near Gainesville, Alachua Co. Although some of the reports were quite detailed, the observers provided conflicting evidence. Conflicting reports included whether the tail was white tipped, the bill shape, and the color of the underparts. Each of these characteristics is critical to determining the probable identity of this species. No red was noted at the base of the mandible, a diagnostic character of the Broad-billed Hummingbird, although it may be very difficult to see in HY/SY females. In addition, no verifiable evidence, such as a photograph or video was submitted by which the contradictory evidence could be resolved. At the time of its review, this species was not currently on Florida's bird list (but see 04-549 above) and a first state record requires more convincing and consistent documentation. Reports previously accepted by FOSRC: none; not accepted: none.
- CUBAN PEWEE, *Contopus caribaeus* (02-489). Re-evaluation of a previously unresolved report. Written description of behavior and plumage of a bird observed 18 May 1996 in the Ft. Jefferson parade grounds in the Dry Tortugas, Monroe Co., published in Field Notes (1993, 50(3):272) suggested Cuban Pewee, but no description of vocalization or mention of primary extension. Written description not sufficient to confirm identity, especially to rule out Eastern Wood-Pewee (*Contopus virens*). Reports previously accepted by FOSRC: 95-333, 01-441, 02-490; not accepted: 00-412.
- DUSKY-CAPPED FLYCATCHER, *Myiarchus tuberculifer* (04-529). Written description by a single observer of a bird observed 5 February 2004, at Emerald Marsh, Tavares, Lake Co. Description at times contradicted identification: specifically mentioned lack of rufous on tail or elsewhere, but Dusky-capped Flycatcher has conspicuous rufous edges to the primaries visible both in flight and perched. The lack of rufous on the tail is diagnostic for Dusky-capped Flycatcher (as well as La Sagra's Flycatcher, *Myiarchus sagrae*), but there was no mention of the angle at which the tail was viewed; the rufous edges to the rectrices in other *Myiarchus* flycatchers can be difficult to see from above unless the tail is spread. No comparisons made to potentially similar *Myiarchus* from Mexico, the Caribbean, or Central America. No mention of vocalizations. Typically winter vagrant flycatchers remain in Florida for some time, but no one else appears to have seen this bird. This species not currently on Florida's bird list and a first state record requires more convincing documentation. Reports previously accepted by FOSRC: none; not accepted: none.
- TROPICAL KINGBIRD, *Tyrannus melancholicus* (02-459). Re-evaluation of a previously unresolved report. Written description of a bird observed 30 November 2001 near Englewood, Charlotte Co. Written description consistent with Tropical or Couch's kingbirds. Vocalization stated to be that of Tropical Kingbird, but not described at all in report. Most agreed description too ambiguous to accept. Reports previously accepted by FOSRC: 00-416, 00-402, 00-425, 02-484; not accepted: none.
- LOGGERHEAD KINGBIRD, *Tyrannus caudifasciatus* (03-517). Based on a paper by P. W. Smith, G. E. Woolfenden, and A. Sprunt, IV, recently published in *North American*

Birds (2000, 54:235-240), which reevaluated the evidence for the occurrence of Loggerhead Kingbird in Florida, the Committee continued its reevaluation of the inclusion of this species on the state list. The FOSRC added the Loggerhead Kingbird to its list of species occurring in Florida based on its inclusion in the list of verified species in R&W (1992). The Committee reviewed original photographs used by R&W and, more recently, by Smith et al. in their reevaluation. In addition, the Committee evaluated new photographs by Brooks Atherton that had not been previously used by R&W or by Smith et al. None of the photos reviewed appeared diagnostic for Loggerhead Kingbird. In most cases, the birds in the photographs tended to have a rounder head and shorter bill than is typical of Loggerhead Kingbird. The accumulated documentation was assigned catalog number 03-517, and the Committee decided that the evidence did not support Loggerhead Kingbird. Thus Loggerhead Kingbird was removed from the official FOSRC state list.

TAMAULIPAS CROW, *Corvus imparatus* (03-510). Written description and photographs of a bird observed 8 January 2000 on the road between Flamingo and the entrance station of Everglades National Park, Monroe Co. Photos and vocal description could not eliminate Fish Crow (*Corvus ossifragus*). Reports previously accepted by FOSRC: none; not accepted: none.

CARIBBEAN MARTIN, *Progne dominicensis* (02-463). Re-evaluation of a previously unresolved report. Written report and video of a large flock of birds observed 29-30 October 1998 near Key West, Monroe Co. Video, mostly of females, difficult to review; written description mentioned males, but no clear view of males in video. Females of several martin species (Purple [*P. subis*], Cuban [*P. cryptoleuca*], and Sinaloa [*P. sinaloae*] martins) are too similar to distinguish. Sighting followed storm, so likely a rarity, but unable to confirm species identity. Reports previously accepted by FOSRC: none; not accepted: 95-332.

BEWICK'S WREN, *Thryomanes bewickii* (02-491). Written description of a bird observed 9 March 2000 near Ft. Walton Beach, Okaloosa Co. Not on review list, but collapse of eastern North American population justifies review. Report submitted >3 yrs after 4-6 sec sighting. Committee felt the observer likely saw a Bewick's Wren, but written description somewhat vague and lacked some important details, such as back color. Evidence was insufficient to confirm identity. Reports previously accepted by FOSRC: 01-454; not accepted: none.

SAGE THRASHER, *Oreoscoptes montanus* (03-522). Written description of a bird observed 23 October 2003 near Ft. Walton Beach, Okaloosa Co. Bird seen by two people. Description did not mention color of tail corners—a critical identification feature—even though observers were in a position to have noticed that. This is a relatively rare bird in Florida, so the Committee chose to treat the report conservatively and concluded that the evidence was insufficient to confirm identity. Reports previously accepted by FOSRC: 81-006; not accepted: none.

YELLOW WARBLER (Mangrove Warbler group), *Dendroica petechia erithachorides* (03-517). Written description of a bird observed 11 August 2003 in Marathon, Monroe Co. This species is not a review species, but the Committee voted unanimously to review report because of potential future split of "Mangrove Warbler" out of Yellow Warbler complex. Observer saw the bird only from rear and side. Description incomplete (no view of breast). Head described as "red" ("red hood"), not rusty or reddish-brown. Committee unable to distinguish between occurrence of possible member of the Mangrove Warbler (*erithachorides*) subspecies group and one from the Golden Warbler (*petechia*) group. There were other issues with the incomplete and oversimplified description. Evidence insufficient to confirm identity. Reports previously accepted by FOSRC: none; not accepted: none.

KIRTLAND'S WARBLER, *Dendroica kirtlandii* (03-525). Written description of a bird observed 17 October 2003 near Pensacola, Escambia Co. Panhandle location and inland site on migration (not directly on coast) unusual. No mention of back streaking, or of

- tail pumping behavior. Bird was observed very closely for about 2 minutes, so these features should have been noticed, or otherwise commented on in the write-up. Evidence was insufficient to confirm identity. Reports previously accepted by the FOSRC: 82-025, 93-273, 97-376, 00-403; not accepted: 82-015, 89-176, 97-376, 00-421.
- RED-LEGGED HONEYCREEPER, *Cyanerpes cyaneus* (03-501). Written description, drawings, field notes, and photographs of a bird observed 25-27 March 2003 near Boca Chita, Biscayne National Park, Miami-Dade Co. Photos clearly show an adult male Red-legged Honeycreeper, thus only ambiguity was origin. Possible dispersal from Cuba considered, where populations may be increasing, or from Yucatan. Strong winds from southeast present prior to sightings. However, adult dispersal less likely during breeding season, March-July. Species common in the avicultural trade in Miami area, but no obvious signs of having been in captivity. Committee decided that given its history in local aviculture, provenance too uncertain. Reports previously accepted by FOSRC: none; not accepted: none.
- RED-LEGGED HONEYCREEPER, *Cyanerpes cyaneus* (03-506). Written description and photographs of a bird observed between 25 April and 3 May 2003 at Garden Key, Dry Tortugas, Monroe Co. See discussion for 03-501. Could not rule out that this bird was the same individual seen at Boca Chita a month earlier. Reports previously accepted by FOSRC: none; not accepted: 03-501.
- RED-LEGGED HONEYCREEPER, *Cyanerpes cyaneus* (04-531). Written description and photographs submitted by one person of a bird observed by three people 21 February 2004 at Royal Palm Hammock, Everglades National Park, Miami-Dade Co. Description and photograph diagnostic of an adult male *Cyanerpes*. No further issues regarding identification. Recent work by P. Sykes and L. Manfredi suggest *Cyanerpes* is not uncommon in Miami cage bird trade. An adult male in Florida in mid-winter is not consistent with what would be the presumed timing of vagrancy. As with previous reports of *Cyanerpes*, the Committee felt it could not rule out a captive escapee, especially for a first state record. More probable for natural vagrants would be young (HY/SY) males or females, which are more likely to occur as vagrants and less likely to be kept in captivity. Not accepted based on uncertainty of provenance. Reports previously accepted by FOSRC: none; not accepted: 03-501, 03-506.
- RED-LEGGED HONEYCREEPER, *Cyanerpes cyaneus* (05-573). Another adult male, observed on 21 April 2005 in Fort Zachary Taylor State Park, Key West, Monroe Co. Species correctly identified, but once again, the Committee could not discount the possibility that the bird originated from the avicultural industry in south Florida. Reports previously accepted by FOSRC: none; not accepted: 03-501, 03-506, 04-531.
- BLUE-BLACK GRASSQUIT, *Volatinia jacarina* (04-541). Detailed description and excellent photographs of a bird observed 27 April 2004 on St. George Island, Franklin Co. The Committee was concerned about the overall slenderness of the bill that seemed more typical of an icterid than a grassquit; however, information available to the Committee about geographical variation in bill shape was incomplete. In addition, some of the behavioral and plumage characteristics seemed inconsistent with those of *Volatinia*. Specimens at FLMNH were reviewed in January 2005, and the photographs and details in the description were re-examined in the light of new information on structure, plumage, and behavior. The very distinct icterid-like bill, robust legs, and walking gait on the ground were inconsistent with Blue-black Grassquit, but were consistent with a smaller icterid, probably a first-year Shiny Cowbird (*Molothrus bonariensis*) with worn, retained juvenile flight feathers. Reports previously accepted by FOSRC: none; not accepted: none.
- BREWER'S SPARROW, *Spizella breweri* (03-519). Detailed written description by one observer of a bird observed by three people on 24 September 2003 near Pensacola, Escambia Co. This species is not presently on the official FOSRC list of the birds of Florida. There was some issue about whether streaking was present on rump. Streak-

ing on breast indicated a juvenile. Since immature *Spizella* sparrows are variable, there were issues about separation of observed bird from juveniles of other members of genus. Another key issue was lack of verifiable evidence on this sighting. Evidence was insufficient to confirm identity. Reports previously accepted by FOSRC: none; not accepted: none.

BULLOCK'S ORIOLE, *Icterus bullockii* (04-543). See discussion of Bullock's Oriole in the Accepted Reports section above. Collected 12 October 1957 near Princeton, Dade Co. In the University of Miami collection as UMRC 1631 then moved to the Field Museum of Natural History and recataloged as FMNH 375044. Based on overall and ventral coloration, plain face, lack of distinct supercilium, and lack of noticeable saw-toothed markings in wing bar on median coverts, specimen determined as a likely female Baltimore Oriole. Reports previously accepted by FOSRC: 01-443, 01-450, 04-542; not accepted: none.

BULLOCK'S ORIOLE, *Icterus bullockii* (04-543). See discussion of Bullock's Oriole in the Accepted Reports section above. Collected 4 February 1967 near Miller's Landing, Leon Co. and housed at the Florida State University. The original catalog number FSU 6848d had been crossed out and the number 2101 penciled in on the label. The bird was identified as a female on the specimen label. Face grayish with no distinct dark eye-line. Chest yellow extending far onto belly. No distinctive saw-toothed markings in wing bar on median coverts, suggesting female or first-winter male Baltimore Oriole. Reports previously accepted by FOSRC: 01-443, 01-450, 04-542; not accepted: 04-543.

CHANGES TO THE OFFICIAL FOSRC STATE LIST

ADDITIONS

CAKCLING GOOSE
 EURASIAN KESTREL
 SLATY-BACKED GULL
 BLACK-HOODED PARAKEET (EXOTIC)
 BROAD-BILLED HUMMINGBIRD
 PIRATIC FLYCATCHER
 MANGROVE SWALLOW
 MOUNTAIN BLUEBIRD
 BICKNELL'S THRUSH
 VARIED BUNTING
 HOODED ORIOLE

DELETIONS

VARIEGATED FLYCATCHER
 LOGGERHEAD KINGBIRD

REPORTS NOT RESOLVED

SOUTH POLAR SKUA, *Catharacta maccormicki* (04-540). Written description of a bird observed 26 June 2004, 100 nautical miles ESE of Cape Canaveral. The Committee determined the bird was seen closer to the territorial waters of the Bahamas rather than those of Florida. The Committee decided that this bird was seen beyond the boundaries of our review area (see FOSRC Rules and Procedures; www.fosbirds.org/RecordsCommittee/RulesAndProcedures.htm). Although the sighting was only 100 nm from Florida, it was not nearest to Florida, but rather to the legal jurisdiction of the Bahamas. For that reason, the Committee did not consider the report and it was not voted on. With the observer's permission, the report was forwarded to Andrew Kratter, who is a member of the FOSRC and The Bahamas Avian Records Committee, so that the Bahamian committee can consider it. We believe that this report, if accepted, would constitute a first record for the Bahamas.

- HEERMANN'S GULL, *Larus heermanni* (03-508). Written description of a bird observed 20 May 2003 near Destin Pass, Okaloosa Co. The committee decided that the plumage was consistent with the Heermann's Gull that had been resident at Ft. DeSoto and had been previously reviewed and accepted (01-452). Occurrence in the panhandle is consistent with vagrancy patterns of the Ft. DeSoto bird and with the date of its last sighting at Ft. DeSoto.
- WHITE-TIPPED DOVE, *Leptotila verreauxi* (03-504). Written description and multiple photographs of a bird observed from 19 April to 2 May 2003 on Garden Key, Dry Tortugas, Monroe Co. Color and lighting varied among the original photographs making direct comparisons difficult. Additional photos were obtained, including photos of *L. v. fulviventris* and *L. jamaicensis gaumeri* taken in the wild in Quintana Roo, Mexico. These photos and examination of specimens in the FLMNH failed to resolve the issue of interpreting conflicting photographic evidence in the absence of a timely description by observers. This is a classic illustration of a case in which photographs alone do not always speak unambiguously to an identification.
- SAY'S PHOEBE, *Sayornis saya* (05-561). Written description of an adult observed by one person, 26 January 2006, at St. Marks National Wildlife Refuge, Wakulla Co. The description was basic, but it seemed to rule out alternative possibilities. The observational narrative was ambiguous, especially concerning whether the observer saw tail pumping. Vote left the report unresolved.
- YELLOW-GREEN VIREO, *Vireo flavoviridis* (04-526). Written description of a bird observed 9 September 2002, near Key West, Monroe Co. This report was the first of two of the same species at the same location, but approximately one year apart submitted by the same observer. Both reports were submitted in late 2003, thus it appeared that the 2002 observation was not written until one year later, when the observer saw the second bird. Description was detailed, but not complete, especially description of facial patterns, absence of wing bars assumed, but not explicitly stated. Committee decided to request copies of original field notes made at the time of the sighting, if available, and then re-evaluate.
- GOLDEN-CROWNED SPARROW, *Zonotrichia atricapilla* (05-562). An adult observed by one person on 6 February 2005 at Zellwood, Orange Co. Head color and pattern fit a bird in breeding or near-breeding condition. The Committee had questions about timing and extent of molt in relation to the plumage reported, so the report was tabled until it could resolve these questions.

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APPENDIX 1.

OFFICIAL STATE LIST OF THE BIRDS OF FLORIDA AS COMPILED BY THE
FLORIDA ORNITHOLOGICAL SOCIETY RECORDS COMMITTEE

The list here concerns modern bird species that have definitely occurred in Florida by natural appearance or by establishment of an exotic. The base list is the *Supplement: Checklist of Florida Birds*, pp. 255-260 in Robertson & Woolfenden (1992), as updated by final decisions of the Florida Ornithological Society's Records Committee. This list of 495 species is updated through 31 December 2005. Annotations are: exotics (e); extinct native species (x); disestablished exotics (d); and species listed without verifiable evidence (u), as directed in FOSRC Rules. Sibling species groups may be included without reference to a particular underlying species but shall not be counted in any total of species found in Florida unless none of the underlying species are on the state list.

Species in the list below annotated with an * should be documented when detected in Florida and submitted to the FOSRC for review. In the case of *Empidonax traillii* and *E. alnorum*, only sightings that also document vocalizations should be sent to FOSRC. In addition, documentation should be submitted to the FOSRC for any species detected in Florida, believed to have occurred naturally or to have escaped, but not appearing in the main list of the aforementioned publication.

ANATIDAE

| | |
|-------------------------------|------------------------------|
| <i>Dendrocygna autumnalis</i> | Black-bellied Whistling-Duck |
| <i>Dendrocygna bicolor</i> | Fulvous Whistling-Duck |
| <i>Anser albifrons</i> | Greater White-fronted Goose |
| <i>Chen caerulescens</i> | Snow Goose |
| <i>Chen rossii</i> | Ross's Goose* |
| <i>Branta bernicla</i> | Brant |
| <i>Branta hutchinsii</i> | Cackling Goose* |
| <i>Branta canadensis</i> | Canada Goose |
| <i>Cygnus columbianus</i> | Tundra Swan |
| <i>Cairina moschata</i> | Muscovy Duck (e) |
| <i>Aix sponsa</i> | Wood Duck |
| <i>Anas strepera</i> | Gadwall |
| <i>Anas penelope</i> | Eurasian Wigeon |
| <i>Anas americana</i> | American Wigeon |

| | |
|----------------------------------|------------------------|
| <i>Anas rubripes</i> | American Black Duck |
| <i>Anas platyrhynchos</i> | Mallard |
| <i>Anas fulvigula</i> | Mottled Duck |
| <i>Anas discors</i> | Blue-winged Teal |
| <i>Anas cyanoptera</i> | Cinnamon Teal |
| <i>Anas clypeata</i> | Northern Shoveler |
| <i>Anas bahamensis</i> | White-cheeked Pintail* |
| <i>Anas acuta</i> | Northern Pintail |
| <i>Anas crecca</i> | Green-winged Teal |
| <i>Aythya valisineria</i> | Canvasback |
| <i>Aythya americana</i> | Redhead |
| <i>Aythya collaris</i> | Ring-necked Duck |
| <i>Aythya marila</i> | Greater Scaup |
| <i>Aythya affinis</i> | Lesser Scaup |
| <i>Somateria spectabilis</i> | King Eider* |
| <i>Somateria mollissima</i> | Common Eider |
| <i>Histrionicus histrionicus</i> | Harlequin Duck |
| <i>Melanitta perspicillata</i> | Surf Scoter |
| <i>Melanitta fusca</i> | White-winged Scoter |
| <i>Melanitta nigra</i> | Black Scoter |
| <i>Clangula hyemalis</i> | Long-tailed Duck |
| <i>Bucephala albeola</i> | Bufflehead |
| <i>Bucephala clangula</i> | Common Goldeneye |
| <i>Lophodytes cucullatus</i> | Hooded Merganser |
| <i>Mergus merganser</i> | Common Merganser* |
| <i>Mergus serrator</i> | Red-breasted Merganser |
| <i>Nomonyx dominicus</i> | Masked Duck* |
| <i>Oxyura jamaicensis</i> | Ruddy Duck |

PHASIANIDAE

| | |
|----------------------------|-------------------|
| <i>Meleagris gallopavo</i> | Wild Turkey |
| <i>Colinus virginianus</i> | Northern Bobwhite |

GAVIIDAE

| | |
|-----------------------|-------------------|
| <i>Gavia stellata</i> | Red-throated Loon |
| <i>Gavia pacifica</i> | Pacific Loon |
| <i>Gavia immer</i> | Common Loon |

PODICIPEDIDAE

| | |
|----------------------------------|-------------------|
| <i>Tachybaptus dominicus</i> | Least Grebe* |
| <i>Podilymbus podiceps</i> | Pied-billed Grebe |
| <i>Podiceps auritus</i> | Horned Grebe |
| <i>Podiceps grisegena</i> | Red-necked Grebe* |
| <i>Podiceps nigricollis</i> | Eared Grebe |
| <i>Aechmophorus occidentalis</i> | Western Grebe* |

DIOMEDEIDAE

| | |
|------------------------------------|-------------------------|
| <i>Thalassarche chlororhynchos</i> | Yellow-nosed Albatross* |
|------------------------------------|-------------------------|

PROCELLARIIDAE

| | |
|-----------------------------|---------------------|
| <i>Pterodroma hasitata</i> | Black-capped Petrel |
| <i>Calonectris diomedea</i> | Cory's Shearwater |
| <i>Puffinus gravis</i> | Greater Shearwater |

| | |
|----------------------------------|----------------------------|
| <i>Puffinus griseus</i> | Sooty Shearwater |
| <i>Puffinus tenuirostris</i> | Short-tailed Shearwater* |
| <i>Puffinus puffinus</i> | Manx Shearwater* |
| <i>Puffinus lherminieri</i> | Audubon's Shearwater |
| HYDROBATIDAE | |
| <i>Oceanites oceanicus</i> | Wilson's Storm-Petrel |
| <i>Oceanodroma leucorhoa</i> | Leach's Storm-Petrel |
| <i>Oceanodroma castro</i> | Band-rumped Storm-Petrel |
| PHAETHONTIDAE | |
| <i>Phaethon lepturus</i> | White-tailed Tropicbird |
| <i>Phaethon aethereus</i> | Red-billed Tropicbird* |
| SULIDAE | |
| <i>Sula dactylatra</i> | Masked Booby |
| <i>Sula leucogaster</i> | Brown Booby |
| <i>Sula sula</i> | Red-footed Booby |
| <i>Morus bassanus</i> | Northern Gannet |
| PELECANIDAE | |
| <i>Pelecanus erythrorhynchos</i> | American White Pelican |
| <i>Pelecanus occidentalis</i> | Brown Pelican |
| PHALACROCORACIDAE | |
| <i>Phalacrocorax auritus</i> | Double-crested Cormorant |
| <i>Phalacrocorax carbo</i> | Great Cormorant |
| ANHINGIDAE | |
| <i>Anhinga anhinga</i> | Anhinga |
| FREGATIDAE | |
| <i>Fregata magnificens</i> | Magnificent Frigatebird |
| ARDEIDAE | |
| <i>Botaurus lentiginosus</i> | American Bittern |
| <i>Ixobrychus exilis</i> | Least Bittern |
| <i>Ardea herodias</i> | Great Blue Heron |
| <i>Ardea alba</i> | Great Egret |
| <i>Egretta thula</i> | Snowy Egret |
| <i>Egretta caerulea</i> | Little Blue Heron |
| <i>Egretta tricolor</i> | Tricolored Heron |
| <i>Egretta rufescens</i> | Reddish Egret |
| <i>Bubulcus ibis</i> | Cattle Egret |
| <i>Butorides virescens</i> | Green Heron |
| <i>Nycticorax nycticorax</i> | Black-crowned Night-Heron |
| <i>Nyctanassa violacea</i> | Yellow-crowned Night-Heron |
| THRESKIORNITHIDAE | |
| <i>Eudocimus albus</i> | White Ibis |
| <i>Eudocimus ruber</i> | Scarlet Ibis* |
| <i>Plegadis falcinellus</i> | Glossy Ibis |
| <i>Plegadis chihi</i> | White-faced Ibis* |

| | |
|-----------------------------------|---------------------|
| <i>Platalea ajaja</i> | Roseate Spoonbill |
| CICONIIDAE | |
| <i>Mycteria americana</i> | Wood Stork |
| CATHARTIDAE | |
| <i>Coragyps atratus</i> | Black Vulture |
| <i>Cathartes aura</i> | Turkey Vulture |
| PHOENICOPTERIDAE | |
| <i>Phoenicopterus ruber</i> | Greater Flamingo |
| ACCIPITRIDAE | |
| <i>Pandion haliaetus</i> | Osprey |
| <i>Elanoides forficatus</i> | Swallow-tailed Kite |
| <i>Elanus leucurus</i> | White-tailed Kite |
| <i>Rostrhamus sociabilis</i> | Snail Kite |
| <i>Ictinia mississippiensis</i> | Mississippi Kite |
| <i>Haliaeetus leucocephalus</i> | Bald Eagle |
| <i>Circus cyaneus</i> | Northern Harrier |
| <i>Accipiter striatus</i> | Sharp-shinned Hawk |
| <i>Accipiter cooperii</i> | Cooper's Hawk |
| <i>Accipiter gentilis</i> | Northern Goshawk* |
| <i>Buteo lineatus</i> | Red-shouldered Hawk |
| <i>Buteo platypterus</i> | Broad-winged Hawk |
| <i>Buteo brachyurus</i> | Short-tailed Hawk |
| <i>Buteo swainsoni</i> | Swainson's Hawk |
| <i>Buteo albionotatus</i> | Zone-tailed Hawk* |
| <i>Buteo jamaicensis</i> | Red-tailed Hawk |
| <i>Buteo regalis</i> | Ferruginous Hawk* |
| <i>Buteo lagopus</i> | Rough-legged Hawk* |
| <i>Aquila chrysaetos</i> | Golden Eagle |
| FALCONIDAE | |
| <i>Caracara cheriway</i> | Crested Caracara |
| <i>Falco tinnunculus</i> | Eurasian Kestrel* |
| <i>Falco sparverius</i> | American Kestrel |
| <i>Falco columbarius</i> | Merlin |
| <i>Falco peregrinus</i> | Peregrine Falcon |
| RALLIDAE | |
| <i>Coturnicops noveboracensis</i> | Yellow Rail |
| <i>Laterallus jamaicensis</i> | Black Rail |
| <i>Rallus longirostris</i> | Clapper Rail |
| <i>Rallus elegans</i> | King Rail |
| <i>Rallus limicola</i> | Virginia Rail |
| <i>Porzana carolina</i> | Sora |
| <i>Porphyryla martinica</i> | Purple Gallinule |
| <i>Gallinula chloropus</i> | Common Moorhen |
| <i>Fulica americana</i> | American Coot |
| ARAMIDAE | |
| <i>Aramus guarauna</i> | Limpkin |

GRUIDAE

| | |
|------------------------|--------------------|
| <i>Grus canadensis</i> | Sandhill Crane |
| <i>Grus americana</i> | Whooping Crane (x) |

CHARADRIIDAE

| | |
|--------------------------------|------------------------|
| <i>Vanellus vanellus</i> | Northern Lapwing* |
| <i>Pluvialis squatarola</i> | Black-bellied Plover |
| <i>Pluvialis dominica</i> | American Golden-Plover |
| <i>Charadrius alexandrinus</i> | Snowy Plover |
| <i>Charadrius wilsonia</i> | Wilson's Plover |
| <i>Charadrius semipalmatus</i> | Semipalmated Plover |
| <i>Charadrius melodus</i> | Piping Plover |
| <i>Charadrius vociferus</i> | Killdeer |
| <i>Charadrius montanus</i> | Mountain Plover* |

HAEMATOPODIDAE

| | |
|-----------------------------|------------------------|
| <i>Haematopus palliatus</i> | American Oystercatcher |
|-----------------------------|------------------------|

RECURVIROSTRIDAE

| | |
|--------------------------------|--------------------|
| <i>Himantopus mexicanus</i> | Black-necked Stilt |
| <i>Recurvirostra americana</i> | American Avocet |

SCOLOPACIDAE

| | |
|--------------------------------|-------------------------|
| <i>Actitis macularius</i> | Spotted Sandpiper |
| <i>Tringa solitaria</i> | Solitary Sandpiper |
| <i>Tringa melanoleuca</i> | Greater Yellowlegs |
| <i>Tringa semipalmatus</i> | Willet |
| <i>Tringa flavipes</i> | Lesser Yellowlegs |
| <i>Bartramia longicauda</i> | Upland Sandpiper |
| <i>Numenius phaeopus</i> | Whimbrel |
| <i>Numenius americanus</i> | Long-billed Curlew |
| <i>Limosa limosa</i> | Black-tailed Godwit* |
| <i>Limosa haemastica</i> | Hudsonian Godwit |
| <i>Limosa lapponica</i> | Bar-tailed Godwit* |
| <i>Limosa fedoa</i> | Marbled Godwit |
| <i>Arenaria interpres</i> | Ruddy Turnstone |
| <i>Aphriza virgata</i> | Surfbird* |
| <i>Calidris canutus</i> | Red Knot |
| <i>Calidris alba</i> | Sanderling |
| <i>Calidris pusilla</i> | Semipalmated Sandpiper |
| <i>Calidris mauri</i> | Western Sandpiper |
| <i>Calidris minutilla</i> | Least Sandpiper |
| <i>Calidris fuscicollis</i> | White-rumped Sandpiper |
| <i>Calidris bairdii</i> | Baird's Sandpiper |
| <i>Calidris melanotos</i> | Pectoral Sandpiper |
| <i>Calidris acuminata</i> | Sharp-tailed Sandpiper* |
| <i>Calidris maritima</i> | Purple Sandpiper |
| <i>Calidris alpina</i> | Dunlin |
| <i>Calidris ferruginea</i> | Curlew Sandpiper |
| <i>Calidris himantopus</i> | Stilt Sandpiper |
| <i>Tryngites subruficollis</i> | Buff-breasted Sandpiper |
| <i>Philomachus pugnax</i> | Ruff |
| <i>Limnodromus griseus</i> | Short-billed Dowitcher |

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| <i>Limnodromus scolopaceus</i> | Long-billed Dowitcher |
| <i>Gallinago delicata</i> | Wilson's Snipe |
| <i>Scolopax minor</i> | American Woodcock |
| <i>Phalaropus tricolor</i> | Wilson's Phalarope |
| <i>Phalaropus lobatus</i> | Red-necked Phalarope |
| <i>Phalaropus fulicarius</i> | Red Phalarope |

LARIDAE

| | |
|---------------------------------|--------------------------|
| <i>Larus atricilla</i> | Laughing Gull |
| <i>Larus pipixcan</i> | Franklin's Gull |
| <i>Larus minutus</i> | Little Gull* |
| <i>Larus ridibundus</i> | Black-headed Gull* |
| <i>Larus philadelphia</i> | Bonaparte's Gull |
| <i>Larus heermanni</i> | Heermann's Gull* |
| <i>Larus cirrocephalus</i> | Gray-hooded Gull* |
| <i>Larus belcheri</i> | Belcher's Gull* |
| <i>Larus delawarensis</i> | Ring-billed Gull |
| <i>Larus californicus</i> | California Gull* |
| <i>Larus argentatus</i> | Herring Gull |
| <i>Larus thayeri</i> | Thayer's Gull* |
| <i>Larus glaucoides</i> | Iceland Gull* |
| <i>Larus fuscus</i> | Lesser Black-backed Gull |
| <i>Larus schistisagus</i> | Slaty-backed Gull* |
| <i>Larus hyperboreus</i> | Glaucous Gull |
| <i>Larus marinus</i> | Great Black-backed Gull |
| <i>Xema sabini</i> | Sabine's Gull |
| <i>Rissa tridactyla</i> | Black-legged Kittiwake |
| <i>Anous stolidus</i> | Brown Noddy |
| <i>Anous minutus</i> | Black Noddy |
| <i>Onychoprion fuscata</i> | Sooty Tern |
| <i>Onychoprion anaethetus</i> | Bridled Tern |
| <i>Sternula antillarum</i> | Least Tern |
| <i>Gelochelidon nilotica</i> | Gull-billed Tern |
| <i>Hydroprogne caspia</i> | Caspian Tern |
| <i>Chlidonias niger</i> | Black Tern |
| <i>Sterna dougallii</i> | Roseate Tern |
| <i>Sterna hirundo</i> | Common Tern |
| <i>Sterna paradisaea</i> | Arctic Tern |
| <i>Sterna forsteri</i> | Forster's Tern |
| <i>Thalasseus maximus</i> | Royal Tern |
| <i>Thalasseus sandwicensis</i> | Sandwich Tern |
| <i>Thalasseus elegans</i> | Elegant Tern* |
| <i>Rynchops niger</i> | Black Skimmer |
| <i>Stercorarius maccormicki</i> | South Polar Skua* |
| <i>Stercorarius pomarinus</i> | Pomarine Jaeger |
| <i>Stercorarius parasiticus</i> | Parasitic Jaeger |
| <i>Stercorarius longicaudus</i> | Long-tailed Jaeger |

ALCIDAE

| | |
|--------------------|---------------------|
| <i>Alle alle</i> | Dovekie |
| <i>Uria lomvia</i> | Thick-billed Murre* |
| <i>Alca torda</i> | Razorbill* |

Brachyramphus perdix
Fratercula arctica

Long-billed Murrelet*
Atlantic Puffin*

COLUMBIDAE

Columba livia
Patagioenas squamosa
Patagioenas leucocephala
Patagioenas fasciata
Streptopelia turtur
Streptopelia decaocto
Zenaida asiatica
Zenaida aurita
Zenaida macroura
Ectopistes migratorius
Columbina passerina
Leptotila verreauxi
Geotrygon chrysis
Geotrygon montana

Rock Pigeon (e)
Scaly-naped Pigeon*
White-crowned Pigeon
Band-tailed Pigeon*
European Turtle-Dove*
Eurasian Collared-Dove (e)
White-winged Dove
Zenaida Dove*
Mourning Dove
Passenger Pigeon (x)
Common Ground-Dove
White-tipped Dove*
Key West Quail-Dove
Ruddy Quail-Dove*

PSITTACIDAE

Melopsittacus undulatus
Myiopsitta monachus
Conuropsis carolinensis
Nandayus nenday
Brotogeris versicolurus

Budgerigar (e)
Monk Parakeet (e)
Carolina Parakeet (x)
Black-hooded Parakeet (e)
White-winged Parakeet (e)

CUCULIDAE

Coccyzus americanus
Coccyzus minor
Coccyzus erythrophthalmus
Crotophaga ani
Crotophaga sulcirostris

Yellow-billed Cuckoo
Mangrove Cuckoo
Black-billed Cuckoo
Smooth-billed Ani
Groove-billed Ani

TYTONIDAE

Tyto alba

Barn Owl

STRIGIDAE

Otus flammeolus
Megascops asio
Bubo virginianus
Bubo scandiacus
Athene cucularia
Strix varia
Asio otus
Asio flammeus
Aegolius acadicus

Flammulated Owl*
Eastern Screech-Owl
Great Horned Owl
Snowy Owl*
Burrowing Owl
Barred Owl
Long-eared Owl*
Short-eared Owl
Northern Saw-whet Owl*

CAPRIMULGIDAE

Chordeiles acutipennis
Chordeiles minor
Chordeiles gundlachii
Caprimulgus carolinensis
Caprimulgus vociferus

Lesser Nighthawk
Common Nighthawk
Antillean Nighthawk
Chuck-will's-widow
Whip-poor-will

APODIDAE

| | |
|------------------------------|-----------------------|
| <i>Streptoprocne zonaris</i> | White-collared Swift* |
| <i>Chaetura pelagica</i> | Chimney Swift |
| <i>Chaetura vauxi</i> | Vaux's Swift* |
| <i>Tachornis phoenicobia</i> | Antillean Palm-Swift* |

TROCHILIDAE

| | |
|--------------------------------|---------------------------|
| <i>Cynanthus latirostris</i> | Broad-billed Hummingbird* |
| <i>Amazilia yucatanensis</i> | Buff-bellied Hummingbird |
| <i>Calliphlox evelynae</i> | Bahama Woodstar* |
| <i>Archilochus colubris</i> | Ruby-throated Hummingbird |
| <i>Archilochus alexandri</i> | Black-chinned Hummingbird |
| <i>Calypte anna</i> | Anna's Hummingbird* |
| <i>Stellula calliope</i> | Calliope Hummingbird |
| <i>Selasphorus platycercus</i> | Broad-tailed Hummingbird* |
| <i>Selasphorus rufus</i> | Rufous Hummingbird |
| <i>Selasphorus sasin</i> | Allen's Hummingbird* |

ALCEDINIDAE

| | |
|----------------------|-------------------|
| <i>Ceryle alcyon</i> | Belted Kingfisher |
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PICIDAE

| | |
|-----------------------------------|-----------------------------|
| <i>Melanerpes erythrocephalus</i> | Red-headed Woodpecker |
| <i>Melanerpes aurifrons</i> | Golden-fronted Woodpecker* |
| <i>Melanerpes carolinus</i> | Red-bellied Woodpecker |
| <i>Sphyrapicus varius</i> | Yellow-bellied Sapsucker |
| <i>Picoides pubescens</i> | Downy Woodpecker |
| <i>Picoides villosus</i> | Hairy Woodpecker |
| <i>Picoides borealis</i> | Red-cockaded Woodpecker |
| <i>Colaptes auratus</i> | Northern Flicker |
| <i>Dryocopus pileatus</i> | Pileated Woodpecker |
| <i>Campephilus principalis</i> | Ivory-billed Woodpecker (x) |

TYRANNIDAE

| | |
|----------------------------------|-----------------------------|
| <i>Contopus cooperi</i> | Olive-sided Flycatcher |
| <i>Contopus sordidulus</i> | Western Wood-Pewee* |
| <i>Contopus virens</i> | Eastern Wood-Pewee |
| <i>Contopus caribaeus</i> | Cuban Pewee* |
| <i>Empidonax flaviventris</i> | Yellow-bellied Flycatcher |
| <i>Empidonax virescens</i> | Acadian Flycatcher |
| <i>Empidonax alnorum</i> | Alder Flycatcher* |
| <i>Empidonax traillii</i> | Willow Flycatcher* |
| <i>Empidonax minimus</i> | Least Flycatcher |
| <i>Sayornis nigricans</i> | Black Phoebe* |
| <i>Sayornis phoebe</i> | Eastern Phoebe |
| <i>Sayornis saya</i> | Say's Phoebe* |
| <i>Pyrocephalus rubinus</i> | Vermilion Flycatcher |
| <i>Myiarchus cinerascens</i> | Ash-throated Flycatcher |
| <i>Myiarchus crinitus</i> | Great Crested Flycatcher |
| <i>Myiarchus tyrannulus</i> | Brown-crested Flycatcher |
| <i>Myiarchus sagrae</i> | La Sagra's Flycatcher |
| <i>Myiodynastes luteiventris</i> | Sulphur-bellied Flycatcher* |

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|-----------------------------------|-------------------------------|
| <i>Legatus leucophaeus</i> | Piratic Flycatcher* |
| <i>Tyrannus melancholicus</i> | Tropical Kingbird* |
| <i>Tyrannus vociferans</i> | Cassin's Kingbird* |
| <i>Tyrannus verticalis</i> | Western Kingbird |
| <i>Tyrannus tyrannus</i> | Eastern Kingbird |
| <i>Tyrannus dominicensis</i> | Gray Kingbird |
| <i>Tyrannus forficatus</i> | Scissor-tailed Flycatcher |
| <i>Tyrannus savana</i> | Fork-tailed Flycatcher* |
| LANIIDAE | |
| <i>Lanius ludovicianus</i> | Loggerhead Shrike |
| VIREONIDAE | |
| <i>Vireo griseus</i> | White-eyed Vireo |
| <i>Vireo crassirostris</i> | Thick-billed Vireo* |
| <i>Vireo bellii</i> | Bell's Vireo |
| <i>Vireo flavifrons</i> | Yellow-throated Vireo |
| <i>Vireo solitarius</i> | Blue-headed Vireo |
| <i>Vireo gilvus</i> | Warbling Vireo |
| <i>Vireo philadelphicus</i> | Philadelphia Vireo |
| <i>Vireo olivaceus</i> | Red-eyed Vireo |
| <i>Vireo flavoviridis</i> | Yellow-green Vireo* |
| <i>Vireo altiloquus</i> | Black-whiskered Vireo |
| CORVIDAE | |
| <i>Cyanocitta cristata</i> | Blue Jay |
| <i>Aphelocoma coerulescens</i> | Florida Scrub-Jay |
| <i>Corvus brachyrhynchos</i> | American Crow |
| <i>Corvus ossifragus</i> | Fish Crow |
| ALAUDIDAE | |
| <i>Eremophila alpestris</i> | Horned Lark |
| HIRUNDINIDAE | |
| <i>Progne subis</i> | Purple Martin |
| <i>Progne cryptoleuca</i> | Cuban Martin* |
| <i>Progne elegans</i> | Southern Martin* |
| <i>Tachycineta bicolor</i> | Tree Swallow |
| <i>Tachycineta albilinea</i> | Mangrove Swallow* |
| <i>Tachycineta cyaneoviridis</i> | Bahama Swallow* |
| <i>Stelgidopteryx serripennis</i> | Northern Rough-winged Swallow |
| <i>Riparia riparia</i> | Bank Swallow |
| <i>Petrochelidon pyrrhonota</i> | Cliff Swallow |
| <i>Petrochelidon fulva</i> | Cave Swallow |
| <i>Hirundo rustica</i> | Barn Swallow |
| PARIDAE | |
| <i>Poecile carolinensis</i> | Carolina Chickadee |
| <i>Baeolophus bicolor</i> | Tufted Titmouse |
| SITTIDAE | |
| <i>Sitta canadensis</i> | Red-breasted Nuthatch |
| <i>Sitta carolinensis</i> | White-breasted Nuthatch |

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| <i>Sitta pusilla</i> | Brown-headed Nuthatch |
| CERTHIIDAE | |
| <i>Certhia americana</i> | Brown Creeper |
| TROGLODYTIDAE | |
| <i>Salpinctes obsoletus</i> | Rock Wren* |
| <i>Thryothorus ludovicianus</i> | Carolina Wren |
| <i>Thryomanes bewickii</i> | Bewick's Wren* |
| <i>Troglodytes aedon</i> | House Wren |
| <i>Troglodytes troglodytes</i> | Winter Wren |
| <i>Cistothorus platensis</i> | Sedge Wren |
| <i>Cistothorus palustris</i> | Marsh Wren |
| PYCNONOTIDAE | |
| <i>Pycnonotus jocosus</i> | Red-whiskered Bulbul (e) |
| REGULIDAE | |
| <i>Regulus satrapa</i> | Golden-crowned Kinglet |
| <i>Regulus calendula</i> | Ruby-crowned Kinglet |
| SYLVIIDAE | |
| <i>Polioptila caerulea</i> | Blue-gray Gnatcatcher |
| TURDIDAE | |
| <i>Oenanthe oenanthe</i> | Northern Wheatear* |
| <i>Sialia sialis</i> | Eastern Bluebird |
| <i>Sialia currucoides</i> | Mountain Bluebird* |
| <i>Catharus fuscescens</i> | Veery |
| <i>Catharus minimus</i> | Gray-cheeked Thrush |
| <i>Catharus bicknelli</i> | Bicknell's Thrush |
| <i>Catharus ustulatus</i> | Swainson's Thrush |
| <i>Catharus guttatus</i> | Hermit Thrush |
| <i>Hylocichla mustelina</i> | Wood Thrush |
| <i>Turdus migratorius</i> | American Robin |
| <i>Ixoreus naevius</i> | Varied Thrush* |
| MIMIDAE | |
| <i>Dumetella carolinensis</i> | Gray Catbird |
| <i>Mimus polyglottos</i> | Northern Mockingbird |
| <i>Mimus gundlachii</i> | Bahama Mockingbird |
| <i>Oreoscoptes montanus</i> | Sage Thrasher* |
| <i>Toxostoma rufum</i> | Brown Thrasher |
| <i>Toxostoma curvirostre</i> | Curve-billed Thrasher* |
| STURNIDAE | |
| <i>Sturnus vulgaris</i> | European Starling (e) |
| MOTACILLIDAE | |
| <i>Anthus rubescens</i> | American Pipit |
| <i>Anthus spragueii</i> | Sprague's Pipit |
| BOMBYCILLIDAE | |
| <i>Bombycilla cedrorum</i> | Cedar Waxwing |

PARULIDAE

| | |
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| <i>Vermivora bachmanii</i> | Bachman's Warbler (x) |
| <i>Vermivora pinus</i> | Blue-winged Warbler |
| <i>Vermivora chrysoptera</i> | Golden-winged Warbler |
| <i>Vermivora peregrina</i> | Tennessee Warbler |
| <i>Vermivora celata</i> | Orange-crowned Warbler |
| <i>Vermivora ruficapilla</i> | Nashville Warbler |
| <i>Parula americana</i> | Northern Parula |
| <i>Dendroica petechia</i> | Yellow Warbler |
| <i>Dendroica pensylvanica</i> | Chestnut-sided Warbler |
| <i>Dendroica magnolia</i> | Magnolia Warbler |
| <i>Dendroica tigrina</i> | Cape May Warbler |
| <i>Dendroica caerulescens</i> | Black-throated Blue Warbler |
| <i>Dendroica coronata</i> | Yellow-rumped Warbler |
| <i>Dendroica nigrescens</i> | Black-throated Gray Warbler |
| <i>Dendroica chrysoparia</i> | Golden-cheeked Warbler* |
| <i>Dendroica virens</i> | Black-throated Green Warbler |
| <i>Dendroica townsendi</i> | Townsend's Warbler |
| <i>Dendroica fusca</i> | Blackburnian Warbler |
| <i>Dendroica dominica</i> | Yellow-throated Warbler |
| <i>Dendroica pinus</i> | Pine Warbler |
| <i>Dendroica kirtlandii</i> | Kirtland's Warbler* |
| <i>Dendroica discolor</i> | Prairie Warbler |
| <i>Dendroica palmarum</i> | Palm Warbler |
| <i>Dendroica castanea</i> | Bay-breasted Warbler |
| <i>Dendroica striata</i> | Blackpoll Warbler |
| <i>Dendroica cerulea</i> | Cerulean Warbler |
| <i>Mniotilta varia</i> | Black-and-white Warbler |
| <i>Setophaga ruticilla</i> | American Redstart |
| <i>Protonotaria citrea</i> | Prothonotary Warbler |
| <i>Helmitheros vermivorus</i> | Worm-eating Warbler |
| <i>Limnothlypis swainsonii</i> | Swainson's Warbler |
| <i>Seiurus aurocapilla</i> | Ovenbird |
| <i>Seiurus noveboracensis</i> | Northern Waterthrush |
| <i>Seiurus motacilla</i> | Louisiana Waterthrush |
| <i>Oporornis formosus</i> | Kentucky Warbler |
| <i>Oporornis agilis</i> | Connecticut Warbler |
| <i>Oporornis philadelphia</i> | Mourning Warbler |
| <i>Oporornis tolmiei</i> | MacGillivray's Warbler* |
| <i>Geothlypis trichas</i> | Common Yellowthroat |
| <i>Wilsonia citrina</i> | Hooded Warbler |
| <i>Wilsonia pusilla</i> | Wilson's Warbler |
| <i>Wilsonia canadensis</i> | Canada Warbler |
| <i>Icteria virens</i> | Yellow-breasted Chat |

INCERTAE SEDIS

Coereba flaveola

Bananaquit

THRAUPIDAE

Piranga rubra

Summer Tanager

Piranga olivacea

Scarlet Tanager

Piranga ludoviciana

Western Tanager

Spindalis zena

Western Spindalis

EMBERIZIDAE

| | |
|----------------------------------|--------------------------------|
| <i>Tiaris olivacea</i> | Yellow-faced Grassquit* |
| <i>Tiaris bicolor</i> | Black-faced Grassquit* |
| <i>Pipilo chlorurus</i> | Green-tailed Towhee* |
| <i>Pipilo maculatus</i> | Spotted Towhee* |
| <i>Pipilo erythrophthalmus</i> | Eastern Towhee |
| <i>Aimophila aestivalis</i> | Bachman's Sparrow |
| <i>Spizella arborea</i> | American Tree Sparrow* |
| <i>Spizella passerina</i> | Chipping Sparrow |
| <i>Spizella pallida</i> | Clay-colored Sparrow |
| <i>Spizella pusilla</i> | Field Sparrow |
| <i>Pooecetes gramineus</i> | Vesper Sparrow |
| <i>Chondestes grammacus</i> | Lark Sparrow |
| <i>Amphispiza bilineata</i> | Black-throated Sparrow* |
| <i>Calamospiza melanocorys</i> | Lark Bunting* |
| <i>Passerculus sandwichensis</i> | Savannah Sparrow |
| <i>Ammodramus savannarum</i> | Grasshopper Sparrow |
| <i>Ammodramus henslowii</i> | Henslow's Sparrow |
| <i>Ammodramus leconteii</i> | Le Conte's Sparrow |
| <i>Ammodramus nelsoni</i> | Nelson's Sharp-tailed Sparrow |
| <i>Ammodramus caudacutus</i> | Saltmarsh Sharp-tailed Sparrow |
| <i>Ammodramus maritimus</i> | Seaside Sparrow |
| <i>Passerella iliaca</i> | Fox Sparrow |
| <i>Melospiza melodia</i> | Song Sparrow |
| <i>Melospiza lincolnii</i> | Lincoln's Sparrow |
| <i>Melospiza georgiana</i> | Swamp Sparrow |
| <i>Zonotrichia albicollis</i> | White-throated Sparrow |
| <i>Zonotrichia querula</i> | Harris's Sparrow* |
| <i>Zonotrichia leucophrys</i> | White-crowned Sparrow |
| <i>Zonotrichia atricapilla</i> | Golden-crowned Sparrow* |
| <i>Junco hyemalis</i> | Dark-eyed Junco |
| <i>Calcarius lapponicus</i> | Lapland Longspur |
| <i>Calcarius ornatus</i> | Chestnut-collared Longspur* |
| <i>Plectrophenax nivalis</i> | Snow Bunting |

CARDINALIDAE

| | |
|----------------------------------|------------------------|
| <i>Cardinalis cardinalis</i> | Northern Cardinal |
| <i>Pheucticus ludovicianus</i> | Rose-breasted Grosbeak |
| <i>Pheucticus melanocephalus</i> | Black-headed Grosbeak |
| <i>Passerina caerulea</i> | Blue Grosbeak |
| <i>Passerina amoena</i> | Lazuli Bunting* |
| <i>Passerina cyanea</i> | Indigo Bunting |
| <i>Passerina versicolor</i> | Varied Bunting* |
| <i>Passerina ciris</i> | Painted Bunting |
| <i>Spiza americana</i> | Dickcissel |

ICTERIDAE

| | |
|------------------------------|-----------------------------|
| <i>Dolichonyx oryzivorus</i> | Bobolink |
| <i>Agelaius phoeniceus</i> | Red-winged Blackbird |
| <i>Agelaius humeralis</i> | Tawny-shouldered Blackbird* |
| <i>Sturnella magna</i> | Eastern Meadowlark |
| <i>Sturnella neglecta</i> | Western Meadowlark* |

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| <i>Xanthocephalus xanthocephalus</i> | Yellow-headed Blackbird |
| <i>Euphagus carolinus</i> | Rusty Blackbird |
| <i>Euphagus cyanocephalus</i> | Brewer's Blackbird |
| <i>Quiscalus quiscula</i> | Common Grackle |
| <i>Quiscalus major</i> | Boat-tailed Grackle |
| <i>Molothrus bonariensis</i> | Shiny Cowbird |
| <i>Molothrus aeneus</i> | Bronzed Cowbird |
| <i>Molothrus ater</i> | Brown-headed Cowbird |
| <i>Icterus spurius</i> | Orchard Oriole |
| <i>Icterus cucullatus</i> | Hooded Oriole* |
| <i>Icterus bullockii</i> | Bullock's Oriole* |
| <i>Icterus pectoralis</i> | Spot-breasted Oriole (e) |
| <i>Icterus galbula</i> | Baltimore Oriole |
| FRINGILLIDAE | |
| <i>Carpodacus purpureus</i> | Purple Finch |
| <i>Carpodacus mexicanus</i> | House Finch (e) |
| <i>Loxia curvirostra</i> | Red Crossbill* |
| <i>Carduelis pinus</i> | Pine Siskin |
| <i>Carduelis tristis</i> | American Goldfinch |
| <i>Coccothraustes vespertinus</i> | Evening Grosbeak |
| PASSERIDAE | |
| <i>Passer domesticus</i> | House Sparrow (e) |

FIELD OBSERVATIONS

Winter Report: December 2005-February 2006.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32:7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: EOS = end of season, NP = national park, NSRA = north shore restoration area, NWR = national wildlife refuge, SF = state forest, SP = state park, STF = sewage treatment facility, WEA = wildlife and environmental area, and N, S, E, W etc., for compass directions. Bold-faced species denote birds newly reported or verified in Florida, or record counts.

SUMMARY OF THE WINTER SEASON

It seemed to be a good season for rarities this winter, with 10 FOSRC rarities: **11** Ross’s Geese (9 at Fort Walton Beach and singles at St. Marks NWR and Rockledge); Cackling Goose at Fort Walton Beach; four Manx Shearwaters off Ponce Inlet; Rough-legged Hawk at Lake Apopka; two Iceland Gulls at the Volusia County landfill; Calliope Hummingbird at Gulf Breeze; two Allen’s Hummingbirds at Tallahassee; Tropical Kingbird at Apalachicola; two Cassin’s Kingbirds at Lake Apopka and one at Wimauma; and Bullock’s Oriole at Tallahassee. Other significant sightings included single Eurasian Green-winged Teals at Gainesville and Lake Apopka, reports of *Chaetura* swifts from three sites (including 20 individuals at Paynes Prairie), the Fork-tailed Flycatcher at Lake Apopka, Florida’s first verifiable winter record of the Common Nighthawk, and the first state report and record of a Paradise Shelduck at Ding Darling NWR. We received very few Christmas Bird Count reports, and BP did not have the time to transcribe all the rarities submitted to him as CBC editor.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 230 at W Cocoa (*Brevard*) 14 Dec (D. Freeland); 235 at Bartow (*Polk*) 17 Dec (P. Fellers); 159 at Gainesville (*Alachua*) 18 Dec (D. Pearson); 160 E of Lake Placid (*Highlands*) 29 Dec (J. Gaetzi et al.); 345 at Lake Apopka NSRA 1 Jan (H. Robinson); 36 at Fellowship (*Marion*) 2 Jan (S. McCool); up to 17 in NE *Leon* 3-7 Jan (D. Bethancourt et al.); 18 near Jupiter Inlet (*Palm Beach*) 3 Jan (J. and L. Hailman); 100 at *Polk* phosphate mines 9 Jan (P. Timmer, C. Geanangel); a high of 100 at Stormwater Treatment Area (STA)-5 (*Hendry*) during Jan-Feb (M. England et al.).

FULVOUS WHISTLING-DUCK: 1000 at STA-5 in Feb (M. England et al.).

GREATER WHITE-FRONTED GOOSE: 2 at Cedar Key (*Levy*) 2 Dec (J. Taylor); 1 at Fort Walton Beach STF (*Okaloosa*) 10-19 Dec (D. Ware et al.); up to 5 (2 adults and 3 juveniles)

at Lake Apopka NSRA (*Lake*) 17 Dec-7 Jan (G. Basili, B. Anderson et al.); 5 at Dinner Island Ranch WMA (*Hendry*) 27 Jan (L. and T. Panto); (the same?) 5 at STA-1W (*Palm Beach*) 25 Feb (J. Lopinot, photo to FOC).

SNOW GOOSE: 1 at Alachua (*Alachua*) 6 Dec (P. Burns); up to 23 at St. Marks (*Wakulla*) 8-13 Dec (A. Wraithmell); 1 at Huguenot Memorial Park (*Duval*) 10 Dec (B. Richter); 1 at Gainesville 11 Dec (M. Joos, D. Robbins); 1 blue morph at Spring Hill (*Hernando*) 11-15 Dec (A. and B. Hansen et al.); 3 blue morphs at Tram Road STF (*Leon*) 12 Dec (G. Menk); 2 at Kanapaha Prairie (*Alachua*) 18 Dec (R. Rowan et al.); 1 at Lake Apopka NSRA 21 Dec (H. Robinson); 6 N of Wesley Chapel (*Pasco*) 26 Dec-4 Jan (D. Goodwin et al.); 1 white morph adult at Brandon (*Hillsborough*) 7 Jan (D. Goodwin); up to 2 white morphs at Merritt Island NWR (*Brevard*) 12 Jan-28 Feb (P. Hueber, D. Freeland et al.); 30 or more at Fruitville (*Sarasota*) 21 Jan (T. Mossbarger); 1 blue morph adult at Barber Park, Orlando (*Orange*) 28 Jan (P. Hueber et al.).

SNOW × ROSS'S GOOSE: 1 hybrid N of Wesley Chapel 26 Dec-4 Jan (B. Pranty et al.).

*ROSS'S GOOSE: 1 at St. Marks NWR 20 Nov-13 Dec (T. Curtis, P. Lehman et al., accepted by FOSRC); 9 at Fort Walton Beach STF 10-19 Dec (L. and B. Duncan, P. Johnson et al.; accepted by FOSRC); 1 adult at Rockledge (*Brevard*) 17 Dec-3 Jan (D. Freeland et al.).

*CACKLING GOOSE: 1 at Fort Walton Beach STF 10 Dec-4 Jan (D. Ware, L. Duncan et al.).

CANADA GOOSE: 3 possibly wild birds E of Tampa 31 Dec-1 Jan (T. Mann et al.).

EGYPTIAN GOOSE: 1 at Indian River Shores (*Indian River*) in Dec (*vide* B. Wagner).

PARADISE SHELDUCK (*Tadorna variegata*): 1 at J.N. "Ding" Darling NWR (*Lee*) in mid-Feb (D. Driemeyer, photo to FOC) furnished the first report and record for Florida. The species is native to the Stewart Islands of New Zealand.

EURASIAN WIGEON: 2 drakes at Eagle Lakes Park (*Collier*) 9 Dec (A. Murray) for the third year out of the past four.

AMERICAN BLACK DUCK: 4 at Merritt Island NWR 8 Feb (D. Freeland).

CINNAMON TEAL: 1 adult drake at Lake Apopka NSRA 4-9 Dec (H. Robinson); 1 adult drake at Brandon (*Hillsborough*) 18 Dec-6 Feb (E. Kwater, L. Atherton et al.).

NORTHERN SHOVELER: 4900 at *Polk* mines 9 Jan (P. Timmer, C. Geanangel).

GREEN-WINGED TEAL: 1500 at *Polk* mines 23 Jan (P. Fellers et al.); 1 drake of the Eurasian race at Lake Apopka NSRA 22 Jan (H. Robinson); 1 drake of the Eurasian race at Gainesville 27 Jan-10 Feb in the same location as the previous winter (B. Roberts, P. Burns et al.).

CANVASBACK: 1 at Gainesville 10-18 Dec (S. Flamand, M. King et al.); 2 at Paynes Prairie Preserve SP (*Alachua*) 18 Dec (J. Hintermister).

REDHEAD: up to 4 at Paynes Prairie Preserve 18 Dec-25 Feb (J. Hintermister); 5 at Sugden Park, Naples (*Collier*) 23 Dec (H. McGuinness et al.); 2500 at Gulf Harbors, New Port Richey (*Pasco*) in Dec-Jan (K. Tracey, photos to FOC).

RING-NECKED DUCK: 1 leucistic female with a white head at Lake Morton, Lakeland (*Polk*) 14 Feb (H. Moulden, photo to FOC).

GREATER SCAUP: 4 at *Hamilton* phosphate mines 14 Dec (P. Lehman et al.); up to 2 (20-25 Jan) wintered at Lake Apopka NSRA (H. Robinson et al., photo to FOC by A. Vinokur).

SURF SCOTER: 1 at St. Marks NWR 13 Dec (P. Lehman); 2 off Key Biscayne (*Miami-Dade*) 23 Dec (R. Torres et al.); 2 at Coconut Point (*Brevard*) 20 Feb (A. Bankert).

BLACK SCOTER: up to 8 in mid-*Pinellas* 2 Dec-5 Feb (Judy Fisher, I. Hernandez); 520 off Amelia Island (*Nassau*) 14 Dec (P. Lehman); 1 at Pensacola (*Escambia*) 17 Dec (B. and L. Duncan et al.); 320 off Hutchinson Island (*St. Lucie*) 17 Dec (J. and L. Hailman); 1 at Hudson Beach, Hudson (*Pasco*) 20 Dec ff (K. Tracey et al.); 200 off Amelia Island (*Nassau*) 3 Feb (R. McGregor).

LONG-TAILED DUCK: 1 female at PCS Waterfowl Management Area (*Hamilton*) 13-17 Dec (J. Krummrich, P. Lehman et al.).

- BUFFLEHEAD: up to 4 at Lake Apopka NSRA to 15 Jan (H. Robinson); up to 7 at Gainesville 3 Dec-14 Feb (R. Rowan et al.); 1 at Lake Maggiore, St. Petersburg (*Pinellas*) 10 Dec (R. Smith); 1 female at Windmill Park (*Broward*) 21 Jan-EOS (M. Berney).
- COMMON GOLDENEYE: 1 at Viera Wetlands (*Brevard*) 10 Dec (D. Reed); 2 at Hamilton mines 14 Dec (P. Lehman, J. Krummrich); 1 at Gainesville 14-15 Dec (S. Flamand, R. Rowan et al.); 1 female at Tangerine (*Orange*) 20 Dec-7 Jan (A. Vinokur, D. Richardson); 1 female at Lake Apopka NSRA (*Orange*) 27 Dec-27 Jan (A. Vinokur, H. Roberson et al.); 1 at Tallahassee (*Leon*) 30 Dec (S. McCool); 1 at a *Polk* mine 9 Jan (P. Timmer, C. Geanangel); 15 at Crystal River 15 Jan (M. Gardler).
- HOODED MERGANSER: 300 at Gainesville 15 Dec (S. Flamand); up to 32 (28 Jan) wintered at Hole-in-the-Donut, Everglades NP (*Miami-Dade*; J. Boyd).
- RED-BREASTED MERGANSER: 1 male at Tallahassee (*Leon*) 23 Feb (G. Menk).
- RUDY DUCK: 3875 at Lake Ariana, Auburndale (*Polk*) 17 Dec (P. Fellers); 34,000 at Lake Apopka 4 & 15 Jan (H. Roberson); 2000 at *Polk* mines 5 Jan (P. Fellers).
- RED-THROATED LOON: 4 at Alligator Point (*Franklin*) 16 Jan (J. Murphy); 2 at St. George Island (*Franklin*) 23 Jan (R. Cassidy).
- COMMON LOON: 8 off Key Biscayne (*Miami-Dade*) 23 Dec (R. Torres et al.); 1 at Flamingo, Everglades NP (*Monroe*) 31 Dec (J. Boyd); 2 off Long Key SP (*Monroe*) 20 Jan (B. Anderson et al.); 200 at St. George Channel (*Franklin*) 21 Feb (R. McGregor).
- PIED-BILLED GREBE: 240 at *Polk* mines 28 Dec (P. Timmer, C. Geanangel).
- HORNED GREBE: 6 at Black Point (*Miami-Dade*) 3 Dec (J. Boyd); 1 at Springhill Road STF, Tallahassee 13 Dec (G. Menk); 1 at Lake Apopka NSRA 21 Dec-20 Jan (H. Roberson et al.); 80+ in *Franklin* 21 Feb (R. McGregor).
- EARED GREBE: 1 at PSC Waterfowl Management Area 13-14 Dec (J. Krummrich, P. Lehman); 1 at Lake Ariana, Auburndale 20 Dec (P. Fellers, L. Albright).
- MASKED BOOBY: 1 salvaged at Ponce Inlet (*Volusia*) 9 Dec (M. Brothers, UF 45042 *vide* T. Webber).
- BROWN BOOBY: 1 off Jupiter Inlet Colony (*Palm Beach*) 20 Dec (J. and L. Hailman).
- NORTHERN GANNET: 7900 in 3 hours (an average of 44/min) passed Canaveral National Seashore (*Brevard*) 9 Dec (D. Freeland et al.).
- AMERICAN WHITE PELICAN: up to 7 at Gainesville 22 Dec-11 Feb (C. Lockwood, B. Carroll et al.); 2 at Talquin Dam (*Liberty*) 11 Feb (S. McCool); 119 W of Fernandina Beach (*Nassau*) and 69 up the St. Mary's River (*Nassau*) 15 Feb (P. Leary); 10 at Lake Talquin (*Gadsden*) 16 Feb (S. McCool).
- BROWN PELICAN: 1 at Gainesville 27 Dec (H. Warren); 1 at Piney Z Lake (*Leon*) 25 Jan-10 Feb (G. Menk et al.).
- GREAT CORMORANT: 1 adult at Doctor's Lake (*Clay*) 23 Feb-EOS (D. Wears et al.).
- ANHINGA: 211 at Lake Apopka NSRA 11 Dec (H. Roberson).
- MAGNIFICENT FRIGATEBIRD: 1 immature over Fort George Island (*Duval*) 15 Dec (R. Clark); 2 at S St. Petersburg 10 Jan (D. Powell).
- AMERICAN BITTERN: 2 at St. Vincent NWR (*Franklin*) 9 Dec (T. Lewis); 25 at Lake Apopka NSRA 27 Feb (H. Roberson).
- BLACK-CROWNED NIGHT-HERON: 1 at Piney Z Lake 25 Jan G. Menk).
- SCARLET-TYPE IBIS: 1 at Fort Myers Beach (*Lee*) 3 Feb (J. Dougherty, photo to FOC).
- WHITE-FACED IBIS: 1 at St. Marks NWR 8 Dec (A. Wraithmell); 3 at Lake Tuscahulla, Micanopy (*Alachua*) 26 Feb-EOS (J. Hintermister, A. Kratter et al., photo to FOC).
- SWALLOW-TAILED KITE: 1 at Lakewood Ranch (*Sarasota*) 24 Feb (L. Jakubowicz); 2 in mid-*Pinellas* 26 Feb (Judy Fisher).
- WHITE-TAILED KITE: 1 at Hole-in-the-Donut 4 Dec (J. Boyd); 1 at Sanibel Island (*Lee*) 15-25 Jan (K. and P. Kiefer et al.); 1 along Canoe Creek Road (*Osceola*) 8 Feb (B. and L. Cooper).
- SHARP-SHINNED HAWK: 14 at Lake Apopka NSRA 9 Dec & 6 Jan (H. Roberson).
- RED-SHOULDERED HAWK: 1 juvenile at Winter Park (*Orange*) captured a squirrel 7 Feb (*vide* C. Takacs, photo to FOC).

- BROAD-WINGED HAWK: 3 wintered at Fort De Soto Park (*Pinellas*) (L. Atherton et al.).
- SHORT-TAILED HAWK: 1 dark morph at Eagle Lakes Park, Naples 23 Dec (H. McGuinness et al.); 3 dark morphs E of Okeechobee (*Okeechobee*) 4 Jan (K. Tracey); 1 dark morph near Port of the Islands 4 Jan (T. Doyle, C. Ewell); 1 dark morph at IMC Peace River Park (*Polk*) 21 Jan-2 Feb (P. Fellers et al.); 1 dark morph at New Port Richey 29 Jan (K. Tracey); 1 light morph over the Joe Overstreet Road marina (*Osceola*) 8 Feb (B. and L. Cooper); 1 dark morph at Yeehaw Junction (*Osceola*) 14 Feb (B. and L. Cooper); 1 at Kissimmee Prairie Preserve 18 Feb (B. and L. Cooper); 1 light morph at Sumica Preserve (*Polk*) [no date] (P. Fellers et al.).
- SWAINSON'S HAWK: 1 E of Bradenton 8 Dec (E. Kwater); 1 light morph at Fort Walton Beach STF 10 Dec (B. Duncan et al.); up to 2 juveniles at Lake Apopka NSRA 20 Dec-16 Jan (J. Dunn, A. Vinokur); 1 juvenile dark morph in a NE *Hillsborough* mine 1 Jan (P. Fellers); up to 4 at Frog Pond WMA (*Miami-Dade*) 7 Jan-EOS (M. Berney et al); 1 dark morph adult in SE *Hillsborough* phosphate land 28 Jan, and 1 adult intermediate morph there 16 Feb (P. Fellers et al.).
- RED-TAILED HAWK: 1 Krider's-type at *Hamilton* mines 14 Dec (P. Lehman).
- *ROUGH-LEGGED HAWK: 1 juvenile light morph at Lake Apopka NSRA 9-21 Dec (H. Robinson et al.).
- GOLDEN EAGLE: 1 immature at Kissimmee Prairie Preserve SP (*Okeechobee*) attempted to kill a Wild Turkey 20 Feb (G. Quigley, J. Richardson).
- CRESTED CARACARA: 1 at Turtle Mound, Canaveral National Seashore (*Volusia*) 23 Feb (P. Hueber).
- YELLOW RAIL: singles at Kissimmee Prairie Preserve 28 Jan & 23 Feb (M. Korosy et al.).
- SORA: 260 at Lake Apopka NSRA 4 Dec (H. Robinson).
- PURPLE GALLINULE: 14 at Lake Harris Park, Leesburg (*Lake*) 12 Feb (R. Smith).
- AMERICAN COOT: 10,700 at *Polk* mines 28 Dec (P. Timmer, C. Geanangel); 2000+ at Inglis 15 Jan (M. Gardler).
- SANDHILL CRANE: 1 over Fernandina Beach (*Nassau*) 1 Dec (P. Leary); 21 over St. Marks NWR 8 Dec (A. Wraithmell); 24 southbound over *Madison* 1 Jan (S. McCool); 2500 near Okahumpka (*Lake*) 10 Feb (P. Fellers, D. Brooke); 15 S of Greenville (*Madison*) 19 Feb (S. McCool).
- WHOOPIING CRANE: 6 at Alachua 10 Dec (G. Gertzel).
- AMERICAN GOLDEN-PLOVER: 1 at St. Marks NWR to 29 Jan (J. Cavanagh et al.); up to 3 at Hole-in-the-Donut 21-22 Dec (R. Diaz et al.); 1 at Merritt Island NWR 1 Feb (D. Freeland).
- SNOWY PLOVER: 16 at Big Sabine (*Escambia*) 14 Dec (B. and L. Duncan); 1 at Talbot Islands SP (*Duval*) 23-26 Dec (P. Leary).
- WILSON'S PLOVER: 6 at Bald Point SP (*Franklin*) 1 Jan (S. McCool).
- SEMPALMATED PLOVER: 20 at *Polk* mines 9 Jan (P. Timmer, C. Geanangel).
- PIPING PLOVER: 1 at Cedar Key 29 Dec (D. Henderson et al.); 5 at Bald Point SP 1 Jan (S. McCool); 11 at Fred Howard Park, Tarpon Springs (*Pinellas*) 11 Jan (M. Gardler); 38 at Crandon Beach (*Miami-Dade*) 31 Jan (R. Diaz).
- AMERICAN OYSTERCATCHER: 1 at Gulf Breeze (*Santa Rosa*) 8 Dec (B. Duncan); 1 at Pensacola 17 Dec (J. Lloyd).
- BLACK-NECKED STILT: 1 at Merritt Island NWR 1 Dec-21 Feb (D. Freeland et al.); 8 at Myakka River SP (*Sarasota*) 17 Jan (B. Anderson et al.); 12 at *Polk* mines 23 Jan (P. Fellers et al.); up to 19 wintered at Lake Apopka NSRA (A. Vinokur et al.).
- AMERICAN AVOCET: 8 at St. Marks NWR 8 Dec (A. Wraithmell); 182 on Quarantine Island, Jacksonville 26 Dec (B. Richter); 1 at Hole-in-the-Donut 14 Jan. (A. Bankert, D. Simpson); 346 at *Polk* mines 8 Feb (P. Fellers et al.).
- SOLITARY SANDPIPER: 1 at Celebration (*Osceola*) 22 Jan (T. Tams).
- WILLET: 100 at Fernandina Beach 15 Feb (P. Leary).
- SPOTTED SANDPIPER: 33 at Inglis Barge Canal 6 Feb (M. Gardler).

- LONG-BILLED CURLEW: 2 at Cedar Key 29 Dec (D. Henderson et al.); 1 at Fort Myers Beach 17 Jan (B. Anderson, C. Ewell et al.).
- RED KNOT: 525 (including 12 banded individuals) at Huguenot Memorial Park 25 Feb (P. Leary).
- WESTERN SANDPIPER: 2690 at *Polk* mines 9 Jan (P. Timmer, C. Geanangel).
- LEAST SANDPIPER: 8000 at *Polk* mines 9 Jan & 8 Feb (P. Timmer, C. Geanangel, P. Fellers).
- PURPLE SANDPIPER: 1 at Port Canaveral Jetty Park (*Brevard*) 1-23 Jan (J. Thomson et al.); 1 at Sebastian Inlet SP (*Indian River*) 13 Jan (F. Haas).
- STILT SANDPIPER: singles at Springhill Road STF 8 Dec (A. Wraithmell) and 1-22 Feb (S. McCool et al.); 308 at *Polk* mines 28 Dec (P. Timmer, C. Geanangel); 180 at Merritt Island NWR 1 Feb (D. Freeland); 17 at Brooksville 15 Feb (M. Gardler).
- LONG-BILLED DOWITCHER: up to 60 at Kissimmee Prairie Preserve 10-14 Dec (G. Quigley, P. Miller); 1725 at *Polk* mines 28 Dec (P. Timmer, C. Geanangel), and 1150 there 8 Feb (P. Fellers et al.); 15 at Brooksville 15-19 Feb (M. Gardler).
- WILSON'S SNIBE: 434 at Lake Apopka NSRA 4 Dec (H. Robinson).
- AMERICAN WOODCOCK: 12 at Lake Apopka NSRA 7 Dec (H. Robinson); 2 at Gulf Breeze 8-26 Dec (B. and L. Duncan); up to 3 at Weekiwachee Preserve 20 Dec-4 Feb (A. and B. Hansen et al.); 2 calling N of Marianna (*Jackson*) 27 Dec (R. Smith); 1 at Medart (*Wakulla*) 10 Jan & 14 Feb (S. McCool); 1 at Cedar Key 18-22 Jan and 2 Feb (D. Henderson et al.); 2 at Long Pine Key, Everglades NP (*Miami-Dade*) 14 Feb-EOS (M. Berney).
- PARASITIC JAEGER: 9 at Amelia Island during strong NE winds 14 Dec (P. Lehman).
- LAUGHING GULL: 1 melanistic individual at Fort De Soto Park 3 Dec (L. Atherton, photo to FOC); 1 aberrant adult with orange legs and bill at Sanibel Island in Jan (D. and L. Stokes et al., photo to FOC); 11,000 at the *Volusia* landfill, Daytona Beach 15 Feb (D. Freeland et al.).
- FRANKLIN'S GULL: 1 juvenile at Sugden Park 23 Dec (H. McGuinness); 1 juvenile at Punta Rassa (*Lee*) 4-10 Jan (C. Ewell et al., photo to FOC by L. Stokes).
- HERRING GULL: 1 apparently of the Scandinavian race *argentatus* at the *Volusia* landfill 11-21 Feb (A. Vinokur, L. Atherton et al.).
- *ICELAND GULL: 1 second-year "Kumlien's" Gull at the *Volusia* landfill 11-21 Feb and 2 juveniles there 12-15 Feb (A. Vinokur et al., photos to FOC).
- LESSER BLACK-BACKED GULL: 1 at Lake Apopka NSRA 2 Dec-6 Jan (H. Robinson); singles at Green Key, New Port Richey 11 Dec and Trouble Creek, Holiday (*Pasco*) 12 Dec (K. Tracey); 1 adult at Fort Walton Beach 19 Dec (M. and R. Rose); up to 4 wintered at Sanibel Island (V. McGrath et al.); 1 adult wintered at the *Collier* landfill (D. Suito).
- GREAT BLACK-BACKED GULL: 1 at Green Key, New Port Richey 11 Dec (K. Tracey); 1 at Lake Apopka NSRA 27 Jan (H. Robinson).
- GULL-BILLED TERN: 2 at *Polk* mines 28 Dec (P. Timmer, C. Geanangel); 5 at Pine Island 18 Jan (M. Gardler); 3 at Weekiwachee Preserve 21 Jan (C. Black et al.); 3 at Green Key 7 Feb (K. Tracey).
- ROYAL TERN: 8 at *Polk* mines 28 Dec (P. Timmer, C. Geanangel).
- COMMON TERN: 1 on the St. Petersburg CBC (*Pinellas*) 17 Dec (D. Powell).
- BLACK TERN: 1 at Merritt Island NWR to 6 Dec (R. Diaz et al.).
- BLACK SKIMMER: 22 at Lake Mirror, Lakeland (*Polk*) 8-15 Feb (T. Palmer).
- RINGED TURTLE-DOVE: 1 at Lake Apopka NSRA 10 Feb (H. Robinson).
- WHITE-WINGED DOVE: 1 at Alligator Point 19 Jan (S. McCool); 2 at Pine Level (*DeSoto*) 4 Feb (R. Smith); 2 at Bronson 13 Feb (R. Rowan); birds now are apparently resident in Newberry and Archer (*Alachua*); B. Carroll et al.).
- BLACK-HOODED PARAKEET: 50 at Holiday (*Pasco*) 16 Dec (K. Tracey); 30 at Fort Myers through the season (M. Fitzpatrick, C. Ewell et al.).
- BLUE-CROWNED PARAKEET: 12 at Holmes Beach, Bradenton (*Manatee*) 23 Feb (Jeff Fisher).
- MONK PARAKEET: 2 at Gainesville 21-26 Feb (S. Porvasnik, D. and S. Hartman).
- GROOVE-BILLED ANI: 1 at Lake Apopka NSRA 9 Dec (H. Robinson).

- BARN OWL: 1 at Seven Springs (*Pasco*) 31 Jan (K. Tracey); 1 at St. Vincent NWR 21 Feb-EOS (T. Lewis).
- BURROWING OWL: 15 at Range 70, Eglin Air Force Base (*Okaloosa*) 15 Jan (L. Fenimore); 1 on the barrier island E of Vero Beach (*Indian River*) 13-17 Feb (*vide* B. Wagner).
- LESSER NIGHTHAWK: 1 along Research Road, Everglades NP (*Miami-Dade*) 3 Dec (D. Simpson, A. Bankert); 12+ at Frog Pond WMA (*Miami-Dade*) 3 Dec ff (B. Roberts et al.); 1 at Lake Apopka NSRA 7 Dec (H. Robinson).
- COMMON NIGHTHAWK: 1 videotaped (calls audible) at Homestead (*Miami-Dade*) 14 Dec (L. Manfredi, to FOC); up to 3 at Lake Apopka NSRA 28 Dec-EOS (H. Robinson et al.); up to 9 at Old Town amusement park, Kissimmee (*Osceola*) in Jan reportedly have been present during winter for the past 8 years (J. Brown, T. Tams).
- CHUCK-WILL'S-WIDOW: 1 flushed at St. Marks NWR 29 Dec (R. Smith); 1 sang at Lutz (*Pasco*) 25 Feb (D. Bowman); 1 sang at Merritt Island (*Brevard*) 27 Feb (D. Freeland).
- WHIP-POOR-WILL: 1 sang at Merritt Island 27 Feb (D. Freeland).
- CHAEATURA SPECIES: up to 20 at Paynes Prairie Preserve 9 Dec-5 Jan (S. Collins, J. Hintermister et al.); 1 at Weekiwachee Preserve 10 Dec (C. Black); 1 at St. Marks NWR 17-20 Dec (E. Shaw, E. Horn et al.).
- HUMMINGBIRD SPECIES: 11 in a Valrico (*Hillsborough*) yard in a 24-hour period: 7 Ruby-throated, 2 *Archilochus* sp., and 2 *Selasphorus* sp. 15-16 Jan (S. Backes, F. Bassett); 66 individuals (with 26 of these at Tallahassee) of six species were banded this winter: 32 Rufous (+ 7 recaptures), 24 Ruby-throated (+ 7 recaptures), 7 Black-chinned, 2 Buff-bellied, 2 Allen's, and 1 Calliope (F. Bassett, F. Dietrich et al.).
- BUFF-BELLIED HUMMINGBIRD: singles banded at Mary Esther (*Okaloosa*) 8 Dec and Tallahassee 13 Dec (F. Bassett et al.); 1 at Fairchild Tropical Gardens (*Miami-Dade*) 20 Jan ff (A. Harper et al.).
- RUBY-THROATED HUMMINGBIRD: 1 at Gainesville 18 Dec (S. Robinson); 1 at Fernandina Beach 18 Jan (P. Leary).
- BLACK-CHINNED HUMMINGBIRD: 1 adult male at Castellow Hammock Park (*Miami-Dade*) 28 Dec (D. Goodwin, E. Haney et al.).
- *CALLIOPE HUMMINGBIRD: 1 juvenile male banded at Gulf Breeze 26 Jan (F. Bassett et al.).
- RUFIOUS HUMMINGBIRD: 1 female at Brooksville 12 Dec-EOS (S. Walsh et al., banded by F. Bassett).
- *ALLEN'S HUMMINGBIRD: singles banded at Tallahassee 14 Jan and 22 Feb (F. Bassett et al.).
- SELASPHORUS HUMMINGBIRD: 2 at Brooksville ca. 1 Jan-4 Feb (S. Walsh); 1 male at Orlando late Feb-EOS (H. Dowling); 1 female at Brandon (*Hillsborough*) 22 Feb for the fourth consecutive winter (E. Kwater); 1 at Spring Hill 27-28 Feb (A. and E. Maywalt).
- SILVERY-CHEEKED HORNBILL: 1 along Krome Avenue (*Miami-Dade*) 25 Feb (J. Bacquie, photo to FOC).
- HAIRY WOODPECKER: 1 at Golden Gate Estates (*Collier*) 11 Dec (T. Doyle).
- EMPIDONAX SPECIES: 1 at Hague 15 Jan (R. Rowan).
- LEAST FLYCATCHER: 2 at Frog Pond WMA 3 Dec (A. Vinokur, D. Simpson); 3 at Oviedo (*Seminole*) 24 Dec (B. Anderson); up to 9 (30 Dec) wintered at Lake Apopka NSRA (H. Robinson).
- VERMILION FLYCATCHER: 1 adult male at Alligator Lake Recreation Area (*Columbia*) early Nov-late Feb (J. Krummrich et al.); 1 male at Tiger Point (*Santa Rosa*) 11-12 Dec (B. Bremser); 1 juvenile female at St. Vincent NWR 17 Dec (T. Lewis); 1 female at St. Marks NWR 17 Dec (E. Shaw), and 1 male there 18-22 Dec (J. Murphy et al.); 1 female at Purotis Pond 18 Dec-EOS (J. Boyd et al.); 1 at Paynes Prairie Preserve 21 Jan-25 Feb (J. Sulek, R. Rowan et al.).
- ASH-THROATED FLYCATCHER: 1 at Garcon Point (*Santa Rosa*) 14 Dec (D. Ware); 1 at Oviedo (*Seminole*) 24 Dec (B. Anderson); 1 at Fort Walton Beach STF 4 Jan-17 Feb (B. Duncan); up to 12 (23 Dec) wintered at Lake Apopka NSRA (H. Robinson).
- GREAT CRESTED FLYCATCHER: 2 at Lake Wales Ridge SF (*Polk*) 3 Jan (P. Fellers).

- BROWN-CRESTED FLYCATCHER: 1 at Black Point Marina (*Miami-Dade*) 24 Dec ff (L. Manfredi et al.); up to 2 at Lake Apopka NSRA 28 Dec-EOS (B. Anderson et al.).
- *TROPICAL KINGBIRD: 1 at Apalachicola (*Franklin*) 27 Dec-EOS (T. Engstrom, S. Kelling et al., photos to FOC by S. McCool) was identified by its calls.
- *CASSIN'S KINGBIRD: 1 NE of Wimauma (*Hillsborough*) 18 Dec-6 Feb (D. Powell, B. Pranty et al., photos to FOC by D. Stumbaugh; accepted by FOSRC); up to 2 wintered at Lake Apopka NSRA (H. Robinson et al.).
- WESTERN KINGBIRD: 1 at Paynes Prairie Preserve 6 Dec (F. Goodwin); up to 36 at Lake Apopka NSRA 10 Dec-EOS (H. Robinson et al.); 1 at Gulf Breeze 12-18 Dec (B. Duncan, J. French); 1 at Pensacola 17 Dec (L. Duncan et al.); 7 NE of Wimauma 18 Dec-6 Feb (B. Pranty, D. Powell et al.); 1 at Tallahassee 28 Dec-9 Jan (P. Flynn, J. Cavanagh); up to 37 at The Villages (*Marion*) 18 Jan-EOS (J. Dinsmore, A. Rouch); 1 NE of Lake Wales 19 Jan (J. Dubois); 1 at Tallahassee 21 Jan (S. McCool); 3 W of Fort Pierce (*St. Lucie*) 30 Jan (H. and J. Rufe).
- SCISSOR-TAILED FLYCATCHER: up to 8 at Lake Apopka NSRA 10 Dec ff (A. Vinokur et al.); 5 NE of Wimauma 18 Dec-6 Feb (B. Pranty, D. Powell et al.); 1 at Miccosukee Greenway Park (*Leon*) 7-22 Jan (M. Hartley et al.); up to 4 at The Villages 18 Jan-EOS (J. Dinsmore, A. Rouch); 7 NE of Lake Wales 19 Jan (J. Dubois); 3 W of Fort Pierce 29-30 Jan (B. Wagner et al.); 1 at Gainesville 29 Jan (D. Thompson).
- FORK-TAILED FLYCATCHER: 1 at Lake Apopka NSRA and vicinity 10 Dec-15 Jan (A. Vinokur et al., photos to FOC).
- LOGGERHEAD SHRIKE: 1 plucked and may have swallowed cabbage palm fruit along the Halifax River (*Volusia*) 6 Feb (C. Tague).
- BELL'S VIREO: 1 at Frog Pond WMA 15 Jan (A. Bankert, D. Simpson); 1 wintered at Southern Glades WEA (*Miami-Dade*; R. Diaz, L. Manfredi et al.).
- YELLOW-THROATED VIREO: 1 at Collier-Seminole SP 4 Jan (K. O'Reilly-Doyle et al.); 1 at Bill Baggs Cape Florida SP 28 Feb (R. Diaz); 1 wintered at W Kendall (J. Boyd).
- PURPLE MARTIN: 3 at Paynes Prairie Preserve 14 Jan (R. Smith); 2 males over East Lake, Tampa (*Hillsborough*) 16 Jan (D. Wassmer, L. Saul); 1 male at Lake Jackson (*Leon*) 26 Jan (G. Menk); 1 at Weeki Wachee 28 Jan (M. Gardler).
- NORTHERN ROUGH-WINGED SWALLOW: 2 at St. Marks NWR 8 Dec (A. Wraithmell); 1 at Rockledge (*Brevard*) 17 Dec (D. Freeland); 1 at Viera Wetlands 16 Jan (D. Freeland); 2 at Lake City (*Columbia*) 28 Jan (R. Smith); 3 in *Hernando* 15 Feb (M. Gardler).
- BANK SWALLOW: 1 at Lake Apopka NSRA to 13 Dec (H. Robinson); 1 at Viera Wetlands 28 Feb (D. Freeland).
- CAVE SWALLOW: 1 at Cantonment (*Escambia*) 8 Jan (L. Catterton); 150 at Homestead Airport (*Miami-Dade*) 15 Jan (J. Boyd, B. Mulrooney); 1 of the Mexican race at Springhill Road STF 22 Feb (G. Menk et al.).
- BARN SWALLOW: 2 at Lake Apopka NSRA to 13 Dec, and 1 there 27 Feb (H. Robinson); 3 at Paynes Prairie Preserve 19 Dec (R. Rowan, G. McDermott); several at Homestead Airport 15 Jan (J. Boyd, B. Mulrooney); 1 at Merritt Island NWR 27 Feb (D. Freeland); 1 at Weekiwachee Preserve 28 Feb (A. and B. Hansen).
- CAROLINA CHICKADEE: 1 wintered at Greynolds Park, Miami (A. Harper et al.).
- RED-BREASTED NUTHATCH: 2 at Gainesville 10-30 Jan (S. Daniels); 1 at Alligator Point 17 Dec-17 Jan (J. Murphy).
- WINTER WREN: 1 at Lake Jackson, Tallahassee, where 1 has wintered the past several years, 14 Dec (P. Lehman); 1 wintered at O'Leno SP (P. Burns et al.).
- SEDGE WREN: 1 at Long Pine Key 5 Dec (R. Torres).
- MARSH WREN: 2 at Loggerhead Key, Dry Tortugas NP 4 Jan (R. Diaz) established the first report for the park.
- RUBY-CROWNED KINGLET: 1 at Eco Pond 31 Dec (J. Boyd).
- HERMIT THRUSH: 2 at Royal Palm, Everglades NP (*Miami-Dade*) 16 Jan (R. Diaz).
- AMERICAN ROBIN: up to 21,000 (15 Jan) wintered at Lake Apopka NSRA (H. Robinson).

- COMMON MYNA: 1 remained at Holmes Beach to 23 Feb (Jeff Fisher).
- HILL MYNA: 30 on powerlines at Coral Gables 23 Jan (B. Anderson et al.).
- AMERICAN PIPIT: several at Frog Pond WMA 7 Jan (J. Boyd); 41 at Fernandina Beach 25 Feb (P. Leary).
- BLUE-WINGED WARBLER: 1 at Topeekegee Yugnee ("TY") Park (*Broward*) 11 Dec (A. Harper et al.); 1 at Weeki Wachee 23 Dec (B. Hansen, R. Grant); 1 at West Lake, Everglades NP (*Miami-Dade*) 22 Jan & 14 Feb (M. Berney, M. Stickel); 1 at Sarasota 24 Jan (J. Dubi, J. Ginaven et al.).
- TENNESSEE WARBLER: 1 at Royal Palm 4 Dec (J. Boyd); 1 at Merritt Island 17 Dec (D. Freeland et al.); 1 at Greynolds Park 17 Dec (J. Boyd, G. Jones); 1 at Castellow Hammock Park (*Miami-Dade*) 10 Jan (J. Boyd); 1 at Southern Glades WFA 5 Feb (T. Mitchell, photos to FOC).
- NASHVILLE WARBLER: 1 at "TY" Park 11 Dec (A. Harper et al.); singles at Lake Apopka NSRA 14 Dec (A. Vinokur, D. Richardson) and 20 Jan-EOS (H. Robinson); 2 at Greynolds Park 17 Dec (J. Boyd); 1 at Fort Walton Beach 19 Dec (J. Kowalski); 1 at Lake Lotus Park, Altamonte Springs (*Seminole*) 5 Jan (P. Hueber); 1 at Jacksonville 6 Jan & 25 Feb (J. Cocke); 1 at Mashers Island (*Franklin*) 8 Jan (J. Murphy); 1 at Matheson Hammock Park (*Miami-Dade*) 8 Jan (A. Harper); 1 at Melbourne 21 Jan (A. Bankert).
- NORTHERN PARULA: 3 migrants at Cape Florida 31 Jan (R. Diaz); 4 migrants at Lake Apopka NSRA 22 Feb (H. Robinson); 2 at Alligator Point 25 Feb (S. McCool).
- YELLOW WARBLER: 1 immature female at W Kendall 11 Dec & 4 Jan (J. Boyd); 2 at Pensacola 17 Dec (M. and R. Rose).
- MAGNOLIA WARBLER: 1 at Lutz (*Hillsborough*) ca. 16-26 Jan (J. Hartzler).
- BLACK-THROATED BLUE WARBLER: 3 at Merritt Island 17 Dec (D. Freeland et al.).
- BLACK-THROATED GRAY WARBLER: 1 at New Port Richey to 16 Dec (K. Tracey); 1 at Gainesville to 13 Feb (G. Kiltie).
- BLACK-THROATED GREEN WARBLER: 1 at Paynes Prairie Preserve 7 Dec (E. and I. Scales); 1 at Sawgrass Lake Park, St. Petersburg 17 Dec (E. Haney et al., photo to FOC by D. Stumbaugh); 1 at Lake Apopka NSRA 19 & 21 Dec (A. Vinokur, D. Richardson); 1 at Fort White (*Columbia*) 21 Jan (J. Sulek); 1 at Clewiston (*Hendry*) 19 Feb (R. Smith).
- PRAIRIE WARBLER: 1 at Fernandina Beach 3 Dec & 23 Feb (P. Leary); 2 at St. Augustine (*St. Johns*) 17 Feb (J. Kern).
- AMERICAN REDSTART: 1 at Gainesville 18 Dec (S. Robinson); 1 at Oakland Nature Preserve (*Orange*) 27 Dec-7 Mar (T. Rodriguez); 1 at Citra (*Marion*) 24 Feb (A. Kratter).
- OVENBIRD: 1 in Jacksonville 9 Dec (J. Cocke); 1 at Orange Park (*Clay*) 10 Jan (L. McCullagh).
- NORTHERN WATERTHRUSH: up to 2 at Paynes Prairie Preserve 18 Dec-4 Feb (M. Paczolt, M. Manetz); 1 at Fernandina Beach 23 Feb (P. Leary).
- LOUISIANA WATERTHRUSH: 1 wintered at Royal Palm (J. Boyd et al.).
- WILSON'S WARBLER: 1 male at Eagle Lake area of PCS Waterfowl Management Area 17 Dec (J. Ault); 1 female at Oviedo 24 Dec (B. Anderson); 1 at Gainesville 21 Jan-14 Feb (M. Manetz, R. Rowan); 1 at Lake Apopka NSRA 27 Jan (H. Robinson); 1 female at Jacksonville 14 Feb (J. Cocke).
- YELLOW-BREASTED CHAT: 2 at Paynes Prairie Preserve 18 Dec (A. Kent); singles at Lake Apopka NSRA 6 Jan & 14 Feb (H. Robinson).
- SUMMER TANAGER: 1 at Gainesville 18 Dec (P. Burns); 1 at Nalcrest (*Polk*) 31 Dec (P. Fellers, D. Brooke); 1 female at Rookery Bay (*Collier*) 20 Jan (T. Doyle, K. O'Reilly-Doyle et al.); 1 female at Pensacola 24 Jan-EOS (P. Palmer); 1 male wintered in the same yard at Tallahassee where it was banded the previous winter (P. Homann).
- WESTERN TANAGER: 1 male at Pensacola 24 Jan-EOS (P. Palmer).
- BACHMAN'S SPARROW: 1 sang at Kissimmee Prairie Preserve 20 Jan (P. Miller), with 73 banded there through the season (M. Korosy, G. Quigley et al.).
- CLAY-COLORED SPARROW: 1 at Valrico 7 Jan-8 Mar (S. Backes et al.).

- FIELD SPARROW: up to 13 (12 Feb) wintered at Lake Apopka NSRA (H. Robinson).
- GRASSHOPPER SPARROW: 70 of the Eastern race banded at Kissimmee Prairie Preserve through the season (P. Miller et al.).
- HENSLOW'S SPARROW: 1 at a *Polk* mine 28 Dec (P. Timmer, C. Geanangel); 26 banded at Kissimmee Prairie Preserve through the season (P. Miller et al.).
- LE CONTE'S SPARROW: up to 4 at Lake Apopka NSRA 18-21 Dec (J. Dunn, B. Anderson, A. Vinokur); 1 at a *Polk* mine 9 Jan (P. Timmer, C. Geanangel); singles banded at Kissimmee Prairie Preserve 20 Jan & 22 Feb (G. Quigley).
- SEASIDE SPARROW: 10 sang at Crystal River 19 Feb (M. Gardler).
- FOX SPARROW: 2 at O'Leno SP 5-25 Feb (P. Burns, M. Manetz).
- LINCOLN'S SPARROW: 2 at Lake Apopka NSRA 11 Dec, and 1 there to 4 Jan (H. Robinson); 1 at Inglis 19 Feb (M. Gardler).
- SWAMP SPARROW: up to 273 (11 Dec) wintered at Lake Apopka NSRA (H. Robinson).
- WHITE-CROWNED SPARROW: 13 at Apopka 1 Jan (M. Gardler).
- ROSE-BREASTED GROSBEAK: 1 male at Fort Walton Beach 19 Dec (P. Baker).
- BLACK-HEADED GROSBEAK: 1 first-winter male at Apalachicola 29 Dec (J. Dozier, J. Murphy et al., photo to FOC); 1 first-winter male at East Point (*Franklin*) 10 Jan-EOS (S. Klink et al., photos to FOC).
- BLUE GROSBEAK: 30 (mostly juveniles) at Lake Apopka NSRA 27 Dec (A. Vinokur); 1 at Lake Wales 31 Dec (P. Fellers, D. Brooke).
- INDIGO BUNTING: 1 at San Felasco Hammock Preserve SP (*Alachua*) 3 Dec (P. Laipis et al.); 1 at Tallahassee 12-13 Feb (R. McGregor).
- PAINTED BUNTING: 4 female-types at Fernandina Beach 3 Dec (P. Leary); 1 female-type at Jacksonville 3 Feb (J. Cocke); 1 female at Cedar Key 6-15 Feb (D. Henderson).
- DICKCISSEL: 1 at Paynes Prairie Preserve 18-19 Dec (A. Kent, S. Collins); up to 3 wintered at Lake Apopka NSRA (B. Anderson, H. Robinson et al.).
- YELLOW-HEADED BLACKBIRD: 1 at Lake Apopka NSRA 26 Dec-6 Jan (H. Robinson); 1 at the end of Joe Overstreet Road 18 Jan (T. Tams).
- RUSTY BLACKBIRD: 1 at Bald Point 11 Dec (J. Dozier).
- BREWER'S BLACKBIRD: 1 at Lake Apopka NSRA 6 & 22 Jan (H. Robinson).
- BRONZED COWBIRD: 1 at Sugden Park 28 Dec (A. Murray).
- BROWN-HEADED COWBIRD: 12 males in a "tight flock" at Jupiter Inlet Colony 25 Feb (J. and L. Hailman).
- *BULLOCK'S ORIOLE: 1 female at Tallahassee 18 Feb-EOS (F. Rutkovsky et al., photo to FOC by D. Jue).
- BALTIMORE ORIOLE: up to 5 at Spring Hill 14 Sep-24 Dec (A. and E. Maywalt); up to 11 (27 Feb) wintered at Altamonte Springs (P. Hueber).
- HOUSE FINCH: 3 (orange-variant male and 2 females) at Fort Lauderdale (*Broward*) 28 Dec (L. Manfredi); 1 male at Dekle Beach (*Taylor*) 7 Jan (S. McCool); 1 sang at Jacksonville 11 Feb (R. Rowan); 1 at Fernandina Beach 23 Feb (P. Leary).
- PINE SISKIN: 1 at San Felasco Hammock Preserve 1 Jan (M. Manetz et al.).
- EUROPEAN GOLDFINCH: 1 at Pensacola 21 Dec (M. Clark).
- NUTMEG MANNIKIN: continued reports from the Pensacola area (*vide* B. Duncan).

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Summer 2005 corrigenda: The White-faced Ibis listed for Springhill Road (*Leon*) should have been listed as St. Marks NWR (*Wakulla*); the two Red-necked Phalaropes at Fort Walton Beach STF 21 Jun-5 July should have been listed as Wilson's Phalaropes.

Fall 2005 reports not published previously: Greater White-fronted Goose: 2 at PSC Waterfowl Management Area (*Hamilton*) 12 Nov (Jerry Krummrich et al.); Cave Swallow: 1 of the Mexican race at Melbourne Beach (*Brevard*) 23 Nov (*vide* Tom Webber, specimen UF 45039).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 3

SEPTEMBER 2006

PAGES 69-114

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 4

NOVEMBER 2006

PAGES 115-135



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The *Florida Field Naturalist* is published quarterly (February, May, September, and November) by the Florida Ornithological Society. It is printed by E. O. Painter Printing Co., P.O. Box 877, DeLeon Springs, Florida 32130. The permanent address of the Florida Ornithological Society is Department of Ornithology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611. The Florida Ornithological Society web site can be found at www.fosbirds.org

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 4

NOVEMBER 2006

PAGES 115-135

NOTES

Florida Field Naturalist 34(4):115-116, 2006.

BROAD-WINGED HAWK CAPTURES HAWKSBILL TURTLE HATCHLING IN THE FLORIDA KEYS

TOM WILMERS¹ AND MONAY MARKEY²

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The Broad-winged Hawk (*Buteo platypterus*) is a migrant in south Florida and winters regularly in the Florida Keys (Robertson and Woolfenden 1992). It is an opportunistic predator that captures a wide variety of prey types (Rusch and Doerr 1972, Keran 1978, Janik and Mosher 1982), including very young snapping turtles (*Chelydra serpentina*) (Mosher and Palmer 1988). However, capture of a hatchling sea turtle by a Broad-winged Hawk has not been previously documented.

The endangered hawksbill turtle (*Eretmochelys imbricata*) is a spongivorous, circum-tropical reptile that rarely nests in the U.S. (Meylan 1992, Meylan et al. 1995).

On the morning of 10 October 2000 (ca 0730 hrs), from a distance of ca 8 m Markey observed a Broad-winged Hawk perched 2.5 m above ground on a sign in a parking lot at Bahia Honda State Park (FL Keys, Monroe County). A hawksbill turtle nest—1 m from the edge of the parking lot and ca 16 m from where the hawk was perched—had hatched the night before. Two disoriented live hatchling turtles had crawled landward onto the parking lot. Thirteen dead hawksbill hatchlings (cause of death unknown) were scattered on the beach.

Less than a minute after first observing the hawk, Markey saw it descend to the parking lot and capture one of the live hatchling turtles. The hawk returned to the perch whereupon Markey, in an effort to startle the bird sufficiently to drop the turtle, rushed towards it. The bird took flight with the turtle in its talons.

The height of the hawk's perch was exceptionally low; reported perch height ranges from 10 to 20 m (Goodrich et al. 1996). That Markey was able to approach the hawk so closely prior to its attack may be attributable to the bird's habituation to people. She had previously observed a Broad-winged Hawk elsewhere in the park that allowed a close approach.

The mean weight of a hawksbill hatchling is 14.3-14.5 g (Limpus et al. 1983, Hitchins et al. 2004) and within the 10-30 g weight of prey most commonly captured by the Broad-winged Hawk (Goodrich et al. 1996). Compared with an older hawksbill turtle, a hatchling has limited endochondral ossification and its shell has not fully hardened. Thus, a Broad-winged Hawk likely could breach a hatchling turtle's shell and consume the flesh within.

We found no literature on raptor predation of sea turtles. Several raptor species do prey occasionally on freshwater turtles: Snail Kite (*Rostrhamus sociabilis*) (Sykes et al.

1995), Osprey (Postupalsky and Kleiman 1965), and, over a wide area, Bald Eagle (*Haliaeetus leucocephalus*) (Clark 1982). Birds that prey opportunistically on hatchling sea turtles include the Great Frigatebird (*Fregata minor*) (Lagarde et al. 2001), Black Vulture (*Coragyps atratus*) (Mrosovsky 1971), and Turkey Vulture (*Cathartes aura*) (Fowler 1979).

Predation of hatchling sea turtles by Broad-winged Hawks and other terrestrial raptors in the Florida Keys is inherently rare and thus inconsequential to sea turtle productivity because hatchling turtles normally emerge from nests and promptly enter the sea at night. Further, most sea turtle nests hatch in advance of the sizable fall raptor migration.

We thank Anne Meylan for examination and species confirmation of the dead hatchling turtles. We are grateful to Phillip Hughes, Ken Meyer, and Anne Meylan for review of the preliminary manuscript.

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OSPREY CATCHES LEAST TERN IN FLIGHT

BONNIE FAIRBANKS

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On the morning of 29 June 2006 on the north end of Keewaydin Island near Naples, FL, I observed an Osprey (*Pandion haliaetus*) capture a Least Tern (*Sternula antillarum*) in flight. The incident began when a group of approximately 30-50 Least Terns took flight from the beach. The terns scattered in various directions, calling as they commonly do while in flight. An Osprey was flying from the water toward the land when the terns began flying. As it came near the group of terns, one of the terns flew directly in front of the Osprey. The Osprey caught the tern in its talons, doubling its wingbeat once as it did so. With the tern in its talons, it continued on as before and flew out of sight over a house. At no time did the terns appear to give the Osprey any special attention; they neither mobbed nor avoided it. The Osprey did not seem to be hunting the terns, because it did not change direction to fly toward them. The Osprey is not a known source of mortality for Least Terns (Thompson et al. 2005). Ospreys eat fish almost exclusively, and the anecdotal observations of Ospreys eating birds do not include Least Terns (Wiley and Lohrer 1973). I also could find no observations of birds caught on the wing by an Osprey.

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REVIEW

The Carolina Parakeet: Glimpses of a Vanished Bird.—Noel F. R. Snyder. 2004. Princeton University Press, ISBN 0-691-11795-0. xii + 153 pp. \$32.95 cloth.—Of Florida's five birds that became or presumably became extinct or extirpated during the 20th century, perhaps none is more enigmatic than the Carolina Parakeet (*Conuropsis carolinensis*). Unlike the other four birds—the Passenger Pigeon (*Ectopistes migratorius*), Ivory-billed Woodpecker (*Campephilus principalis*), Bachman's Warbler (*Vermivora bachmanii*), and Dusky Seaside Sparrow (*Ammodramus maritimus nigrescens*)—the causes of the parakeet's extinction are largely unknown. Unregulated shooting—for sport, to prevent crop depredation, and for scientific collections—often is cited as the primary cause of the parakeet's extinction but is usually discounted because this activity was localized. Other gaps in our knowledge of the parakeet's biology include the year when the parakeet became extinct in the wild, and whether or not it nested exclusively in cavities, entered a state of torpor when roosting, or if its preference for cockleburbs rendered it toxic to predators.

In this short book, Noel Snyder, a former Floridian, weaves two stories, centered primarily in the interior of Florida's peninsula during the early 20th century. The first is a reconstruction of the biology of the Carolina Parakeet based on historical accounts and interviews with residents of the Okeechobee area who observed the parakeet decades earlier. Snyder's second story, which I found to be more interesting because it is less conjectural, involves the interplay of ornithologists, oologists, "sportsmen," Audubon wardens, and other fascinating characters who lived in the region about 80 years ago.

The book is divided into ten chapters: 1) Basic Characteristics of the Species; 2) The Decline and Fall; 3) Controversial Last Records; 4) Habitat Preferences and Requirements; 5) Feeding Habits and Movements; 6) Breeding Habits; 7) Causes of Extinction; 8) Parakeet Toxicity and Other Topics for Research; 9) Postmortem of a Conservation Failure; and 10) Evaluating Historical Data, and some General Conclusions. The book contains two color illustrations of Carolina Parakeets and 36 black-and-white photographs of people or locations mentioned in the book. I enjoyed the contemporary painting by John Schmitt of a Carolina Parakeet family at their nest cavity, as well as the numerous photographs taken during the 1930s by Alexander Sprunt, Jr., which are handsomely reproduced in this book. I was surprised to learn that John James Audubon's plate of the Carolina Parakeet may inaccurately portray juvenal plumage as being entirely green. Snyder reports that every extant specimen of juvenile Carolina Parakeets has an orange patch on the forehead (a character included in Schmitt's painting). Snyder relates an entertaining tale originally published by Robert Porter Allen (1938). The story involves eggs collected on the Kissimmee Prairie in 1930 for Charles Doe, a well-known but little-liked Florida oologist. Apparently Doe "bounced" a check written for payment of the eggs and was forced to flee the area to avoid bodily harm at the hands of the collectors! The eggs were placed in a large metal can and were nailed to a tree behind a store in Basinger (in present-day eastern Highlands County), and were rediscovered—apparently in good condition—eight years later by Allen and others.

While much of the natural history of the Carolina Parakeet is taken from existing references, Snyder provides "new" information that he obtained by interviewing residents of the Okeechobee area who knew the parakeet in life during the 1910s-1920s. These interviews, which were aided by Audubon warden Rod Chandler, took place in 1979 and 1981. All those who Snyder interviewed have since died, and their information is published for the first time in this book. While some of this information doubtlessly is factual, other remembrances seem to me to be far-fetched, such as the claim that some parakeets roosted in barns and houses, hanging from the rafters by their bills rather

than using their legs to perch. Elsewhere in the book, Snyder accepts as factual several historical statements that have been discounted by other ornithologists (e.g., Bailey 1925, Howell 1932, McKinley 1985).

Among the questionable statements that Snyder accepts are that Carolina Parakeets built open twig nests in addition to nesting in cavities, and that parakeets—including those in Florida—fell into a state of torpor when roosting. Regarding the cup nests, Snyder refuses to discount the few second- or third-hand historical reports even though no ornithologist ever witnessed such behavior, and even though no other psittacid in the world is known to nest in both cavities and open nests. Snyder suggests that exotic diseases, perhaps transmitted by chickens, contributed to the extinction of Carolina Parakeets, although he admits that no historical or recent observations exist of any other psittacid in the New World being similarly affected by diseases transmitted by domestic fowl. Aside from the parakeets, Snyder accepts William Bartram's 18th century observations of King Vultures (*Sarcoramphus papa*) in Florida—often dismissed by others as a misidentification of Crested Caracaras (*Caracara cheriway*)—and suggests that the birds became extirpated by Indians who sought the vulture's feathers! Shockingly, Snyder claims that Ivory-billed Woodpeckers were not old-growth forest specialists, and cites as proof of this belief the presence of the woodpeckers "hanging on" in Cuba. On the contrary, the few remaining Ivory-billed Woodpeckers in Cuba were found in the few remaining pockets of old-growth forest, and the birds are now considered extirpated from that country, having last been seen in 1988 (Jackson 2004).

Snyder anticipates criticism of his faith in the hearsay data that he gathered about Carolina Parakeets, and I chuckled at his contempt for "a few ornithologists [who] even build their reputations by denouncing the gullibility of those who accept sightings of rare species that are not supported by airtight evidence." I was disappointed that an ornithologist of Snyder's caliber would so boldly put faith in hearsay evidence based on 50- or 60-year old recollections, especially when he mentions two instances in which his own (much more recent) memory was faulty. Snyder goes so far as to claim that the hearsay data that he obtained "significantly expands our knowledge of the last days" of the Carolina Parakeet. Elsewhere in his book, Snyder admits that hearsay data are "often of indeterminate accuracy," thereby creating "a problem that poses some thorny problems of interpretation." Thorny problems, indeed.

I found it interesting that none of the hearsay evidence that Snyder presents was mentioned in the *Birds of North America* account of the Carolina Parakeet, written by Snyder and Keith Russell (2002). It is tempting to speculate that either Snyder's co-author or editors struck the hearsay information from the *BNA* account as being too conjectural. On the other hand, perhaps Snyder simply was "saving" the hearsay information for his book, which he calls "an expansion" of the *BNA* account.

I was disappointed that Snyder uses pet-trade names rather than ornithological nomenclature for the other psittacid species that he discusses. A map showing the historical distribution of the Carolina Parakeet and the numerous locations that Snyder mentions would have been a helpful addition to the book. I noted a few minor typographical errors and out-dated nomenclature; Snyder globally refers to the Snail Kite (*Rostrhamus sociabilis*) as the Everglades Kite. For data on naturalized psittacid populations in North America, Snyder quotes Hardy (1973) and Owre (1973)—and nobody else—even though these two citations are greatly out-of-date. There appears to be an inconsistency in Snyder's book about the two purported races of the Carolina Parakeet, the western *ludovicianus* and the eastern *carolinensis*. On page 6, Snyder states that the perceived differences between the two races—primarily plumage coloration—were "modest and variable." However, on page 10, Snyder states that the two purported races "differed significantly in bill, wing, and tail measurements . . . and fairly consistently" in plumage.

Snyder concludes his book by listing several topics of the Carolina Parakeet's biology or history that might be solved by the use of molecular techniques. Among these are the

relationship of *Conuropsis* with other New World psittacid genera such as *Aratinga* and *Myiopsitta*; whether feeding on cockleburs rendered parakeets “unpalatable” to predators; whether “biochemical or morphological traces of pathogens” could be detected in parakeet feathers or skin; and whether the two clutches of eggs collected by Charles Doe in Osceola County in 1927 are genuine Carolina Parakeet eggs. One would hope that scientists are now studying some of these issues in hopes of learning more about what perhaps is North America’s most fascinating lost bird species.

In summary, *The Carolina Parakeet: Glimpses of a Vanished Bird* makes entertaining reading for those interested in the early ornithology of Florida. The book is less successful as a treatise on the natural history of the Carolina Parakeet, owing to its reliance on unproven and otherwise unvetted hearsay data. While I have reservations about Snyder’s faith in some historical data, I recommend this book for birders, ornithologists, and public and academic libraries.

I thank Reed Bowman for improving a draft of this review.

—Bill Pranty, 8515 Village Mill Row, Bayonet Point, Florida 34667-2662.

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IN MEMORIAM

Howard P. Langridge, 1923-2004

Howard Percy Langridge, a Charter Member of the Florida Ornithological Society (FOS) and an extraordinarily skilled birder who contributed much to our knowledge of birds in Florida, died from complications resulting from a massive stroke on 14 November 2004, at Sycamore Shoals Hospital, Elizabethton, Tennessee, at the age of 81. He was born 31 May 1923 at Cedar Rapids, Iowa, the son of H. R. and Winifred M. Langridge. His childhood and teen years were spent at Cedar Rapids.

In addition to being a member of FOS, Howard held memberships in the American Birding Association (ABA), the Tennessee Ornithological Society (TOS), and the Audubon Society of the Everglades at West Palm Beach. He was a member of the FOS Bird Records Committee from 1985 through 1987, and was Associate Editor (for bird distribution) for the Florida Field Naturalist (FFN) for 10 years (1985 through 1994). He authored or co-authored 21 short articles on significant bird observations he had made in Florida, publishing them in FFN, and was a regular contributor to the seasonal reports in the Field Observations of FFN. He was the editor for the Florida Region for *North American Birds* and its predecessor *American Birds*, writing the spring season reports for 11 years (1986 through 1996), and was a regular contributor of his observations to that journal from the late 1950s up until the time of his death. He and T. Trotsky documented the first Black-tailed Godwit in Florida in 1981 (Merritt Island NWR) and with W. Matthews and G. Hunter had the first sighting of a Thick-billed Murre for the state in 1976 (Lake Worth Fishing Pier). Howard was the compiler of the West Palm Beach Christmas Bird Count (CBC) for an unbroken 40 years, 1958 (the 59th CBC period) through 1997 (the 98th CBC period). No other person has compiled a count or counts in Florida for that length of time. In addition to the West Palm Beach CBC, he frequently participated on CBCs at Ft. Lauderdale, Everglades-Coot Bay, Stuart, and several others. Through 2000 (the last time Howard submitted his list total to the ABA List Report Supplement to *Birding*) he had a Florida Life List of 441 species of birds.

I had the good fortune to have known Howard for 38 years. During the 20 years my family and I lived at Delray Beach, he and I birded together on a regular basis in Palm Beach County and elsewhere in the state from the Dry Tortugas to Jacksonville to Pensacola. Some of his favorite birding areas included the Dry Tortugas, Florida Keys, Everglades National Park, Arthur R. Marshall Loxahatchee NWR, Hypoluxo Island at Lantana, the Lake Worth Fishing Pier, Blowing Rocks Beach near Jupiter, Duda Farms near Belle Glade, and the lower Rio Grande Valley of Texas. After Howard retired, he spent a week or so annually during spring migration at the Dry Tortugas, camping outside Ft. Jefferson on Garden Key. On such visits he often was a co-leader for Wings, the well-known birding tour company out of Tucson, Arizona. Over the years he took hundreds of out-of-town birders to see the south Florida specialties. Peter Dunne of Cape May, New Jersey, in his popular book *The Feather Quest: a North American Birder's Year*, referred to Howard as an "alpha alpha birder."

After moving to Elizabethton, Tennessee, in 1997, he continued to bird in the eastern part of that state, often in association with fellow birders in the region, and recorded several first records for Tennessee, including Great Blue (white morph) Heron, Lesser Black-backed Gull, and Royal Tern. Howard's last birding with a group was with the Herndon TOS Chapter on 30 October 2004 at Sycamore Shoals State Park at Elizabethton.

Howard had two great passions in life—extreme competition in birding and tennis. He loved a "good chase" for a rare bird. Upon seeing an interesting species or something that pleased him, he would break into a broad smile and rapidly rub his palms together

as an expression of his excitement. In the field he usually wore a light-colored, broad-brimmed, tilley-like hat, a shirt with a collar, lightweight long trousers, and low-cut leather boots or tennis shoes. He always carried crackers to munch on and drank only water. Invariably he used 3x5 index cards in the field to take notes on the birds he observed and make sketches of the rarer species using a lead pencil. He would quickly whip a card out of his shirt pocket to make a notation or sketch and then quickly replace it. These cards were recycled from student term papers; he had saved hundreds or thousands of these cards for this purpose. His sketches were accurate artistic renderings of birds. In my 55 years of birding I have never met a birder who liked to crawl into a dense thicket like Howard in search of furtive species. The man was truly amazing in this respect; he was as agile as a raccoon.

Traveling with Howard was a great pleasure, since there was always interesting conversation about birds and every other topic under the sun, as he was extremely well read in current events, history, literature, and a wide range of other subjects. He and I also held a similar view of "the world." We frequently talked by telephone about birds, birding, and planning trips in and out of state. Upon answering the phone, instead of saying hello or some other greeting, his stock in trade was "H. P. Langridge here"—when I think of him, I can still hear that familiar greeting. His enthusiasm was infectious, and, when he perceived something to be funny, he would break out into his distinctive cackling-like laugh. He was a dynamo of energy, and, for things that interested him, he always gave 100 percent. His family, birding, playing tennis, and making furniture and other items out of wood he had cut on his Tennessee property were among his primary interests. He played tennis with gusto and, because of his skill and stamina, was able to beat players half his age. Howard and his youngest daughter, Daphne (Robin to most of us) were ranked in mixed-doubles tennis in Florida for several years. He played tennis 3-5 times per week up to just before his death.

He was predeceased by his wife of 55 years, Mable Sharp Langridge, a daughter Patsy Langridge, and a grandson William H. Ollmann. He is survived by a brother, Ray Langridge (Marion, Iowa); daughters J. Susan Ollmann (Gainesville, FL), Jane M. Farmer (Pensacola, FL), and Daphne R. Mahagan (Dade City, FL); a son, Howard P. Langridge III (Sopchoppy, FL); four grandchildren; and one great-grandchild.

Howard left his native Iowa at the age of 18 and worked for the U.S. Postal Service in Washington, D.C. He served a little over three years in the U.S. Navy as a reconnaissance photographer aboard a PBV aircraft in the Pacific during World War II. On 2 December 1944 he married Mable Sharp of Elizabethton, Tennessee. Following the war he attended East Tennessee State University at Johnson City under the GI Bill, where he earned Bachelor and Master of Arts degrees in English. It is about this time that Howard began birding. He taught English at Unaka High School in Carter County, TN, for six years before moving to Lantana, FL, in 1957. He taught English for 23 years in the Palm Beach County Public School System, first at Palm Beach High School for several years, but most of his teaching career was at Forest Hill H.S. in West Palm Beach, until his retirement in 1981. He often commuted between his home in Lantana and Forest Hill H.S. on his bicycle, using the less traveled streets. This was long before most people gave much thought to conserving fossil fuels and maintaining clean air standards in South Florida. Howard was well liked by his students and fellow faculty members at Forest Hill. He had an energetic teaching style, being very animated in the classroom. He taught a number of different courses in the English Department, his passion being composition. He was head of the English Department for several years, was Student Council Advisor, and Field Biology Club Sponsor, where he taught students bird identification and other skills pertaining to their environmental education.

Friday afternoons during the school year found Howard and the kids in the Field Biology Club hard at work trying not to misidentify a bird and not utter a grammatical error. At year's end, he handed each of his students a 3 × 5 card with the simple



Clockwise from top left. Howard P. Langridge—In his element in the classroom at Forest Hill High School, West Palm Beach, FL, circa 1970s; courtesy Susan Ollmann. Birding on southern Great Abaco Island, Bahamas, 17 November 1990; photo by Paul Sykes. Faculty photo in Forest Hill H. S. Yearbook 1981 (his last year teaching); photo courtesy Susan Ollmann. On “station” at Lake Worth Fishing Pier with a first-year Sabine’s Gull, Lake Worth, Florida, November 1986; photo by Tadziu Trotsky.

inscription “Langridge Product,” a distinction accepted with great pride. Years later, at a moving-to-Tennessee party in H. P.’s honor, many of his West Palm Beach friends proudly asked him to inscribe their field guides with the words “Langridge Product.”

He did graduate work toward a doctorate at Florida State University in Tallahassee, but did not obtain a degree. During the Florida years he lived at Lantana. Summers were spent with Mable and children at the house he himself built on the side of a mountain on their property on the east side of Elizabethton, or traveling and camping in the western United States. In 1997, Howard and Mable left Florida, all their children having fledged many years before, and moved to their home in eastern Tennessee.

His service to the birding community in Florida and Tennessee will be long remembered and much appreciated. We shall all miss this kind, gentle, gracious man who touched the lives of so many of us.

I wish to thank Wallace Coffey, Steve Holzman, Gloria Hunter, Bonnie and Cam Kepler, Susan Ollmann, Daphne Mahagan, Tadziu Trotsky, and Ann and Phil Weinrich for their assistance in preparing this memoriam. *Paul W. Sykes, Jr., 1080 Forest Road, Watkinsville, GA 30677.*

FIELD OBSERVATIONS

Spring Report: March-May 2006.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32:7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: EOS = end of season, NP = national park, NSRA = north shore restoration area, NWR = national wildlife refuge, SP = state park, STF = sewage treatment facility, WEA = wildlife and environmental area, and N, S, E, W etc., for compass directions. Bold-faced entries denote birds newly reported or verified in Florida, or record counts.

SUMMARY OF THE SPRING SEASON

The weather was generally mild and dry, with no significant storms, and therefore no significant fallouts. The western Panhandle received only 1.46 inches of rain in March-April. FOSRC rarities reported this season were the Red-billed Tropicbird specimen from Boynton Beach, Iceland Gull at Daytona Beach, Cassin’s Kingbird at Lake Apopka, and the Bullock’s Oriole at Tallahassee. Other rarities included the first Band-rumped Storm-Petrels recorded in the Atlantic Ocean (off Ponce Inlet), three White-faced Ibises at Micanopy with another at Fort Walton Beach, Roseate Spoonbills and Black Skimmers breeding inland in Polk County, an interesting mini-invasion of Wilson’s Phalaropes between 20-26 May, a European Herring Gull (perhaps soon to be considered specifically distinct from American Herring Gulls) at Daytona Beach, an apparent Antillean Nighthawk at St. George Island, one or two La Sagra’s Flycatchers at Cape Florida, an interesting mimid at Boca Chica Key that may have been a Northern × Bahama mockingbird hybrid, a Common Myna north to St. Petersburg, and a black-backed Western Spindalis at Everglades National Park.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 160 at Gainesville (*Alachua*) 12 Apr (D. Hartman); 3 at St. Petersburg (*Pinellas*) 12 May (E. Haney); 20 at Ocala (*Marion*) 21 May (B. Anderson); 2 at Lower Wekiva State Preserve (*Lake/Seminole*) 24 May (L. Malo); 6 at Cutler Ridge (*Miami-Dade*) 25 May (R. Torres).

FULVOUS WHISTLING-DUCK: 5 at St. Marks NWR (*Wakulla*) 5 Apr (A. Wraithmell); 1 at a *Polk* phosphate mine 11 May (P. Fellers); up to 25 (28 Apr) all season at Lake Apopka NSRA (*Orange*; H. Robinson).

SNOW GOOSE: 1 immature white morph at Merritt Island NWR (*Brevard*) 1-7 Mar, 1 adult white morph there 29 Mar, and 1 adult blue morph over South Merritt Island

- (*Brevard*) 26 Apr (all D. Freeland); 1 white morph at Springhill Road STF (*Leon*) 14-29 Mar (G. Menk).
- MANDARIN DUCK: 1 pair copulated at Lake Frances, Madison (*Madison*) 25 Mar (S. McCool, photo to FOC).
- MOTTLED DUCK: 2 (the female perhaps a Mottled Duck x Mallard) at Tallahassee (*Leon*) 10 Apr (S. McCool, photo to FOC); 2 at Egans Creek Wetlands (*Nassau*) 12 Apr (J. Hintermister); 104 at Myakka River SP (*Sarasota*) 27 May (R. Smith).
- BLUE-WINGED TEAL: 3 near Oak Hill (*Volusia*) 18 May (M. Brothers); 1 at Lake Apopka NSRA 28 May (H. Robinson).
- BLUE-WINGED × CINNAMON TEAL: 1 apparent hybrid drake at Viera Wetlands (*Brevard*) 11 Mar (A. Bankert, photo to FOC).
- CINNAMON TEAL: 1 male at St. Marks NWR 18 Mar (T. Curtis).
- NORTHERN SHOVELER: 1500 at *Polk* mines 11 Mar (P. Fellers, E. Lane).
- NORTHERN PINTAIL: 41 at *Polk* mines 3 Mar (P. Fellers, D. Brooke); 1 male at Honeymoon Island SP (*Pinellas*) 4 May (W. Yusek).
- GREEN-WINGED TEAL: 2800 at *Polk* mines 3 Mar (P. Fellers, D. Brooke).
- REDHEAD: 2 at Paynes Prairie Preserve SP (*Alachua*) to 13 Mar (H. Adams); 1 at Lake Apopka NSRA 3 May (H. Robinson); 45 at Tierra Verde (*Pinellas*) 13 May (B. Ahern, D. Powell).
- RING-NECKED DUCK: 1 at Lake Apopka NSRA 3 May (H. Robinson); 3 at *Polk* mines 11 May (P. Fellers).
- GREATER SCAUP: 2 (female and male) at St. Marks NWR 8 May (J. Dozier).
- LESSER SCAUP: 950 at *Polk* mines 11 Mar (P. Fellers, E. Lane); 4 (1 female, 3 males) at Springhill Road STF 31 May (G. Menk).
- SURF SCOTER: 1 male at Merritt Island NWR 29 May (T. Dunkerton).
- BUFFLEHEAD: 3 at *Polk* mines 3 Mar (P. Fellers, D. Brooke); 1 female at Springhill Road STF 31 May (G. Menk).
- COMMON GOLDENEYE: 1 female at Springhill Road STF 29 Mar-4 Apr (G. Menk).
- RUDDY DUCK: 9500 at Lake Apopka NSRA 5 Mar, and 5 there 21 May (H. Robinson); 4 males at Tierra Verde 27 Mar (L. Atherton).
- WILD TURKEY: 1 at Melbourne Beach (*Brevard*) 12 April (A. Bankert).
- PACIFIC LOON: 1 at Gulf Breeze (*Santa Rosa*) 25 Mar (P. Baker); 1 first-summer bird at Destin Bridge (*Okaloosa*) 21 May (D. Ware).
- COMMON LOON: flocks (with 90% of the birds in alternate plumage) flying NE over Gainesville 60-120 minutes after sunrise included 117 on 22 Mar and 193 on 5 Apr (A. Kratter); 4 over Cary State Forest (*Nassau*) 12 Apr (J. Hintermister).
- HORNED GREBE: 1 with "some rufous on neck" at Fort Walton Beach STF (*Okaloosa*) 24 May (M. Myers, B. Duncan).
- BLACK-CAPPED PETREL: 2 about 100 nm off Ponce Inlet (*Volusia*) 1 Apr (B. Wallace, M. Brothers).
- AUDUBON'S SHEARWATER: 1 off Elliott Key, Biscayne NP (*Miami-Dade*) 20 Apr (R. Torres).
- LEACH'S STORM-PETREL: 2 just off the mouth of the St. Johns River (*Duval*) 15 May (R. Clark).
- BAND-RUMPED STORM-PETREL: 2 about 80 nm off Ponce Inlet 1 Apr (B. Wallace, M. Brothers, photos to FOC); 1 in the Florida Straits (*Monroe*) 21 Apr (M. Gardler).
- WHITE-TAILED TROPICBIRD: 1 about 100 nm off Ponce Inlet 1 Apr (B. Wallace, M. Brothers); 1 between Dry Tortugas NP and Key West (*Monroe*) 25 Apr (M. Gearheart, D. Williams).
- *RED-BILLED TROPICBIRD: 1 at Boynton Beach (*Palm Beach*) 19 Mar (*vide* T. Webber; UF 45217).
- MASKED BOOBY: 17 nests at Dry Tortugas NP (*Monroe*) in Apr (*vide* M. Gardler).
- BROWN BOOBY: 1 immature at New Smyrna Beach (*Volusia*) 4 May (*vide* M. Brothers); 2 immatures off Jacksonville (*Duval*) 15 May (R. Clark); 1 immature off Jupiter Inlet (*Palm Beach*) 31 May (J. and L. Hailman).

- RED-FOOTED BOOBY: singles at Dry Tortugas NP 16 Apr (white-tailed brown morph) and 23 Apr (immature brown morph) (M. Gardler et al.).
- NORTHERN GANNET: 1 at Coconut Point (*Brevard*) 22 May (A. Bankert).
- AMERICAN WHITE PELICAN: 200 at Fernandina Beach (*Nassau*) 19 Mar (P. Leary); 500 at St. Marks NWR 9 Apr (M. Hartley).
- BROWN PELICAN: 1 immature at Lake Olympia (*Orange*) 12 Mar (T. Rodriguez); 1 at Lake Apopka NSRA 11 Mar (H. Robinson); 2 at Lake Somerset (*Polk*) 1 Apr (T. Palmer); 1 immature at Lake Talquin (*Leon*) 7 May (S. McCool); 1 over Lake Ivanhoe (*Orange*) 25 May (G. Bretz).
- GREAT CORMORANT: 1 at Orange Park (*Duval*) to 11 Mar (B. Ahern, D. Powell).
- MAGNIFICENT FRIGATEBIRD: 1 female at Bald Point (*Franklin*) 2 Apr (H. Van Tol); 1 adult male over Fernandina Beach 28 May (P. Leary).
- AMERICAN BITTERN: 20 at Lake Apopka NSRA 1 Mar (H. Robinson); 5 or more at Lake Miccosukee (*Jefferson*) 29-31 Mar (M. Hill); 1 at Roosevelt Wetlands, St. Petersburg 17-20 Apr (W. Yusek); 1 at Florida International University (*Miami-Dade*) 31 May (B. Schneider).
- LEAST BITTERN: 8 at Roosevelt Wetlands 14 May (D. Margeson).
- "GREAT WHITE HERON:" 1 near Oak Hill (*Volusia*) 18 May had been present 2 weeks (M. Brothers).
- GREAT EGRET: 88 at a drying lake at Spring Hill (*Hernando*) 23 May (A. and E. Maywalt).
- REDDISH EGRET: 1 immature at West Kendall (*Miami-Dade*) 8 May (J. Boyd).
- YELLOW-CROWNED NIGHT-HERON: 27 at Lake Apopka NSRA 25 Apr (H. Robinson).
- SCARLET-TYPE IBIS: 1 at Lakes Park, Fort Myers (*Lee*) attempted to breed with a White Ibis during May (A. Marshall).
- GLOSSY IBIS: 1 at Lake Jackson (*Leon*) 20 May (H. Hooper); 685 at Lake Apopka NSRA 31 May (H. Robinson).
- WHITE-FACED IBIS: up to 3 at Micanopy (*Alachua*) to 22 Mar (J. Hintermister, P. Burns et al.); 1 adult at Fort Walton Beach STF 17 May (M. Myers, B. Duncan).
- ROSEATE SPOONBILL: 3 on nests at *Polk* mines 2 Apr (C. Geanangel), and 26 there 11 May, with 11 in the "rookery area" (P. Fellers); 1 immature at Altamonte Springs (*Seminole*) 1-3 May (P. Hueber); 3 immatures at Lake Jesup Conservation Area (*Seminole*) 13 May (L. Malo et al.).
- WOOD STORK: 319 at Lake Somerset 1 Apr (T. Palmer).
- GREATER FLAMINGO: 1 near Key West 25 Apr (A. Binns).
- OSPREY: 113 at Lake Apopka NSRA 17 May (H. Robinson).
- SNAIL KITE: 1 pair bred at Lake Istokpoga (*Highlands*) in Apr (M. McMillian); 1 at Kissimmee Prairie Preserve SP (*Okeechobee*) 14 May (P. Miller).
- MISSISSIPPI KITE: 1 at Jacksonville 19 Apr (J. Cocke); 4 at Green Cove Springs (*Clay*) 29 May (R. Rowan et al.).
- BALD EAGLE: 30 at Tomoka Landfill (*Volusia*) 3 Mar (D. Freeland, M. Gardler et al.); 1 adult near Big Pine Key (*Monroe*) 16 May (G. Stoccardo).
- NORTHERN HARRIER: 170 at Lake Apopka NSRA 4 Mar (H. Robinson).
- BROAD-WINGED HAWK: 1 at Old Town (*Dixie*) 19 Apr (J. Hintermister).
- SHORT-TAILED HAWK: 1 light morph at Flatwoods Park (*Hillsborough*) 2 Mar (B. Ahern); 2 (1 dark morph, 1 light morph) at Spring Hill 3 Mar (M. Gardler); 2 at Oak Hill (*Volusia*) 3 Mar (D. Freeland, M. Gardler); 1 light morph at Sumica Conservation Area, Indian Lake Estates (*Polk*) 4 Mar (P. Fellers et al.); 1 dark morph at Fernandina Beach 1 Apr (P. Leary); 3 dark morphs at J.B. Starkey Wilderness Park (*Pasco*) 1 Apr (K. Tracey); 1 at Black Point Swamp near Shell Mound (*Levy*) 7 Apr (J. Hintermister); 1 light morph at Seminole Ranch/Orlando Wetlands Park (*Orange*) 29 Apr (L. Malo et al.); 1 dark morph E of Lake Wales (*Polk*) 20 May (T. Palmer); 1 dark morph at Myakka River SP 27 May (R. Smith); at least 4 around New Port Richey (*Pasco*) through the season (K. Tracey); 1 light morph at J.N. "Ding" Darling NWR (*Lee*) throughout the season (*vide* C. Ewell).

- SWAINSON'S HAWK: 1 intermediate dark morph at a *Polk* mine 3 Mar (P. Fellers, D. Brooke); 1 dark morph at Southern Glades WEA (*Miami-Dade*) 5 Mar (R. Diaz).
- CRESTED CARACARA: 1 near Bithlo (*Orange*) 31 May (G. Stoccardo).
- AMERICAN KESTREL: 4 at Tram Road STF (*Leon*) 6 Apr (G. Menk).
- MERLIN: 12 at Bill Baggs Cape Florida SP (*Miami-Dade*) 10 Apr (R. Diaz); 1 at Tate's Hell (*Franklin*) 5 May (J. Spohrer).
- PEREGRINE FALCON: 1 at Kissimmee Prairie Preserve (*Okeechobee*) 9 Apr (P. Miller); 1 at Lake Apopka NSRA 7 May (H. Robinson).
- YELLOW RAIL: 1 at Kissimmee Prairie Preserve 5 Mar (P. Miller).
- VIRGINIA RAIL: 1 at St. Marks NWR 28 Apr (J. Hintermister).
- SORA: 2 at Fort De Soto Park (*Pinellas*) 10 Apr (L. Atherton); 1 at Lake Apopka NSRA 7 May (H. Robinson).
- PURPLE GALLINULE: 1 at Maple Swamp, Clearwater 3 Mar-12 Apr (P. Trunk et al.); 11 at Lake Hancock (*Polk*) 2 Apr (T. Palmer); 2 at Roosevelt Wetlands 20 Apr (W. Yusek); 49 at Lake Apopka NSRA 30 Apr (H. Robinson).
- AMERICAN COOT: 1 at Springhill Road STF 31 May-1 Jun (G. Menk).
- LIMPKIN: 1 pair with 5 fledglings at Lake Munson (*Leon*) 12 Mar (M. Hill); 10 at Roosevelt Wetlands 14 May (D. Margeson).
- SANDHILL CRANE: 1 at Fort Walton Beach STF 13 May (L. Fenimore); 1 southbound high over the Wakulla River (*Wakulla*) 29 May (M. Keys).
- SOUTHERN LAPWING: 1 at St. Marks NWR 6 May-EOS (T. Curtis).
- BLACK-BELLIED PLOVER: 60 at Werner-Boyce Salt Springs SP (*Pasco*) 21 Apr (K. Tracey); 145 at Huguenot Memorial Park (*Duval*) 11 May (R. Clark); 1 at Myakka River SP 27 May (R. Smith).
- AMERICAN GOLDEN-PLOVER: 10 at Bald Point 3 Mar (J. Dozier); 4 in *Flagler* 5 Mar (R. Smith et al.); 1 at St. Marks NWR 14 Apr (A. Wraithmell et al.).
- SNOWY PLOVER: 32 at Three Rooker Island (*Pinellas*) 7 Apr (K. Tracey); 10 at Anclote Bar (*Pasco*) 21 Apr (K. Tracey); 1 on a nest at Cape Romano (*Collier*) 9 May (D. Sutor).
- WILSON'S PLOVER: 23 at Anclote Bar 11 Apr (K. Tracey); 3, including 1 displaying territorial behavior, at St. Vincent Island (*Franklin*) 20 May (B. Stedman); 3 or more pairs at Palm Island (*Sarasota*) 31 May (G. and T. Duch).
- SEMPALMATED PLOVER: up to 2 at Hague (*Alachua*) 28 Apr-1 May (S. Flamand, M. Manetz); 3 at Lake Apopka NSRA 7 May (H. Robinson); 27 at *Polk* mines 11 May (P. Fellers).
- PIPING PLOVER: 3 at Little Estero Island Critical Wildlife Area (*Lee*) 18 Mar (C. Ewell); 32 at Three Rooker Island 7 Apr (K. Tracey); 10 at Anclote Bar 11 Apr (K. Tracey).
- KILLDEER: 1 nest with 4 eggs at Naples 24 May (L. Addison).
- AMERICAN OYSTERCATCHER: 1 at downtown Pensacola (*Escambia*) 11 Apr (C. Bunch); 3 at Bayou Grande, Pensacola 20 Apr (B. Duncan et al.); 1 at Destin 1 May (P. Gault); 8 at Charley Pass, North Captiva Island (*Lee*) 28 May (C. Ewell).
- BLACK-NECKED STILT: 16 at the Sarasota Celery Fields (*Sarasota*) 19 Mar (J. Dubi); 14 at Kissimmee Prairie Preserve 14 May (P. Miller); 1 at Springhill Road STF 20-24 Apr (G. Menk et al.); 12 at Eagle Lakes Park, Naples (*Collier*) 9 May (D. Sutor); 1 pair with a chick at Seven Springs (*Pasco*) 28 May (K. Tracey).
- AMERICAN AVOCET: **1110** at *Polk* mines 2 Apr (C. Geanangel); 5 at St. Vincent Island, Indian Pass (*Franklin*) 7 Apr (T. Lewis); 3 at Tigertail Beach, Marco Island (*Collier*) 20 Apr (K. Williams); 9 in alternate plumage at Three Rooker Island 20 May (K. Tracey); 4 at St. Marks NWR 27 May (J. Dozier, J. Murphy); 2 at Bystre Lake (*Hernando*) 28 May (M. Gardler).
- SOLITARY SANDPIPER: 5 at Seven Springs 22 Apr (K. Tracey); 1 at Green Swamp 7 May was the first for *Sumter* (R. Smith); **76** at Lake Apopka NSRA 7 May (H. Robinson).
- SPOTTED SANDPIPER: 1 at Altamonte Springs (*Seminole*) 17 May (P. Hueber); 1 at Lake Apopka NSRA 21 May (H. Robinson); 1 at St. Marks NWR 27 May (J. Dozier, J. Murphy).

- UPLAND SANDPIPER: up to 2 at Alachua 30 Mar-7 Apr (P. Burns, J. Hintermister et al.); 1 W of Palmdale (*Glades*) 30 Mar (B. and L. Cooper); singles at Key West and Stock Island (*Monroe*) 15 Apr (M. Gardler); 1 in *Flagler* 22 Apr (B. Wallace); 1 at Graham (*Bradford*) 10-11 May (D. Robbins, J. Hintermister).
- WHIMBREL: 35 at Canaveral National Seashore (*Brevard*) 14 Apr (D. Freeland et al.).
- MARbled GODWIT: 1 at Springhill Road STF 11 Apr (J. Cavanagh).
- RED KNOT: 1000+ on Bird Island at Nassau Sound (*Duval*) 1 Mar (P. Leary); 70 at Redington Shores (*Pinellas*) 3 Mar (I. Hernandez); 100 at Three Rooker Island 7 Apr (K. Tracey); 500+ at Huguenot Memorial Park 25 Apr, and 2000 there 14 May, including birds banded in SW Florida, Delaware, Chile, and Argentina (P. Leary); 40 at Cape Romano 9 May (D. Sutor); 60 in mixed plumages at Cayo Costa SP (*Lee*) 21 May (C. Ewell).
- SANDERLING: 1 at Lake Apopka NSRA 7 May (H. Robinson).
- SEMPALMATED SANDPIPER: 12 at Center Hill 7 May were the first for *Sumter* (R. Smith).
- WHITE-RUMPED SANDPIPER: 1 at St. Marks NWR 28 Apr (R. McGregor); 1 at Merritt Island NWR 28 Apr (D. Freeland); 1 at Center Hill 7 May was the first for *Sumter* (R. Smith); up to 2 at Lake Apopka NSRA 5-17 May (H. Robinson); up to 9 (23 May) at Springhill Road STF 11-25 May (G. Menk, A. Wraithmell et al.); 1 at Gainesville 12 May (P. Burns); 3 in *W Pasco* 14 May (K. Tracey); 4 at Fort De Soto Park 18 May (L. Atherton); 4 near Oak Hill (*Volusia*) 18 May (M. Brothers); 1 at Anclote Bar (*Pasco*) 20 May (K. Tracey); 8 at Cutler Ridge 21 May (R. Torres); 5 at Big Carlos Pass/Estero Island (*Lee*) on 23 May (C. Ewell); 1 at Cape Romano 24 May (D. Sutor); 2 at Viera Wetlands 24 May (A. Bankert); 3 at Bystre Lake 28 May (M. Gardler).
- PEEP SPECIES: 12,000 at *Polk* mines 5 Apr, and 6000 there 11 May (P. Fellers).
- PECTORAL SANDPIPER: 3 at *Polk* mines 11 Mar (P. Fellers, E. Lane); singles at Springhill Road STF 19 and 24 May (A. Wraithmell et al.); 1 at St. Vincent Island 21 May (B. Stedman); 1 at Lake Apopka NSRA 24 May (H. Robinson); 1 at Bystre Lake 28 May (M. Gardler).
- DUNLIN: 6000 at Merritt Island NWR 3 Mar (D. Freeland, M. Gardler)
- STILT SANDPIPER: 2 at Springhill Road STF 23 Mar (J. Cavanagh), and 3 there 25 May (G. Menk); 1 at Gainesville 14 Apr (M. Manetz); 2 at Lake Apopka NSRA 3 May (H. Robinson); 2 at Center Hill (*Sumter*) 7 May was the first for *Sumter* (R. Smith).
- BUFF-BREASTED SANDPIPER: 4 at Fort Walton Beach STF 20 Apr (M. Myers, B. Duncan), and 1 there 20 May (B. and W. Duncan); 1 at St. Marks NWR 28 Apr (J. Hintermister, D. Robbins); 2 adults at Captiva Island (*Lee*) 18 May (C. Ewell).
- LONG-BILLED DOWITCHER: 1100 at *Polk* mines 3 Mar (P. Fellers, D. Brooke); 10 at Lake Apopka NSRA 19 Apr (H. Robinson); 1 at Springhill Road STF 11 May (G. Menk, J. Cavanagh).
- WILSON'S SNIPER: 1 at Lake Apopka NSRA 7 May (H. Robinson).
- WILSON'S PHALAROPE: 1 male at Three Rooker Island 20 May (K. Tracey); up to 31 at St. Marks NWR 23-24 May (A. Wraithmell, R. McGregor); 4 at Springhill Road STF 23 May (A. Wraithmell); 2 at Marathon (*Monroe*) 24 May (B. Mulrooney); 1 male at Seven Springs 25-26 May (K. Tracey, B. Pranty).
- RED-NECKED PHALAROPE: 1 in *N Escambia* 20 May (L. Catterton); 1 at Fort Walton Beach STF 20 May (B. and W. Duncan).
- POMARINE JAEGER: 1 off Elliott Key 20 Apr (R. Torres).
- LAUGHING GULL: 3500 (many starting to nest) at Three Rooker Island 7 Apr (K. Tracey).
- RING-BILLED GULL: 3100 at Lake Apopka NSRA 15 Mar (H. Robinson).
- HERRING GULL: 112 at Crandon Park Beach (*Miami-Dade*) 10 Mar (R. Diaz); 1 of the European race at Daytona Beach Landfill (*Volusia*) 12 Mar (J. Hintermister et al.).
- *ICELAND GULL: 1 immature *kumlieni* at Daytona Beach Landfill to 12 Mar (J. Hintermister et al.).
- LESSER BLACK-BACKED GULL: 1 at Redington Shores 3 Mar (I. Hernandez); 500 at Fort Lauderdale in early Mar (K. Rosenberg); 3 at Daytona Beach Landfill 12 Mar (J. Hintermister et al.); 15 (9 adults) at Crandon Park Beach (*Miami-Dade*) 16 Mar (R. Diaz);

- singles at Anclote Bar 11 and 20 Apr (K. Tracey); 1 adult at Lower Matecumbe Key (*Monroe*) 30 Apr (D. Freeland); 1 at Longboat Key (*Manatee*) 21 May (R. Peipert).
- GREAT BLACK-BACKED GULL: 8 at Crandon Park Beach 16 Mar (R. Diaz).
- GULL-BILLED TERN: up to 2 at Lake Apopka NSRA 19 Apr-5 May (H. Robinson); 2 at Eagle Lakes Park 19 Apr (D. Thurston); 2 at Three Rooker Island 21 Apr (K. Tracey); 1 at Little Estero Island 23 May (C. Ewell).
- COMMON TERN: 3 sub-adults at Little Estero Island 23 May (C. Ewell).
- ARCTIC TERN: 1 W of Key West 21 Apr (M. Gardler).
- LEAST TERN: 17 courted at Ponce Inlet (*Volusia*) 29 Mar (M. Brothers); 3 at *Polk* mines 2 Apr (C. Geanangel); 115 at Anclote Bar 11 Apr (K. Tracey); 45 over an office building roof near Loughman (*Polk*) 27 Apr (K. Tracey); 60 at Albertson's roof colony, Bonita Springs (*Lee*) 15 May (D. Sutor); 2 at Bystre Lake 28 May (M. Gardler); 1 at Paynes Prairie Preserve 31 May (R. Rowan).
- BLACK TERN: 2 at St. Marks NWR 16 Mar (B. Bergstrom), and 1 there 23 Mar (J. Cavanagh); 2 at *Polk* mines 2 Apr (C. Geanangel); 2 in alternate plumage at Fort George Inlet (*Duval*) 20 May (P. Leary).
- BLACK NODDY: 1 immature at Dry Tortugas NP 26 Apr (A. Binns).
- BLACK SKIMMER: 20 at Mirror Lake (*Polk*) 17 Mar (T. Palmer); 49 at Lake Morton (*Polk*) 30 Mar (T. Palmer); 30 over an office building roof near Loughman 27 Apr (K. Tracey); **40 bred** in mined lands S of Bartow for the second year of breeding (P. Fellers).
- ROCK PIGEON: 1 without bands at St. Vincent Island 20 May (B. Stedman).
- WHITE-CROWNED PIGEON: 8 at Cape Florida 22 Mar (R. Diaz).
- AFRICAN COLLARED-DOVE (formerly known as Ringed Turtle-Dove): 1 at Daytona Beach 29 Mar (*vide* T. Webber, UF 45235).
- WHITE-WINGED DOVE: 4 at Bald Point 15 Apr-15 May (J. Murphy, J. Dozier); 3 at St. Petersburg 6 May-EOS (M. Wilkinson); 1 at Weeki Wachee 8 May (M. Gardler); 1 at Altamonte Springs (*Seminole*) 14 May (G. Bretz).
- ROSE-RINGED PARAKEET: 1 male at Paisley (*Lake*) 26 May (C. Hilliker).
- BARN OWL: 1 roosted in a boathouse at St. Vincent Island 1 Mar-28 Apr (T. Lewis).
- BURROWING OWL: 18 at Site B-70, Eglin Air Force Base (*Okaloosa*) 23 Apr (L. Fenimore).
- SHORT-EARED OWL: up to 2 at Dry Tortugas NP 16-25 Apr (M. Gardler).
- LESSER NIGHTHAWK: 1 at St. George Island SP (*Franklin*) 27 Apr (J. Cavanagh).
- ANTILLEAN NIGHTHAWK: 1 found dead at John Pennekamp SP (*Monroe*) 6 May contained an egg in an ovary (*vide* A. Kratter, UF 45226).
- NIGHTHAWK SPECIES: 1 photographed at St. George Island 27 Apr (A. Wraithmell) was identified as an Antillean based on plumage features (K. Karlson).
- CHUCK-WILL'S-WIDOW: 33 at Starkey Wilderness Park (*Pasco*) 14 May (K. Tracey).
- WHIP-POOR-WILL: 1 at Kissimmee Prairie Preserve 2 Mar (P. Miller); 1 at Bok Tower Sanctuary, Lake Wales (*Polk*) 17 Mar (T. Palmer); 1 sang at St. Petersburg 19 Mar (D. Margeson).
- CHIMNEY SWIFT: 1 at Gainesville 23 Mar (M. Drummond).
- BUFF-BELLIED HUMMINGBIRD: 1 at Fairchild Tropical Gardens (*Miami-Dade*) 10 Mar (L. Manfredi).
- RUBY-THROATED HUMMINGBIRD: 1 active nest at Kirby Storter Roadside Park (*Collier*) 7 May (B. Schneider, S. Schneider).
- RUFIOUS HUMMINGBIRD: 1 female at Tallahassee in early Mar (F. Dietrich).
- SELASPHORUS HUMMINGBIRD: 1 male at Orlando to 3 Mar (*vide* B. Anderson); of 2 at Valrico (*Hillsborough*), 1 remained to 4 Mar and the other to 15 Mar (S. Backes); 3 at Tallahassee 20-21 Mar (C. and N. Newton).
- HAIRY WOODPECKER: 1 at Rainbow Springs SP (*Marion*) 16 Mar (J. Hintermister); 1 pair at Tosohatchee State Reserve (*Orange*) 20 Mar (P. Hueber).
- ACADIAN FLYCATCHER: 1 at Lake Apopka NSRA 19 Apr (H. Robinson).
- WILLOW FLYCATCHER: 1 sang repeatedly at Bolen Bluff Trail, Paynes Prairie Preserve 9 Apr (B. Carroll, B. Enneis, details to FOC).

- LEAST FLYCATCHER: 1 sang and called at Starkey Wilderness Park 1 Apr (K. Tracey); 1 at Lake Apopka NSRA remained to 19 Apr (H. Robinson); 1 called at the Croom Tract of Withlacoochee State Forest (*Hernando*) 28 May (M. Gardler).
- VERMILION FLYCATCHER: 1 at St. Marks NWR 18 Mar (T. Curtis).
- ASH-THROATED FLYCATCHER: 2 at Lake Apopka NSRA to 1 Mar (H. Robinson); 1 at Fort Walton Beach STF 16 Mar (M. Myers, B. Duncan).
- GREAT CRESTED FLYCATCHER: 1 heard-only at Tallahassee 3 Mar (F. Rutkovsky); 1 sang at Weekiwachee Preserve (*Hernando*) 4 Mar (A. and B. Hansen); 1 at Alachua 10 Mar (P. Burns).
- BROWN-CRESTED FLYCATCHER: 2 at Lake Apopka NSRA 1 Mar, and 1 there to 5 Mar (H. Robinson).
- LA SAGRA'S FLYCATCHER: singles at Cape Florida 26-29 Mar (R. Diaz) and 20-22 Apr (C. Wood, T. Mitchell).
- TROPICAL KINGBIRD: 1 at Lake Apopka NSRA 24 May (H. Robinson).
- *CASSIN'S KINGBIRD: 1 at Lake Apopka NSRA to 4 Mar (S. Benedetto).
- WESTERN KINGBIRD: 34 at Lake Apopka NSRA 8 Mar, and 4 there to 7 May (H. Robinson); 20 near Bartow 14 Mar (T. Palmer); 41 at The Villages (*Marion*) 31 Mar (J. Dinsmore); 1 at Fort Walton Beach STF 5 May (B. Duncan); 1 at Gulf Breeze 16 May (B. Duncan).
- EASTERN KINGBIRD: 1 at Cape Florida 22 Mar (R. Diaz); 3 at Fort De Soto Park 23 Mar (R. Smith).
- GRAY KINGBIRD: 1 at St. George Island 18-19 Mar (A. Knothe, J. Murphy); 1 at Tallahassee 29 Apr-7 May (R. Cassidy); 1 at Lake Apopka NSRA 14 May (H. Robinson).
- SCISSOR-TAILED FLYCATCHER: 4 at Lake Apopka NSRA 22 Mar (H. Robinson); 3 at The Villages 31 Mar (J. Dinsmore); 1 at Cedar Key 15 Apr (S. Rayer et al.); 1 at Tallahassee 19 Apr (M. Hill); 1 at Bald Point 20 Apr (S. McCool); 1 at St. George Island 23 Apr (E. Shaw et al.).
- BELL'S VIREO: 1 at Southern Glades WEA to 18 Mar (R. Diaz et al).
- YELLOW-THROATED VIREO: 1 sang at Morris Bridge Park (*Hillsborough*) 2 Mar (B. Ahern); 1 sang at Spring Hill 14 Mar (A. and B. Hansen).
- BLUE-HEADED VIREO: 1 at Lake Apopka NSRA 19 Apr (H. Robinson).
- WARBLING VIREO: 1 at Bald Point 4-5 May (J. Dozier).
- PHILADELPHIA VIREO: 1 at Sanibel Lighthouse (*Lee*) 27 Apr (V. McGrath).
- RED-EYED VIREO: 1 sang at Morris Bridge Park 2 Mar (B. Ahern); 1 at Lake Apopka NSRA 17 Mar (H. Robinson).
- BLACK-WHISKERED VIREO: 1 at Cape Florida 10 Apr (R. Diaz); 1 at Coconut Point (*Brevard*) 6 May (A. Bankert, S. Hills).
- FLORIDA SCRUB-JAY: 3 at Beverly Hills (*Citrus*) 23 May (M. Gardler).
- TREE SWALLOW: 71,000 at Lake Apopka NSRA 10 Mar, and 1 there to 24 May (H. Robinson); 1 immature at Springhill Road STF 18 May (G. Menk).
- NORTHERN ROUGH-WINGED SWALLOW: 1 at Lake Jackson 13 Mar (G. Menk); 2 in *St. Lucie* 29 May (R. Smith).
- BANK SWALLOW: 2 at St. Marks NWR 22 Mar (A. Wraithmell); 12 at Lake Apopka NSRA 14 May, and 3 there to 21 May (H. Robinson).
- CLIFF SWALLOW: 1 at St. Marks NWR 26 Mar (R. McGregor); 2 at Bald Point 8 Apr (J. Murphy); 1 at Springhill Road STF 27 Apr (G. Menk); singles at Lake Apopka NSRA 14 & 24 May (H. Robinson).
- CAVE SWALLOW: 1 at Gulf Breeze 12 Mar (B. Duncan); up to 2 of the Mexican race at St. Marks NWR 22-27 Mar (R. McGregor et al.); singles of the Mexican race at Springhill Road STF 29 Mar and 11 Apr (G. Menk); 1 at Destin 30 Mar (B. Fleming); 1 at Captiva Island 7 Apr was thought to be of the Mexican race (V. McGrath); 3 of the Mexican race at Bald Point 11 Apr (G. Menk); 2 of the Mexican race at Key West 15 Apr (M. Gardler); up to 4 of the Mexican race at Dry Tortugas NP 16-27 Apr (M. Gardler); 1 at

- Bald Point 28 Apr (J. Murphy); 1 at Site B-70, Eglin Air Force Base 8 May (L. Fenimore); 1 at Fort Walton Beach STF 10 May (B. Duncan, M. Myers).
- BARN SWALLOW: 1 at Cape Coral (*Lee*) 6 Mar (J. Greenlaw); 3 at *Polk* mines 11 May (P. Fellers); 1 flew S past Cayo Costa SP 21 May (C. Ewell); 90 at Lake Apopka NSRA 31 May (H. Robinson).
- CAROLINA CHICKADEE: 1 feeding fledglings at Weekiwachee Preserve 31 Mar (A. and B. Hansen); 1 at Valrico 23-28 May (S. Backes).
- TUFTED TITMOUSE: 1 at A.D. Barnes Park (*Miami-Dade*) 9-29 Apr (J. Boyd).
- HOUSE WREN: 1 at Lake Apopka NSRA to 7 May (H. Robinson).
- WINTER WREN: 1 at O'Leno SP (*Columbia*) to 11 Mar (B. Christensen).
- SEDGE WREN: 34 at Lake Apopka NSRA 14 Apr (H. Robinson); 1 or more sang through the season at Kissimmee Prairie Preserve (P. Miller).
- MARSH WREN: 32 at Lake Apopka NSRA 23 Apr; and 3 there to 5 May (H. Robinson); 1 sang at Lake Jackson 9 May (G. Menk).
- RUBY-CROWNED KINGLET: 1 at Winter Park (*Orange*) 13 Apr (B. Anderson).
- VEERY: 1 at St. Vincent Island 19 May (B. Stedman).
- WOOD THRUSH: 1 at E Orlando 11 Mar (B. Payne); 1 banded at Tallahassee 26 Mar (P. Homann); 2 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell).
- AMERICAN ROBIN: 30,000 went to roost at St. Petersburg 4 Mar (D. Margeson).
- GRAY CATBIRD: 51 at Lake Apopka NSRA 19 Apr (H. Robinson).
- NORTHERN MOCKINGBIRD: 1 at Dry Tortugas NP 17 Apr (M. Gardler).
- MIMID SPECIES:** 1 potential Northern x Bahama Mockingbird hybrid at Boca Chica Key (*Monroe*) 1 Mar (C. Goodrich, photos to FOC) had dark streaking on the flanks and reduced white in the wings and tail.
- COMMON MYNA: 2 nested at Southern Glades WEA 4 Apr (R. Diaz); 1 at St. Petersburg 29-30 Apr (L. and N. Snyder, photo to FOC).
- CEDAR WAXWING: 100 at Lake Apopka NSRA 19 Mar (H. Robinson); 60 at Altamonte Springs 15 May (P. Hueber); 30 at Mead Garden, Winter Park 20 May (B. Anderson et al.).
- BLUE-WINGED WARBLER: 1 at Fort De Soto Park 10 Apr (M. Wilkinson), and 2 there 29 Apr (B. Ahern, D. Powell); 1 at Pinecraft Park, Sarasota 13 Apr (J. Dubi); 1 male at Mead Garden, Winter Park 19 Apr (P. Hueber); 1 at A. D. Barnes Park 19 Apr (R. Torres); 1 at San Felasco Hammock Preserve SP 27 Apr (P. Burns).
- "BREWSTER'S WARBLER:" 1 at Fort De Soto Park 9 Apr (L. Atherton).
- GOLDEN-WINGED WARBLER: 1 male at Fort De Soto Park 19-22 Apr (L. Atherton, P. Fellers et al.).
- NASHVILLE WARBLER: 1 at Lake Apopka NSRA 1 Mar (H. Robinson).
- NORTHERN PARULA: 83 at Cape Florida 8 Mar (R. Diaz).
- YELLOW WARBLER: 1 at Lake Apopka NSRA 14 May (H. Robinson).
- CHESTNUT-SIDED WARBLER: 1 at Green Key Road (*Pasco*) 2 May (K. Tracey).
- MAGNOLIA WARBLER: 5 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell); 1 at Gainesville 12 May (P. Burns); 1 at Maritime Hammock Park (*Brevard*) 20 May (A. Bankert).
- CAPE MAY WARBLER: 1 at Lake Talquin (*Gadsden*) 22 Apr (S. McCool); 62 at Green Key Road 1 May, and 55 there 2 May (K. Tracey, B. Pranty et al.); 6 at Lake Apopka NSRA 5 May (H. Robinson); singles at Rookery Bay and Marco Island (*Collier*) 6 May (D. Sutor); 1 at Viera Wetlands 24 May (A. Bankert).
- BLACK-THROATED BLUE WARBLER: 23 at Green Key Road 29 Apr; and 31 there 30 Apr (K. Tracey et al.); 14 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell); 1 at Lake Apopka NSRA 17 May (H. Robinson).
- YELLOW-RUMPED WARBLER: 680 at Lake Apopka NSRA 10 Mar; and 49 to 26 Mar (H. Robinson).
- BLACK-THROATED GREEN WARBLER: 1 at Corkscrew Swamp Sanctuary (*Collier*) 24 Mar (D. Sutor); 2 at Green Key 30 Apr (K. Tracey et al.).

- BLACKBURNIAN WARBLER: 1 adult male at Fort De Soto Park 9 Apr (L. Atherton); 1 at Rookery Bay 6 May (D. Suito).
- PRAIRIE WARBLER: 305+ at Cape Florida 24 Mar (R. Diaz).
- PALM WARBLER: 208+ of the western race at Cape Florida 8 Mar (R. Diaz); 1 of the western race at Altamonte Springs 5 May (P. Hueber); 2 at Lake Apopka NSRA 17 May (H. Robinson).
- BAY-BREASTED WARBLER: 1 adult male at St. George Island SP 27-28 Apr (J. Cavanagh et al.); 1 male at St. Augustine (*St. Johns*) 7 May (J. Kern); 2 at Fort De Soto Park 8 May (L. Atherton).
- BLACKPOLL WARBLER: 304 at Green Key Road 29 Apr, and 202 there 30 Apr (K. Tracey, B. Pranty et al.); 85 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell); 1 at Tallahassee 30 Apr (D. Jue); 73 at Lake Apopka NSRA 5 May, and 1 there to 24 May (H. Robinson); 33 at St. Augustine 7 May (J. Kern); 24+ flew in off the ocean in 30 minutes at Fort Clinch SP (*Nassau*) 11 May (P. Leary); 2 at West Kendall 24 May (J. Boyd).
- CERULEAN WARBLER: 1 male at Fort De Soto Park 10-12 Apr (L. Atherton et al.).
- BLACK-AND-WHITE WARBLER: 10 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell).
- AMERICAN REDSTART: 1 at San Felasco Hammock Preserve 11 Mar (S. Flamand); 24 at Green Key 29 Apr (K. Tracey); 17 at Lake Apopka NSRA 3 May (H. Robinson).
- PROTHONOTARY WARBLER: 2 at Fort De Soto Park 23 Mar (R. Smith).
- WORM-EATING WARBLER: 5 in *Alachua* 5-6 Apr (J. Hintermister, S. Rayer et al.); 5 at Fort De Soto Park 9 Apr (L. Atherton); 1 at Lake Apopka NSRA 5 May (H. Robinson).
- SWAINSON'S WARBLER: singles killed by flying into windows at Wellington (*Palm Beach*) 21 Mar (UF 45213 *vide* A. Kratter) and St. Augustine 24 Mar (B. Charest; UF 45185 *vide* A. Kratter); 1 at Cape Florida 26 Mar (J. Boyd), and 4 there 28 Mar (R. Diaz); 1 at Fort De Soto Park 9 Apr (W. Yusek et al.); 1 sang at Dunedin Hammock Park (*Pinellas*) 16 Apr (R. Smart).
- OVENBIRD: 20 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell).
- NORTHERN WATERTHRUSH: 3 in *Alachua* 12-24 Mar (M. Meisenburg et al.); 25 at Lake Apopka NSRA 28 Apr, and 2 there to 19 May (H. Robinson).
- LOUISIANA WATERTHRUSH: 1 at Koucky Park (*Leon*) 10 Mar (E. Woodruff); 4 at Cape Florida 25-26 Mar (R. Diaz); 1 at Green Key 1 Apr (K. Tracey); 6 at Lake Apopka NSRA 14 Apr, and 1 there to 17 May (H. Robinson).
- KENTUCKY WARBLER: 4 at Fort De Soto Park 10 Apr (M. Wilkinson); 1 at Sweetwater (*Miami-Dade*) 28 Apr (S. Schneider).
- CONNECTICUT WARBLER: 1 at Fort De Soto Park 5 May (C. Rasmussen); 1 at Wekiwa Springs SP (*Orange*) 7 May, and 4 males there 14 May (R. Poole et al.); 1 at Crandon Park 18 May (J. King); 1 at Cocoa Beach (*Brevard*) 19 May (A. Wood); 2 at Hugh Taylor Birch SP (*Broward*) 20 May (B. Roberts).
- COMMON YELLOWTHROAT: 75 at Lake Apopka NSRA 17 Mar (H. Robinson); 228 at Cape Florida 26 Mar (R. Diaz).
- HOODED WARBLER: 1 at San Felasco Hammock Preserve 11 Mar (P. Burns); 1 male at Cape Florida 26 Mar (J. Boyd); 10 at Fort De Soto Park 9 Apr (L. Atherton), and 18 there 29 Apr (B. Ahern, D. Powell).
- WILSON'S WARBLER: 1 male at Koucky Park 1 Mar (R. Lengacher); 1 male at Fort De Soto Park 18 Mar (C. Gjervold).
- CANADA WARBLER: 1 at A.D. Barnes Park 19 Apr (R. Torres).
- YELLOW-BREASTED CHAT: 1 at Southern Glades WEA 4 Apr (R. Diaz); 1 at Cape Florida 16 Apr (R. Diaz); up to 9 (10 May) at Lake Apopka NSRA 19 Apr-EOS (H. Robinson); 3 males sang at Paynes Prairie Preserve 23 Apr-EOS (J. Hintermister).
- SUMMER TANAGER: 1 at E Orlando 10 Mar (B. Payne); 1 male sang and a female carried nesting material at Babcock-Webb WMA (*Charlotte*) 30 Mar (B. and L. Cooper); there were no previous breeding reports in the county.
- WESTERN SPINDALIS: 1 black-backed male at Gumbo Limbo Trail, Everglades NP (*Miami-Dade*) 23-25 Apr (P. St. John et al., photo to FOC by C. Wood).

- BACHMAN'S SPARROW: 17 at the Croom Tract of Withlacoochee State Forest 2 Mar (M. Gardler).
- CLAY-COLORED SPARROW: 1 at Lake Apopka NSRA to 26 Mar (H. Robinson); 1 at Valrico to 13 Apr (S. Backes).
- FIELD SPARROW: 1 at Inglis Dam 13 Mar (M. Gardler); 1 at Lake Apopka NSRA to 19 Mar (H. Robinson).
- VESPER SPARROW: 4 at Lake Apopka NSRA to 26 Mar (H. Robinson); 1 in E *Hernando* 29 Mar (M. Gardler).
- SAVANNAH SPARROW: 155 at Lake Apopka NSRA 26 Mar, and 1 there to 19 May (H. Robinson); 1 at Lake Jackson 2 May (G. Menk).
- GRASSHOPPER SPARROW: 2 at Lake Apopka NSRA 19 Apr (H. Robinson).
- HENSLOW'S SPARROW: 3 males counter-sang at Kissimmee Prairie Preserve 6 Apr (P. Miller).
- NELSON'S SHARP-TAILED SPARROW: 4 at Salt Springs SP 21 Apr (K. Tracey).
- SONG SPARROW: 1 at Lake Apopka NSRA to 22 Mar (H. Robinson).
- LINCOLN'S SPARROW: singles at Lake Apopka NSRA 1 Mar & 19 Apr (H. Robinson); 1 at Southern Glades WEA 4 Apr (R. Diaz); 1 at Orlando (*Orange*) 20 Apr (D. Freeman); 1 at Dry Tortugas NP 27 Apr (M. Gardler); 1 at Fort De Soto Park 5 May (C. Rasmussen).
- SWAMP SPARROW: 67 at Lake Apopka NSRA 14 Apr, and 1 there to 19 May (H. Robinson); 1 at Lake Jackson 2 May (G. Menk).
- WHITE-THROATED SPARROW: 1 at Fort De Soto Park 9-29 Apr (L. Atherton et al.); 1 at High Springs (*Alachua*) 2 May (D. Robbins).
- WHITE-CROWNED SPARROW: 1 at Lake Apopka NSRA to 23 Apr (H. Robinson).
- DARK-EYED JUNCO: 1 at Fort George Island (*Duval*) 15-18 Apr (R. Clark).
- NORTHERN CARDINAL: 340 at Lake Apopka NSRA 17 Mar (H. Robinson).
- ROSE-BREADED GROSBEAK: 6 at Fort De Soto Park 29 Apr (B. Ahern, D. Powell).
- BLUE GROSBEAK: 2 in *Hardee* 26 Mar (R. Smith); up to 16 (3 & 14 May) at Lake Apopka NSRA all season (H. Robinson).
- INDIGO BUNTING: single adult males at Tallahassee 20 Mar (F. Rutkovsky) and 29 Mar (A. Wraithmell); up to 15 (17 & 21 May) at Lake Apopka NSRA all season (H. Robinson)
- PAINTED BUNTING: 1 female at Allen's Creek Park (*Pinellas*) 4 Mar (L. Childress); 8 at Lake Apopka NSRA 5 Mar (H. Robinson); 1 at E Orlando 10 Mar (B. Payne); 2 at San Felasco Hammock Preserve 12 Mar (P. Burns); 1 male at E *Leon* 19 Mar (*fide* P. McTarsney); 1 at LaCrosse (*Alachua*) 20-27 Mar (*fide* G. Kiltie); 1 male sang at Fort Walton Beach STF 17 May (B. Duncan); 1 female at Winter Park to 20 May (B. Anderson).
- DICKCISSEL: 1 at Hague (*Alachua*) 19 Mar (P. Laipis); 1 male at Fort De Soto Park 22 Apr (L. Atherton et al.); 1 male at Dry Tortugas NP 26 Apr (M. Gardler), and 1 female there 30 Apr (S. Schneider); up to 4 at Lake Apopka NSRA 28 Apr-EOS (H. Robinson).
- BOBOLINK: 14,000 at Lake Apopka NSRA 28 Apr, and 1 to 24 May (H. Robinson); 114 at Green Key Road 28 Apr, 76 there 30 Apr, and 165 there 2 May (K. Tracey et al.); 400 at Merritt Island NWR 28 Apr (D. Freeland); 850+ at St. Augustine 4 May, and 450 there 7 May (J. Kern); 350 at Crystal River Preserve SP (*Citrus*) 12 May (J. Hintermister, D. Robbins); 78 E of Fort Meade (*Polk*) 13 May (T. Palmer).
- YELLOW-HEADED BLACKBIRD: 1 west of Homestead (*Miami-Dade*) 3-5 Mar (B. Mulrooney, A. Harper); 1 male at Ocoee (*Orange*) 8 Apr (E. and R. Nichols).
- RUSTY BLACKBIRD: 3-4 in N *Leon* 12-14 Mar (W. Phelan).
- SHINY COWBIRD: 1 male sang at Coe Visitor Center, Everglades NP (*Miami-Dade*) 4 Mar (J. Boyd); 1 male at Southern Glades WEA 18 Mar-4 Apr (R. Diaz); 2 males at Key West 15 Apr (M. Gardler); up to 6 (4 females, 2 males) at Dry Tortugas NP 16-25 Apr (M. Gardler); 1 male sang at Cedar Key 21 Apr-1 May (D. Henderson); 1 male at Fort De Soto Park 21 Apr (L. Atherton); 1 male at MacDill Air Force Base (*Hillsborough*) 25 Apr (C. Rasmussen); 4 (2 females, 2 males) at Alligator Point (*Franklin*) 30 Apr (J. Murphy); 1 male at Cape Florida 1 May (R. Diaz); 3 at Bald Point 7 May (J. Murphy),

J. Dozier); 1 male at Fort Walton Beach STF 10 May (B. Duncan, M. Myers); 1 female at Lake Apopka NSRA 10 May, and 1 "pair" there 17 May (H. Robinson); 1 male at Big Pine Key (*Monroe*) 24 May (B. Mulrooney); 2 males sang at Captiva Island 26 May (V. McGrath); 1 male and 1 female at Dagny Johnson Key Largo Hammock State Botanical Site (*Monroe*) 24 May (R. Torres).

BRONZED COWBIRD: 1 male at West Kendall 31 Mar (J. Boyd); 2 males and 1 female at Homestead 9 May-EOS (L. Manfredi).

BROWN-HEADED COWBIRD: 250 at Kissimmee Prairie Preserve (*Okeechobee*) 12 Mar (P. Miller).

ORCHARD ORIOLE: singles at Winter Park 25 & 29 Mar (B. Anderson); 1 adult male sang at Lake Jackson 26 Mar (G. Menk); 17 at Lake Apopka NSRA 31 May (H. Robinson).

*BULLOCK'S ORIOLE: 1 female at Tallahassee to 11 Apr (F. Rutkovsky et al.).

HOUSE FINCH: 2 at Mayo 19 Mar (J. Hintermister, D. Robbins); 1 at Horseshoe Beach (*Dixie*) 19 Apr (J. Hintermister); 1 pair nested in a slash pine at St. Petersburg 20-22 Apr (D. and L. Margeson); 2 at Perry (*Taylor*) 28 Apr (J. Hintermister, D. Robbins); 2 pairs were breeding at Fort George Island 15 May (R. Clark); 5 at Beverly Hills 23 May (M. Gardler); 4 males sang throughout the season in downtown Orlando (G. Bretz); 1 yellow morph at Altamonte Springs (*Seminole*) 28 May-EOS (G. Bretz).

PINE SISKIN: 1 female at Columbia City (*Columbia*) 26 Mar (J. Krummrich).

AMERICAN GOLDFINCH: 1 at Lake Apopka NSRA 7 May (H. Robinson); 1 female at Winter Park 11 May (B. Anderson).

ZEBRA FINCH: 1 at Archer (*Alachua*) 14-16 Apr (M. Meisenburg).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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- (5) use the form "7 June 2003" for all dates;
- (6) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 34, No. 4

NOVEMBER 2006

PAGES 115-135

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 1

MARCH 2007

PAGES 1-37



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The *Florida Field Naturalist* is published quarterly (February, May, September, and November) by the Florida Ornithological Society. It is printed by E. O. Painter Printing Co., P.O. Box 877, DeLeon Springs, Florida 32130. The permanent address of the Florida Ornithological Society is Department of Ornithology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611. The Florida Ornithological Society web site can be found at www.fosbirds.org

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 1

MARCH 2007

PAGES 1-37

Florida Field Naturalist 35(1):1-8, 2007.

CHARACTERISTICS OF NEST SITES USED BY CRESTED CARACARAS IN SOUTH-CENTRAL FLORIDA

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Abstract.—Understanding habitat needs of nesting Crested Caracaras (*Caracara cheriway*) requires knowledge about nest trees and nest sites, particularly when surveying areas targeted for conversion projects and planning for habitat restoration. Here, I describe nest sites of breeding pairs of caracaras from 76 different breeding areas in south-central Florida. Most nest sites found were on privately owned cattle ranches. Most nests were built in cabbage palms, and nest trees typically occurred in short-stature pasture or grassland habitat. Nests were generally oriented in a south-southeast direction within the nest tree, and all nest sites had cover (vegetation suitable to hide a fledgling on the ground) within 100 m of the nest tree. Differences in vegetation structure on private and public lands may result from differences in management activities conducted on these lands. Further study to understand how these structural differences influence selection of a nest site by breeding caracaras, their nesting success, and post-fledgling survival, is recommended.

Florida's population of the Crested Caracara (*Caracara cheriway*) occurs in the prairies and grasslands of the south-central peninsula. Believed to be isolated and relatively small, this population is listed as Threatened by both the U.S. Fish and Wildlife Service (USFWS 1987) and the state of Florida (Logan 1997). Historically recorded in prairie ecosystems (Scott 1892, Nicholson 1929, Bent 1938), caracaras are now primarily associated with privately owned cattle ranches (Morrison and Humphrey 2001), although some nesting pairs persist on publicly owned lands such as floodplains along the Kissimmee River owned by the South Florida Water Management District (SFWMD), Avon Park Air Force Range, and the Kissimmee Prairie Preserve State Park.

Over the past decade, conversion of pasture and grassland habitats to urban development in this region has accelerated. More recently, water-holding areas are being constructed in conjunction with the Comprehensive Everglades Restoration Plan (CERP) in pasture and grassland habitats within the Kissimmee River basin and on other SFWMD lands. These conversions have resulted in loss of caracara nest sites and nesting habitat across the region. Availability of suitable nest sites may be a critical factor influencing the distribution and persistence of caracaras in Florida. Permitting for conversion projects increasingly requires information about potential effects of projects on this species. To aid biologists in these evaluations and when planning for habitat restoration, information about nest site characteristics is necessary. In this paper, I describe nest sites used by breeding caracaras in south-central Florida including the nest tree and surrounding habitat.

STUDY AREA AND METHODS

I characterized the nest tree and nest site at 87 active Crested Caracara nests in south central Florida found during 1994-2000 (Morrison and Humphrey 2001), defining active nests as those in which eggs were laid. These nest sites represented 76 different breeding areas within Highlands, Glades, DeSoto, Osceola, Okeechobee, Indian River and Polk counties. Much of this region is characterized by large open expanses of grasslands dotted with numerous shallow ponds, wetlands, and marshes and scattered or small clumps to large hammocks of live oaks (*Quercus virginiana*), cabbage palms (*Sabal palmetto*), pine (*Pinus* spp.), and cypress (*Taxodium* spp.). Principal land uses on private lands include cattle grazing and citrus, sugar cane, and other agricultural production. Lands in state and federal ownership are managed primarily as natural areas (no agricultural production and limited livestock grazing) to support native plant and animal communities.

Seventy-five sites described in this study were on privately owned land, mostly cattle ranches, and 12 were on publicly owned land (Morrison and Humphrey 2001). Caracaras are very site faithful, often using the same nest tree or alternate trees within the same general area among years (distance between alternate nest trees: mean = 0.7 ± 0.1 km, range 0.02-1.6 km). For pairs that used alternate nest trees ($n = 55$, 72%), I included alternate nest trees in data analysis only if they were at least 200 m apart ($n = 11$) to avoid duplication in measurements of ground vegetation and shrub cover within 100 m of each nest tree.

For each nest tree, I recorded tree species, tree height, nest height, and whether it was a single tree, in a group of 2-3 trees, 4-5 trees, 6-10 trees, or >10 trees. I measured the angle of nest orientation within the nest tree as the deviation from north around the central vertical axis of the trunk. Because fledgling caracaras spend much time on the ground (J. Morrison, unpubl. data), I also measured distance from each nest tree to the nearest cover and cover height. I defined cover as any vegetation ≥ 0.5 m in height that would be sufficient to hide a fledgling caracara on the ground, assuming the presence of cover around a nest tree is essential in minimizing exposure of fledglings to predators; for example, eagles, owls, foxes, coyotes, bobcats, and domestic dogs or cats.

To characterize the types and height of vegetation throughout the nest stand at each site, I delineated a 100 m transect extending out in each of the 4 cardinal directions from the nest tree. Then, at 2 m and 10 m from the nest tree and at every subsequent 10 m along each transect out to 100 m, I recorded the height of the herbaceous (grass/forb) layer and height of shrubs. I also identified species and recorded the heights of 10 other

randomly selected trees in the nest stand (within 100 m of the nest tree) at sites where the nest tree was in a group of at least 10 trees. Results are expressed as (mean \pm SE) unless otherwise indicated.

RESULTS

Most (97%) caracara nests were in cabbage palms ($n = 84$), although I recorded one nest in a cypress (Morrison et al. 1997), one in oak, and one in eastern red-cedar (*Juniperus virginiana*). Mean nest tree height was 7.5 m (range 3.5-14.0 m, SE = 0.3 m, $n = 87$). Nest trees ranged from single trees to trees within groups of 2-10 or more (Fig. 1), although nest trees in stands containing >10 trees ($n = 26$) were generally taller (8.3 ± 0.5 m) than other trees in the stand (7.0 ± 0.4 m, one-tailed test, $t = 8.20$, $P < 0.01$, $n = 10$ other trees measured in each nest stand). The ratio of nest height to nest tree height averaged 0.9 ($n = 87$). The orientation of caracara nests in nest trees differed significantly from random with most nests facing in a south-southeast direction (mean angle of nest orientation = 164.4° , angular dispersion = 47.8 , $r = 0.7$, Rayleigh test, $P < 0.01$).

Seventy-five percent of nests had vegetation qualifying as cover within 25 m of the nest tree (Fig. 2), and all nests had vegetation that qualified as cover within 100 m of the nest tree. Common species identified as cover included saw palmetto (*Serenoa repens*), Brazilian pepper (*Schinus terebinthifolius*), wax myrtle (*Myrica cerifera*), and St. John's wort (*Hypericum perforatum*). Cover height in all nest stands

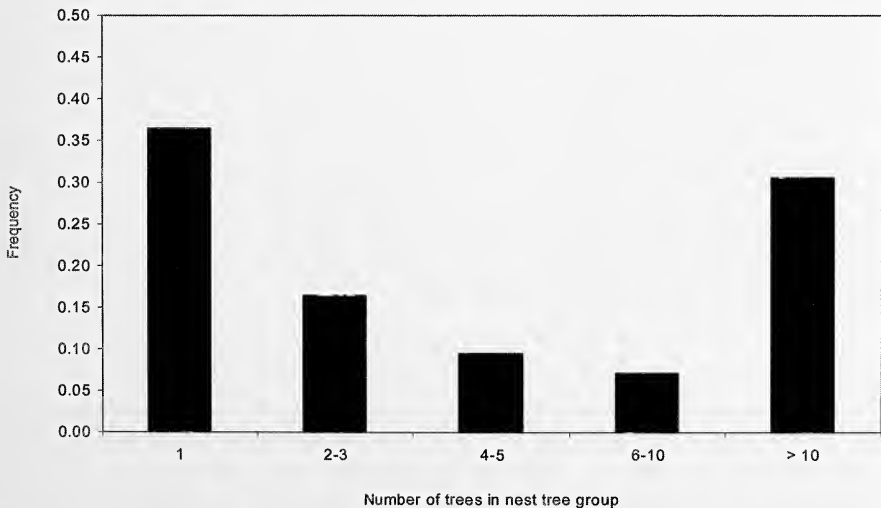


Figure 1. Frequency distribution of the number of trees in the nest tree group for Crested Caracara nests in south-central Florida, 1994-1996. $n = 87$ nests.

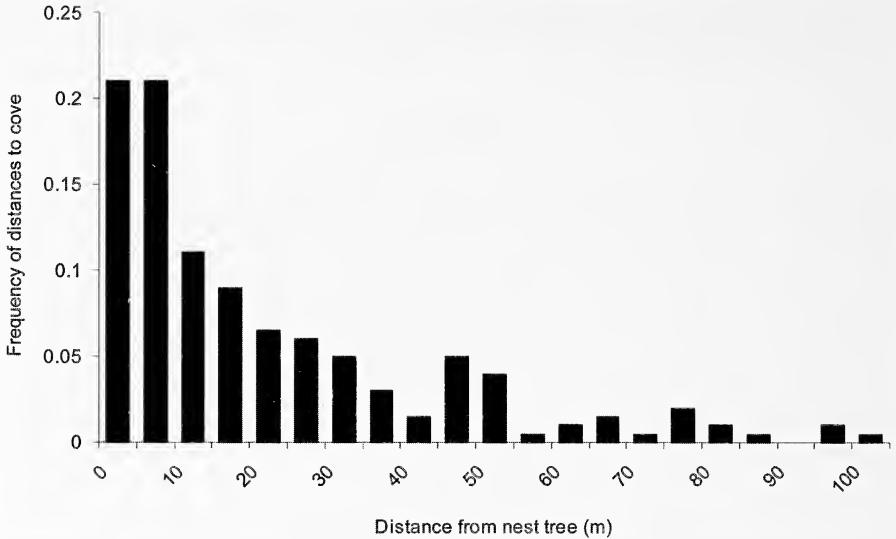


Figure 2. Frequency distribution of distance to cover from the nest tree at Crested Caracara nests in south-central Florida, 1994-1996. $n = 87$ nests.

ranged from 0.5 to 7.0 m (1.6 ± 0.1 m), although heights of vegetation qualifying as cover did not differ among nest sites on public lands and at nest sites on private lands ($t = -1.61$, $P = 0.11$).

Within 100 m of the nest tree, grasses and forbs were shorter at nest sites on private lands (0.2 ± 0.0 m, $n = 75$) than at nest sites on public lands (0.3 ± 0.0 m, $n = 12$, one-tailed test, $t = -11.55$, $P = 0.00$, Fig. 3). More shrubs were recorded along the 4 transects at nest sites on public lands (39 ± 4.4 shrubs per site) than at nest sites on private lands (12 ± 2.7 shrubs per site, one-tailed test, $t = -5.26$, $P < 0.01$). On average, shrubs were taller at nest sites on public lands (1.4 ± 0.4 m, $n = 12$) than at nest sites on private lands (1.1 ± 0.6 m, $n = 75$, one-tailed test, $t = -1.82$, $P = 0.04$, Fig. 4). I found no difference in the number of trees recorded along the 4 transects at nest sites on public lands (30 ± 4.7 trees per site) and at nest sites on private lands (31.5 ± 7.2 trees per site, one-tailed test, $t = 0.17$, $P = 0.87$).

DISCUSSION

Raptor nest sites are typically characterized by structures that provide sufficient nest support and protection from the elements and predators and contain suitable foraging sites and adequate area for the adults and young (Titus and Mosher 1987, Speiser et al. 1998). Site location and habitat structure may be more important than tree species composition to breeding raptors (Bednarz and Dinsmore 1982).

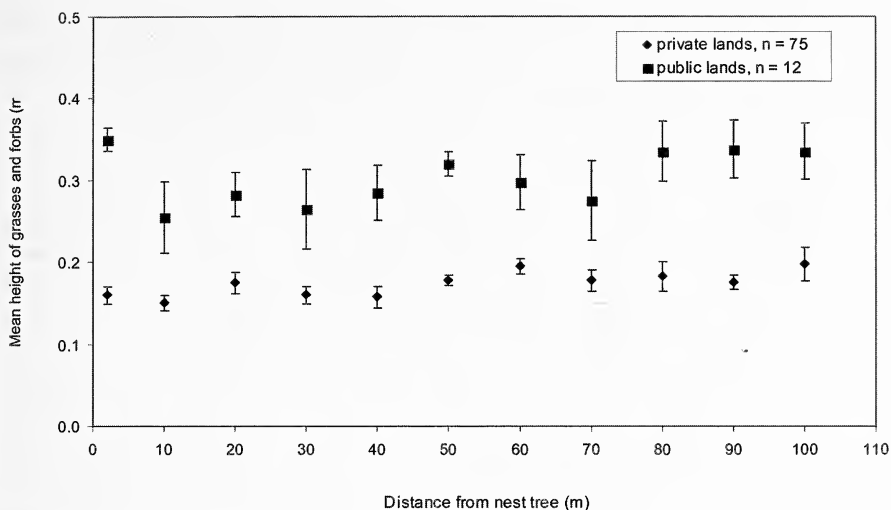


Figure 3. Mean ground cover height within 100 m of Crested Caracara nests on public and private lands in south-central Florida, 1994-1996. $n = 87$ nests.

Throughout their respective ranges, the Crested Caracara and its southern congener, *Caracara plancus*, have been reported nesting in a variety of tree and shrub species, including mesquite (*Prosopis articulata*), elm (*Ulmus* sp.), cardón (*Pachycereus pringlei*), yucca (*Yucca valida*), palo verde (*Cercidium microphyllum*), palo fierro (*Olneya tesota*), palm (*Washingtonia robusta*), McCartney rose (*Rosa bracteata*), and yaupon (*Ilex vomitoria*) (Rivera-Rodríguez and Rodríguez-Estrella 1993, Travaini et al. 1994, Dickinson and Arnold 1996, Goldstein 2000). Among the sites, however, caracara nests share the following: (1) nest support structures typically are isolated and are the tallest structures in the immediate area, and (2) the area around the nest support structure is generally open, for example prairie, pasture, or grassland. Rivera-Rodríguez and Rodríguez-Estrella (1993) suggested that the caracaras' choice of cardóns in the Cape region of Baja California, Mexico may permit construction of bigger and longer-lasting nests in habitat with little tall vegetation. Also commonly reported among these studies is that the canopy of the nest support structure is thick around the nest so the nest is rarely visible from a distance.

I found similar characteristics associated with caracara nest sites in south-central Florida; these raptors nested in isolated or small groups of trees generally surrounded by open pasture or grassland, and habitats on private lands where most nest sites were found contained few shrubs. The overwhelming use of cabbage palms by nesting caracaras may reflect this tree's abundance in the landscape or its suitability as a support structure for the caracara's bulky yet somewhat

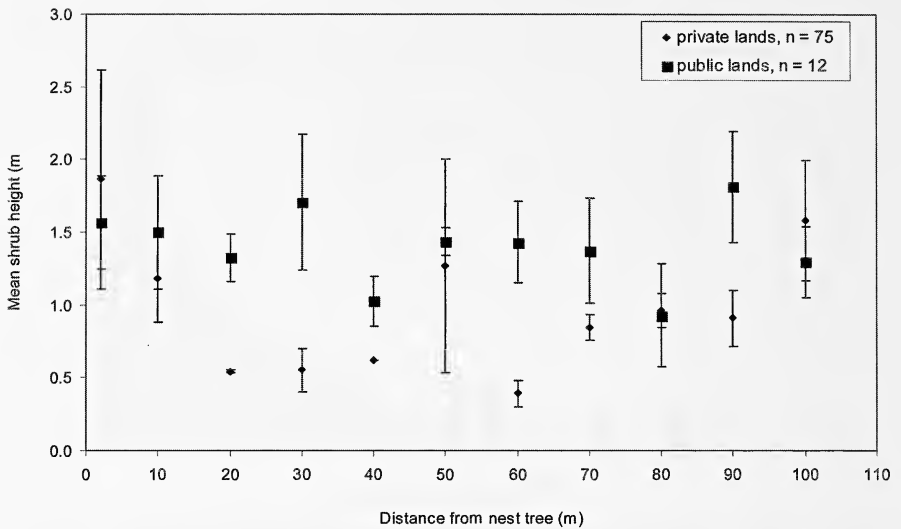


Figure 4. Mean height of shrubs within 100 m of Crested Caracara nests on public and private lands in south-central Florida, 1994-1996. $n = 87$ nests.

flimsy nests, which are typically constructed with thin, long, and dried pieces of vines, weed stalks, briars, twigs, and fruiting clusters of palm (Morrison 1996). Caracara nests were rarely visible in the crown of palms and generally could be seen only by standing directly at the nest tree and looking up into it. Such thick cover around the nest in the nest tree may provide protection for young from inclement weather, excessive insolation, and aerial nest predators such as crows (*Corvus* sp.). Because nests are so concealed, guidelines for nest searching recommend careful inspection of all palm trees at a suspected nest site (Morrison 2000). In addition, planting of palms may be appropriate at sites where habitat is restored with a goal of attracting nesting caracaras.

The finding of a strong orientation of caracara nests in Florida is similar to results reported by Travaini et al. (1994), who suggested that such orientation would protect nests from prevailing, cold winter winds. In Florida, the south-southeastern orientation of caracara nests may provide chicks with greater insolation on cold winter days and protection from prevailing winds that, during the caracara's winter breeding season (November through March, Morrison 1999) come primarily from the northwest.

Differences in the number of nest sites found on public and private lands may reflect selection by caracaras possibly associated with differences in vegetation structure on these two land ownership types. On privately owned cattle ranches, management activities routinely conducted include regular and intensive grazing, burning, mowing, and

plowing, all disturbance activities that reduce shrub cover in favor of grasses (Peroni and Abrahamson 1986). In contrast, reduced or absence of these activities on public lands managed primarily as natural areas may favor growth of shrubs and taller ground cover vegetation. As noted by Morrison and Humphrey (2001), breeding pairs of caracaras are rarely found on public lands, and those pairs attempted breeding during fewer years, initiated egg-laying later, and had lower nesting success than pairs nesting on private lands. While more shrubs at nest sites found on public lands should provide more cover to protect fledglings, more shrubs may also provide more cover for predators. Additionally, caracaras, unlike other raptors, are quite terrestrial and spend much of their foraging time walking about on the ground, thus may favor short ground vegetation as it facilitates foraging or improves their ability to scan for predators. Further study is needed to improve our understanding of how vegetation structural differences on private and public lands may influence selection of a nest site by breeding caracaras, their nesting success, and post-fledgling survival.

Caracaras' selection of nest sites also may vary depending on exposure to humans. I found some pairs nesting close to houses or barns and near roads. Response to habitat conversion within a breeding area and near an active nest may vary among pairs, perhaps according to their prior exposure to human activity (Knight 1984). As suitable nesting habitat continues to be lost to development, displaced breeding pairs of caracaras will be forced to seek other nest sites. While some pairs nest successfully quite close to human activity, recent reports of what seem to be atypical nest sites, for example on a power pole in a sugar cane field (J. Layne, pers. comm.) and near commercial buildings (T. Dean, pers. comm.) may be a consequence of pairs relocating after loss of suitable habitat in parts of the breeding range. Such atypical nests should be monitored to determine breeding success. While other studies have suggested that caracaras can adapt to human activities and moderate habitat changes (Rodríguez-Estrella 1996, pers. obs.), range-wide population declines in Florida are likely to result if continued loss of nest sites occurs.

ACKNOWLEDGMENTS

I sincerely thank V. Dreitz, S. McGehee, D. Todd, and M. McMillian for assistance with field data collection. I also thank landowners throughout south-central Florida who generously provided access to their lands. Their support has been invaluable in facilitating our ability to expand our knowledge of the caracara's nesting ecology. I gratefully acknowledge the cooperation and logistical support provided by personnel at the MacArthur Agro-Ecology Research Center and Archbold Biological Station, particularly J. Fitzpatrick, H. Swain, P. Bohlen, and G. Lollis. Funding was provided by the Avon Park Air Force Range, the Florida Fish and Wildlife Conservation Commission, and the Institute of Food and Agricultural Sciences at the University of Florida in Gainesville. This paper is contribution #102 from the MacArthur Agro-Ecology Research Center of Archbold Biological Station.

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THE AVIFAUNA OF CONSTRUCTED TREATMENT WETLANDS IN SOUTH FLORIDA USED FOR EVERGLADES RESTORATION

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Constructed treatment wetlands invariably create wildlife habitat (Kadlec and Knight 1996, U.S. Environmental Protection Agency 1999, Knight et al. 2001). Habitat improvement can be dramatic, especially when these systems are built on degraded areas such as farm fields (Hickman 1994). The South Florida Water Management District (SF-WMD) and the U.S. Army Corps of Engineers have built a complex of large treatment wetlands, known as Stormwater Treatment Areas (STAs), on reclaimed farmland in south Florida as part of a multi-billion dollar effort by State and Federal governments to protect and restore the Everglades (Chimney and Goforth 2001, Sklar et al. 2005, SFWMD 2006). Current plans call for the STAs to encompass more than 17,000 ha. These wetlands were designed to treat and reduce high phosphorus concentrations in stormwater runoff from the Everglades Agricultural Area (EAA) before this water enters the northern portion of the remaining Everglades, the Water Conservation Areas (WCAs) (Fig. 1). The STAs have attracted a high abundance and diversity of wildlife species, including many birds. This paper presents a checklist of the avifauna found in two of the STAs and compares STA bird community composition and species richness with regional and other treatment wetlands.

METHODS

Birds in two STAs were surveyed: STA-1West (STA-1W) in Palm Beach County (2,699 ha, 26°39' N, 80°25' W) and STA-5 in Hendry County (1,663 ha, 26°26' N, 80°54' W). Both STAs are located within the EAA and are part of a regional landscape dominated by wetlands (Fig. 1). The STAs were built on relict Everglades marshland that had been drained and farmed for decades. Portions of STA-1W were flooded in 1989 and first opened for public birding in 2005; STA-5 was flooded in 1999 and opened for public birding in 2004. Each STA has a perimeter earthen levee that impounds water and various control structures (pump stations, interior levees, culverts, etc.) to manage flow through the system. The STAs are kept inundated except when inflow is restricted during ex-

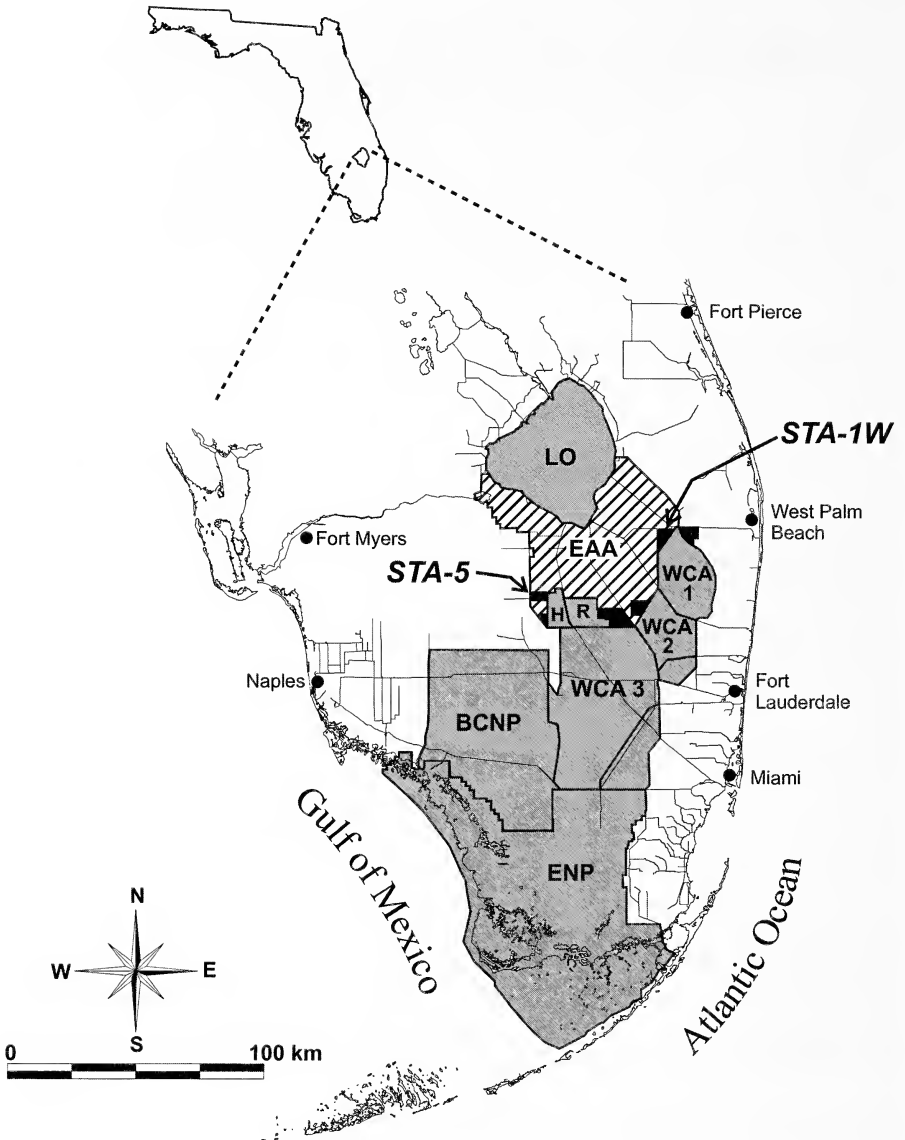


Figure 1. Location of Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) in relation to the Everglades Agricultural Area, the other STAs (black areas), Lake Okeechobee, and major wetland management units (gray areas) in south Florida. More than 40% of the landscape in this region is classified as freshwater habitat. BCNP = Big Cypress National Preserve; EAA = Everglades Agricultural Area; ENP = Everglades National Park; H = Holey Land Wildlife Management Area; LO = Lake Okeechobee; R = Rotenberger Wildlife Management Area; WCA = Water Conservation Areas 1, 2, and 3. Water Conservation Area 1 also is designated as the Arthur R. Marshall Loxahatchee National Wildlife Refuge.

treme droughts or when treatment cells are taken off-line for maintenance. The target depth in these systems is ~0.5 m, but can exceed 1 m after large rain events when the STAs are treating runoff. Water depth in these systems can fluctuate rapidly in response to management activities. Flooded areas in the STAs developed into a mosaic of habitat types that included open-water areas intermixed with stands of *Typha* spp., other emergent marsh species (e.g., arrowhead [*Sagittaria* spp.], spikerush [*Eleocharis* spp.] and pickerelweed [*Pontederia cordata*]), submersed vegetation (e.g., coontail [*Ceratophyllum demersum*], southern naiad [*Najas guadalupensis*] and hydrilla [*Hydrilla verticillata*]) and floating species (e.g., water hyacinth [*Eichhornia crassipes*], water lettuce [*Pistia stratiotes*] and duckweed [*Lemna* spp.]). The STA levees, access roads and adjacent lands were upland areas that include grassed, old-field, and woodland habitats.

A master bird list was compiled for each STA by combining species identifications made by one of us (DEG) on 84 occasions in STA-1W from May 1995 to November 1997 (primarily winter and spring), by amateur ornithologists from local Audubon Society chapters in both STAs during fall, winter and spring (12 trips to STA-1W from September 2005 to March 2006; 15 trips to STA-5 from February 2004 to March 2006) and other incidental sightings. The accuracy of identifications made by citizen volunteers can be comparable to data collected by professional biologists (Hoyer et al. 2001). We did not estimate individual species densities from our survey data, but did ascertain the more abundant bird groups. Birds seen on at least 50% of all trips to each STA from 2004 to 2006 were designated as "frequent" species. The nomenclature, classification and sequence of each species followed American Ornithologists' Union (2006); habitat preferences are from American Ornithologists' Union (1998). The protective status of birds was based on Florida Fish and Wildlife Conservation Commission (2004). Breeding status and seasonality of birds in south Florida was based on distribution maps and descriptions provided in Robertson and Kushlan (1974), Robertson and Woolfenden (1992), Ridgely et al. (2003) and U.S. Fish & Wildlife Service (2006). Wetland bird species richness in the STAs, the Arthur R. Marshall Loxahatchee National Wildlife Refuge (LNWR; see Fig. 1) and a subset of treatment wetlands (Knight et al. 1993, USEPA 1999) was fit to wetland surface area as a power function: $S = cA^z$, where S is species richness, A is surface area, c is a constant and z is the slope of the regression (Gotelli 2001).

RESULTS

A total of 139 bird species representing 39 families was observed in the STAs; 100 species in 31 families occurred in STA-1W, whereas STA-5 had 118 species in 38 families (Table 1). Combined, the two STAs had 20 of the 21 families identified by Kadlec and Knight (1996) as common in North American treatment wetlands. Wading birds (Ciconiiformes, 15 species), shorebirds (Charadriiformes, 31 species), gallinules and coots (Gruiformes, 7 species) and ducks (Anseriformes, 16 species) were often numerically abundant in the STAs as were perching birds (Passeriformes, 39 species) on occasion. Twenty-eight of the 35 frequently observed species belonged to these aforementioned groups. Sixteen species are State and/or Federally listed as Endangered, Threatened or a Species of Special Concern. Seventy-two species are classified as residents and are known to breed in south Florida. Six frequent species (Osprey [*Pandion haliaetus*], Roseate Spoonbill [*Platalea ajaja*], Snowy Egret [*Egretta thula*], Tricolored Heron [*Egretta*

Table 1. Checklist of birds observed in Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) including seasonality, breeding and protective status and habitat preference. + = species present, * = frequently observed species listed on at least 50% of all surveys in that STA. Status key: E = endangered (Federal), e = endangered (State), s = species of special concern (State), T = threatened (Federal), t = threatened (State), R = breeding resident, R_e = exotic resident, S = uncommon straggler (non-breeding), M = transient migrant (non-breeding), V = seasonal visitor (non-breeding). Habitat preference key: A = aquatic, U = upland.

| Order | | | | | | |
|-------------------|----------------------------------|------------------------------|--------|-------|-------------------|---------|
| Family | Species Name | Common Name | STA-1W | STA-5 | Status | Habitat |
| Anseriformes | | | | | | |
| Anatidae | Ducks, Geese, & Swans | | | | | |
| | <i>Dendrocygna autumnalis</i> | Black-bellied Whistling-duck | + | * | V | A |
| | <i>Dendrocygna bicolor</i> | Fulvous Whistling-duck | + | * | R | A |
| | <i>Anser albifrons</i> | Greater White-fronted Goose | + | | V | A |
| | <i>Aix sponsa</i> | Wood Duck | | + | R | A |
| | <i>Anas americana</i> | American Wigeon | | + | V | A |
| | <i>Anas platyrhyncho</i> | Mallard | | + | V | A |
| | <i>Anas fulvigula</i> | Mottled Duck | + | * | R | A |
| | <i>Anas discors</i> | Blue-winged Teal | * | * | V | A |
| | <i>Anas cyanoptera</i> | Cinnamon Teal | | + | V | A |
| | <i>Anas clypeata</i> | Northern Shoveler | + | + | V | A |
| | <i>Anas acuta</i> | Northern Pintail | + | + | V | A |
| | <i>Anas crecca</i> | Green-winged Teal | | + | V | A |
| | <i>Aythya collaris</i> | Ring-necked Duck | + | * | V | A |
| | <i>Aythya affinis</i> | Lesser Scaup | | + | V | A |
| | <i>Lophodytes cucullatus</i> | Hooded Merganser | + | | V | A |
| | <i>Oxyura jamaicensis</i> | Ruddy Duck | | + | V | A |
| Podicipediformes | | | | | | |
| Podicipedidae | Grebes | | | | | |
| | <i>Podilymbus podiceps</i> | Pied-billed Grebe | + | + | R | A |
| Pelecaniformes | | | | | | |
| Pelecanidae | Pelicans | | | | | |
| | <i>Pelecanus erythrorhynchos</i> | American White Pelican | + | + | V | A |
| | <i>Pelecanus occidentalis</i> | Brown Pelican | + | + | R _e ,s | A |
| Phalacrocoracidae | Cormorants | | | | | |
| | <i>Phalacrocorax auritus</i> | Double-crested Cormorant | * | * | R | A |
| Anhingidae | Darters | | | | | |
| | <i>Anhinga anhinga</i> | Anhinga | * | * | R | A |
| Ciconiiformes | | | | | | |
| Ardeidae | Herons, Bitterns, & Allies | | | | | |
| | <i>Botaurus lentiginosus</i> | American Bittern | + | + | V | A |
| | <i>Ixobrychus exilis</i> | Least Bittern | + | + | R | A |
| | <i>Ardea herodias</i> | Great Blue Heron | * | * | R | A |
| | <i>Ardea alba</i> | Great Egret | * | * | R | A |

Table 1. (Continued) Checklist of birds observed in Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) including seasonality, breeding and protective status and habitat preference. + = species present, * = frequently observed species listed on at least 50% of all surveys in that STA. Status key: E = endangered (Federal), e = endangered (State), s = species of special concern (State), T = threatened (Federal), t = threatened (State), R = breeding resident, R_e = exotic resident, S = uncommon straggler (non-breeding), M = transient migrant (non-breeding), V = seasonal visitor (non-breeding). Habitat preference key: A = aquatic, U = upland.

| Order | | | | | | |
|---------------------------------|--------------------------------|---|--------|-------|--------|---------|
| Family | | | STA-1W | STA-5 | Status | Habitat |
| Species Name | Common Name | | | | | |
| <i>Egretta thula</i> | Snowy Egret | * | + | R,s | A | |
| <i>Egretta caerulea</i> | Little Blue Heron | * | + | R,s | A | |
| <i>Egretta tricolor</i> | Tricolored Heron | * | * | R,s | A | |
| <i>Bubulcus ibis</i> | Cattle Egret | * | * | R | A/U | |
| <i>Butorides virescens</i> | Green Heron | + | * | R | A | |
| <i>Nycticorax nycticorax</i> | Black-crowned Night-heron | + | + | R | A | |
| <i>Nyctanassa violacea</i> | Yellow-crowned Night-heron | | + | R | A | |
| Threskiornithidae | Ibises & Spoonbills | | | | | |
| <i>Eudocimus albus</i> | White Ibis | * | + | R,s | A | |
| <i>Plegadis falcinellus</i> | Glossy Ibis | * | * | R | A | |
| <i>Platalea ajaja</i> | Roseate Spoonbill | * | + | R,s | A | |
| Ciconiidae | Storks | | | | | |
| <i>Mycteria americana</i> | Wood Stork | * | + | R,E,e | A | |
| Cathartidae | New World Vultures | | | | | |
| <i>Coragyps atratus</i> | Black Vulture | + | * | R | U | |
| <i>Cathartes aura</i> | Turkey Vulture | + | * | R | U | |
| Phoenicopteriformes | | | | | | |
| Phoenicopteridae | Flamingos | | | | | |
| <i>Phoenicopterus ruber</i> | Greater Flamingo | | + | S | A | |
| Falconiformes | | | | | | |
| Accipitridae | Hawks, Kites, Eagles, & Allies | | | | | |
| <i>Pandion haliaetus</i> | Osprey | * | + | R,s | A | |
| <i>Elanoides forficatus</i> | Swallow-tailed Kite | | + | R | U | |
| <i>Rostrhamus sociabilis</i> | Snail Kite | + | | R,E,e | A | |
| <i>Haliaeetus leucocephalus</i> | Bald Eagle | * | + | R,T,t | A | |
| <i>Circus cyaneus</i> | Northern Harrier | + | + | V | A/U | |
| <i>Accipiter striatus</i> | Sharp-shinned Hawk | | + | V | U | |
| <i>Accipiter cooperii</i> | Cooper's Hawk | + | + | V | U | |
| <i>Buteo lineatus</i> | Red-shouldered Hawk | + | + | R | A/U | |
| <i>Buteo jamaicensis</i> | Red-tailed Hawk | | * | R | U | |
| Falconidae | Caracaras & Falcons | | | | | |
| <i>Caracara cheriway</i> | Crested Caracara | | + | R,T,t | U | |
| <i>Falco sparverius</i> | American Kestrel | + | + | R,T | U | |
| <i>Falco columbarius</i> | Merlin | | + | V | A/U | |
| <i>Falco peregrinus</i> | Peregrine Falcon | + | + | R,e | A/U | |

Table 1. (Continued) Checklist of birds observed in Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) including seasonality, breeding and protective status and habitat preference. + = species present, * = frequently observed species listed on at least 50% of all surveys in that STA. Status key: E = endangered (Federal), e = endangered (State), s = species of special concern (State), T = threatened (Federal), t = threatened (State), R = breeding resident, R_e = exotic resident, S = uncommon straggler (non-breeding), M = transient migrant (non-breeding), V = seasonal visitor (non-breeding). Habitat preference key: A = aquatic, U = upland.

| Order | | STA-1W | STA-5 | Status | Habitat |
|------------------------|--------------------------------|---------------------------------|-------|--------|------------------|
| Family | Species Name | Common Name | | | |
| Gruiformes | | | | | |
| Rallidae | | Rails, Gallinules, & Coots | | | |
| | <i>Rallus elegans</i> | King Rail | + | | R A |
| | <i>Porzana carolina</i> | Sora | + | + | V A |
| | <i>Porphyrio martinica</i> | Purple Gallinule | + | + | R A |
| | <i>Porphyrio porphyrio</i> | Purple Swamphen | + | + | R _e A |
| | <i>Gallinula chloropus</i> | Common Moorhen | * | * | R A |
| | <i>Fulica americana</i> | American Coot | * | * | R A |
| Aramidae | | Limpkin | | | |
| | <i>Aramus guarauna</i> | Limpkin | + | + | R,s A |
| Charadriiformes | | | | | |
| Charadriidae | | Plovers | | | |
| | <i>Pluvialis squatarola</i> | Black-bellied Plover | + | + | V A |
| | <i>Pluvialis dominica</i> | American Golden-Plover | | + | M A/U |
| | <i>Charadrius semipalmatus</i> | Semipalmated Plover | + | | V A |
| | <i>Charadrius vociferus</i> | Killdeer | * | * | R A/U |
| Recurvirostridae | | Stilts & Avocets | | | |
| | <i>Himantopus mexicanus</i> | Black-necked Stilt | * | * | R A |
| | <i>Recurvirostra americana</i> | American Avocet | + | + | V A |
| Scolopacidae | | Sandpipers & Allies | | | |
| | <i>Tringa solitaria</i> | Solitary Sandpiper | + | | M A |
| | <i>Tringa melanoleuca</i> | Greater Yellowlegs | + | * | V A |
| | <i>Tringa flavipes</i> | Lesser Yellowlegs | * | + | V A |
| | <i>Tringa semipalmata</i> | Willet | + | + | R A |
| | <i>Arenaria interpres</i> | Ruddy Turnstone | + | | V A |
| | <i>Calidris alba</i> | Sanderling | + | | V A |
| | <i>Calidris mauri</i> | Western Sandpiper | + | | V A |
| | <i>Calidris minutilla</i> | Least Sandpiper | * | * | V A |
| | <i>Calidris melanotos</i> | Pectoral Sandpiper | + | + | M A |
| | <i>Calidris alpina</i> | Dunlin | + | + | V A |
| | <i>Calidris himantopus</i> | Stilt Sandpiper | + | + | V A |
| | <i>Philomachus pugnax</i> | Ruff | | + | V A |
| | <i>Limnodromus griseus</i> | Short-billed Dowitcher | + | + | V A |
| | <i>Limnodromus scolopaceus</i> | Long-billed Dowitcher | + | + | V A |
| | <i>Gallinago delicata</i> | Wilson's Snipe | + | + | V A |
| Laridae | | Skuas, Gulls, Terns, & Skimmers | | | |
| | <i>Larus atricilla</i> | Laughing Gull | + | | R A |

Table 1. (Continued) Checklist of birds observed in Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) including seasonality, breeding and protective status and habitat preference. + = species present, * = frequently observed species listed on at least 50% of all surveys in that STA. Status key: E = endangered (Federal), e = endangered (State), s = species of special concern (State), T = threatened (Federal), t = threatened (State), R = breeding resident, R_e = exotic resident, S = uncommon straggler (non-breeding), M = transient migrant (non-breeding), V = seasonal visitor (non-breeding). Habitat preference key: A = aquatic, U = upland.

| Order | | | | | | |
|--|--------------------------|--------|-------|----------------|---------|--|
| Family | | STA-1W | STA-5 | Status | Habitat | |
| Species Name | Common Name | | | | | |
| <i>Larus delawarensis</i> | Ring-billed Gull | + | + | V | A | |
| <i>Larus argentatus</i> | Herring Gull | | + | V | A | |
| <i>Larus fuscus</i> | Lesser Black-backed Gull | | + | V | A | |
| <i>Sternula antillarum</i> | Least Tern | + | | R,t | A | |
| <i>Gelochelidon nilotica</i> | Gull-billed Tern | + | | R | A | |
| <i>Hydroprogne caspia</i> | Caspian Tern | * | + | V | A | |
| <i>Sterna forsteri</i> | Forster's Tern | + | | V | A | |
| <i>Thalasseus maximus</i> | Royal Tern | + | | R | A | |
| <i>Rynchops niger</i> | Black Skimmer | + | + | R,s | A | |
| Columbiformes | | | | | | |
| Columbidae Pigeons & Doves | | | | | | |
| <i>Columba livia</i> | Rock Pigeon | + | + | R _e | U | |
| <i>Streptopelia decaocto</i> | Eurasian Collared-Dove | | + | R _e | U | |
| <i>Zenaida asiatica</i> | White-winged Dove | + | | R | U | |
| <i>Zenaida macroura</i> | Mourning Dove | + | + | R | U | |
| <i>Columbina passerina</i> | Common Ground-Dove | + | + | R | U | |
| Cuculiformes | | | | | | |
| Cuculidae Cuckoos, Roadrunners, & Anis | | | | | | |
| <i>Crotophaga ani</i> | Smooth-billed Ani | + | | R | A/U | |
| Strigiformes | | | | | | |
| Strigidae Typical Owls | | | | | | |
| <i>Strix varia</i> | Barred Owl | | + | R | A/U | |
| Caprimulgiformes | | | | | | |
| Caprimulgidae Goatsuckers | | | | | | |
| <i>Chordeiles minor</i> | Common Nighthawk | | + | R | U | |
| Coraciiformes | | | | | | |
| Alcedinidae Kingfishers | | | | | | |
| <i>Ceryle alcyon</i> | Belted Kingfisher | + | + | R | A | |
| Piciformes | | | | | | |
| Picidae Woodpeckers & Allies | | | | | | |
| <i>Melanerpes carolinus</i> | Red-bellied Woodpecker | + | + | R | U | |
| Passeriformes | | | | | | |
| Tyrannidae Tyrant flycatchers | | | | | | |
| <i>Sayornis phoebe</i> | Eastern Phoebe | | + | V | U | |
| <i>Myiarchus crinitus</i> | Great Crested Flycatcher | | + | R | U | |

Table 1. (Continued) Checklist of birds observed in Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) including seasonality, breeding and protective status and habitat preference. + = species present, * = frequently observed species listed on at least 50% of all surveys in that STA. Status key: E = endangered (Federal), e = endangered (State), s = species of special concern (State), T = threatened (Federal), t = threatened (State), R = breeding resident, R_e = exotic resident, S = uncommon straggler (non-breeding), M = transient migrant (non-breeding), V = seasonal visitor (non-breeding). Habitat preference key: A = aquatic, U = upland.

| Order | | | | | | |
|-----------------------------------|-------------------------------|----|------|----------------|--------|---------|
| Family | | | STA- | STA- | Status | Habitat |
| Species Name | Common Name | 1W | 5 | | | |
| Laniidae | Shrikes | | | | | |
| <i>Lanius ludovicianus</i> | Loggerhead Shrike | + | + | R | | U |
| Vireonidae | Vireos | | | | | |
| <i>Vireo griseus</i> | White-eyed Vireo | | + | R | | U |
| Corvidae | Crows & Jays | | | | | |
| <i>Cyanocitta cristata</i> | Blue Jay | + | + | R | | U |
| <i>Corvus brachyrhynchos</i> | American Crow | | + | R | | U |
| <i>Corvus ossifragus</i> | Fish Crow | + | + | R | | A |
| Hirundinidae | Swallows | | | | | |
| <i>Progne subis</i> | Purple Martin | + | + | R | | U |
| <i>Tachycineta bicolor</i> | Tree Swallow | + | * | V | | U |
| <i>Stelgidopteryx serripennis</i> | Northern Rough-winged Swallow | + | + | V | | U |
| <i>Petrochelidon pyrrhonota</i> | Cliff Swallow | | + | M | | A |
| <i>Hirundo rustica</i> | Barn Swallow | | + | M | | A/U |
| Troglodytidae | Wrens | | | | | |
| <i>Troglodytes aedon</i> | House Wren | | + | V | | U |
| Sylviidae | Old World Warblers | | | | | |
| <i>Poliophtila caerulea</i> | Blue-gray Gnatcatcher | + | + | R | | U |
| Turdidae | Thrushes | | | | | |
| <i>Sialia sialis</i> | Eastern Bluebird | | + | R | | U |
| <i>Turdus migratorius</i> | American Robin | | + | V | | U |
| Mimidae | Mockingbirds & Thrashers | | | | | |
| <i>Dumetella carolinensis</i> | Gray Catbird | | + | V | | U |
| <i>Mimus polyglottos</i> | Northern Mockingbird | + | + | R | | U |
| Sturnidae | Starlings | | | | | |
| <i>Sturnus vulgaris</i> | European Starling | + | + | R _e | | U |
| Parulidae | Wood-Warblers | | | | | |
| <i>Parula americana</i> | Northern Parula | | + | R | | A/U |
| <i>Dendroica petechia</i> | Yellow Warbler | | + | R | | U |
| <i>Dendroica coronata</i> | Yellow-rumped Warbler | + | + | V | | U |
| <i>Dendroica discolor</i> | Prairie Warbler | + | | R | | U |
| <i>Dendroica palmarum</i> | Palm Warbler | * | + | V | | U |
| <i>Minotilta varia</i> | Black-and-white Warbler | | + | V | | U |
| <i>Seiurus noveboracensis</i> | Northern Waterthrush | + | | M | | A |
| <i>Geothlypis trichas</i> | Common Yellowthroat | + | + | R | | A |
| Emberizidae | Emberizids | | | | | |
| <i>Pipilo erythrophthalmus</i> | Eastern Towhee | + | | R | | U |

Table 1. (Continued) Checklist of birds observed in Stormwater Treatment Areas 1-West and 5 (STA-1W and STA-5) including seasonality, breeding and protective status and habitat preference. + = species present, * = frequently observed species listed on at least 50% of all surveys in that STA. Status key: E = endangered (Federal), e = endangered (State), s = species of special concern (State), T = threatened (Federal), t = threatened (State), R = breeding resident, R_e = exotic resident, S = uncommon straggler (non-breeding), M = transient migrant (non-breeding), V = seasonal visitor (non-breeding). Habitat preference key: A = aquatic, U = upland.

| Order | Family | Species Name | Common Name | STA-1W | STA-5 | Status | Habitat |
|-------|--------------|----------------------------------|-------------------------------|--------|-------|----------------|---------|
| | | <i>Spizella pusilla</i> | Field Sparrow | | + | V | U |
| | | <i>Passerculus sandwichensis</i> | Savannah Sparrow | + | + | V | A |
| | | <i>Melospiza georgiana</i> | Swamp Sparrow | + | | V | A/U |
| | Cardinalidae | | Cardinal, Saltators, & Allies | | | | |
| | | <i>Cardinalis cardinalis</i> | Northern Cardinal | + | | R | U |
| | | <i>Passerina ciris</i> | Painted Bunting | | + | V | U |
| | Icteridae | | Blackbirds | | | | |
| | | <i>Agelaius phoeniceus</i> | Red-winged Blackbird | * | * | R | A |
| | | <i>Sturnella magna</i> | Eastern Meadowlark | + | + | R | U |
| | | <i>Quiscalus quiscula</i> | Common Grackle | | + | R | A/U |
| | | <i>Quiscalus major</i> | Boat-tailed Grackle | * | * | R | A/U |
| | | <i>Molothrus ater</i> | Brown-headed Cowbird | | + | V | U |
| | Passeridae | | Old World Sparrows | | | | |
| | | <i>Passer domesticus</i> | House Sparrow | | + | R _e | U |

tricolor], White Ibis [*Eudocimus albus*], and Wood Stork [*Mycteria americana*]) are both State/Federally listed and breed in the region. The STAs were used by many migratory species, often in great numbers, during the spring and fall (e.g., American White Pelican [*Pelecanus erythrorhynchos*], Black-bellied Whistling-Duck [*Dendrocygna autumnalis*], Blue-winged Teal [*Anas discors*], Lesser Yellowlegs [*Tringa flavipes*] and Black-necked Stilt [*Himantopus mexicanus*]). Sixty-nine percent of STA bird species preferred aquatic habitats or shared an affinity for both aquatic and upland areas. However, all pigeons and doves, and many of the raptors and perching birds are considered upland species.

DISCUSSION

Bird diversity and abundance in wetlands is influenced by a number of variables such as wetland surface area (Reaves and Croteau-Hartman 1994), water depth (Breininger and Smith 1990, Twedt et al. 1998, Bancroft et al. 2002), composition of the vegetation community (Johnson and Montalbano 1984, Bancroft et al. 2002), prey availability

(Gawlik 2002) and trophic status (Hoyer and Canfield 1994, Crozier and Gawlik 2002). High quality upland habitat immediately adjacent to wetlands also attracts a number of species that may be only facultative wetland inhabitants (Kent 1994, Knight et al. 2001). The STAs shared 91% of their avifauna with the LNWR (USFWS 2006), but only 78% with the EAA (Pearlstine et al. 2005). The EAA notably had fewer co-occurring species of perching birds and ducks, which may be related to its limited shrub habitat and type of wetlands (largely restricted to rice fields, flooded fallow fields and drainage canals). Differences in surface area accounted for slightly more than one-half of the variance in bird species richness among wetlands ($r^2 = 0.59$, $p < 0.01$) (Fig. 2). The unexplained variance can be attributed to the other species-habitat relationships noted above (Rafe et al. 1985) or factors such as differences in sampling methods among investigators.

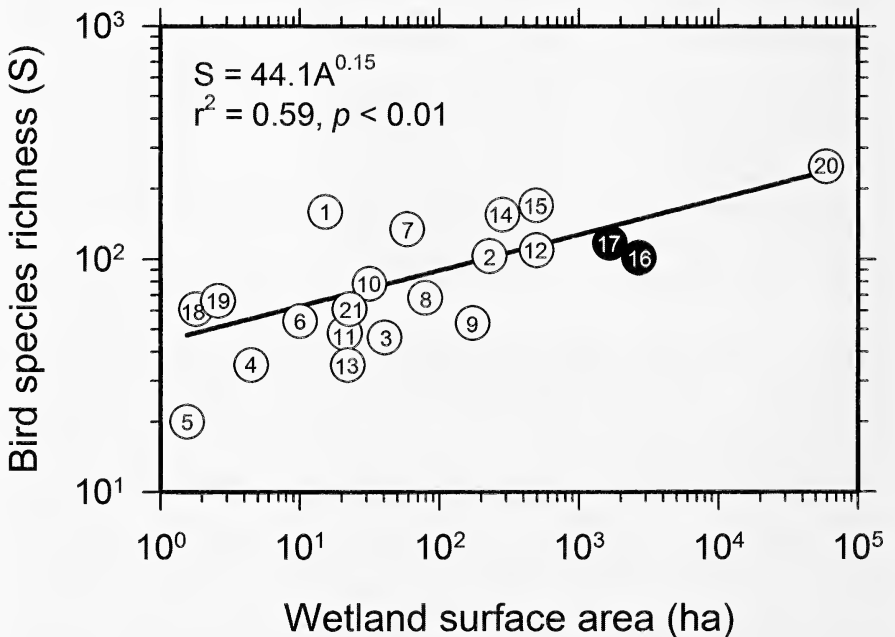


Figure 2. Species-area curve for wetland bird communities. Symbol key: 1 = Arcata (CA), 2 = Bear Bay (SC), 3 = Biwabik (MN), 4 = Collins (MS), 5 = Cypress Domes (FL), 6 = Des Plaines (IL), 7 = Hayward (CA), 8 = Houghton Lake (MI), 9 = Incline Village (NV), 10 = Lake Buena Vista (FL), 11 = Lake Coral (FL), 12 = Lakeland (FL), 13 = Ocean Springs (MS), 14 = Orlando Easterly (FL), 15 = Show Low (AZ), 16 = STA-1W (FL), 17 = STA-5 (FL), 18 = Tres Rios Cobble (AZ), 19 = Tres Rios Hayfield (AZ), 20 = LNWR (FL), 21 = West Jackson County (MS). Data sources: 1-9, 12, 15, 18, 19, & 21 (USEPA 1999); 10 (Kent and Langston 2000); 11 (Knight et al. 1985); 13 (Kadlec and Knight 1996); 14 (M. Sees pers. comm.); 16 & 17 (this paper); 20 (USFWS 2006). All systems except LNWR are treatment wetlands.

The bird assemblage in the STAs was not static. The periodic influx of large numbers of birds of a single species or group of species into the STAs generally occurred under one of two circumstances. The first was associated with large numbers of migrating birds moving into the area that found the STAs suitable habitat. Seasonal migrants accounted for the high concentrations of Tree Swallows, Blue-winged Teal and other waterfowl. The STAs at normal operating depth (~0.5 to 1.0 m) afforded birds with moderate to deep-water marsh habitat. The sharp increases in bird abundance during the fall and spring was somewhat predictable, but varied in magnitude from year to year, probably because of external factors such as annual recruitment and habitat suitability of the surrounding landscape.

The second circumstance that produced dramatic increases in bird abundance occurred when water depth in the STAs decreased during recessions. In this case, the habitat changed quickly and local birds attracted to shallow water (e.g., wading- and shorebirds) moved in to exploit it. An example of this situation occurred in March 1996 when water levels in portions of STA-1W rapidly fell from depths that approached 1 m to 0.2 m or less. A group of over 1000 herons, egrets, ibis and Wood Storks, many of which had been feeding in the surrounding area, quickly moved in and began feeding in the drying marsh. Although we did not continue observations, we suspect that as soon as water levels increased to normal, most of the wading birds would have returned to their previous feeding areas. A similar managed drawdown in winter 2005 of a substantial portion of STA-1W that contained little emergent vegetation attracted a great number of shorebirds. The influx of birds into the STAs in response to falling water levels has occurred on other occasions; these events were driven by management activities and therefore were unpredictable from the bird's perspective or occurred during prolonged regional droughts. The proximate factor for the increase in bird density was likely a sharp increase in food availability (Gawlik 2002) because prey was suddenly more vulnerable to being captured. This situation differed from seasonal migrations in that the increase in bird abundance was from a redistribution of local birds rather than a regional influx of migrants and it was caused by a short-term change in the habitat (i.e., water depth) rather than from long-term processes that structure vegetation, such as trophic status.

The two situations that cause high bird abundance in the STAs are not mutually exclusive and it is possible that a decrease in water depth that coincides with seasonal bird migration could result in very high bird density and diversity. Such a convergence of events contributed to the high diversity of shorebirds in STA-1W. Although the STAs are operated as treatment systems to reduce nutrients in stormwater runoff, bird use of these areas is extensive and dependent on variable wetland conditions, much like in natural wetlands.

ACKNOWLEDGMENTS

We thank the many Audubon Society members for their interest in documenting the avifauna of the STAs and Margaret England (Hendry-Glades Audubon Society), Vincent Lucas (Tropical Audubon Society), Bijaya Kattel (SFWMD), and Ann McElhatton (Florida Atlantic University) for sharing this information with us. The paper was improved based on helpful comments from Mark Cook, Bijaya Kattel, Jana Newman, Scott Robinson, Seán Sculley, Gary Williams and two anonymous reviewers.

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FIRST RECORD OF NORTHERN FULMAR (*FULMARUS GLACIALIS*) FOR FLORIDA, AND NOTES ON OTHER NORTH ATLANTIC SEABIRD SPECIMEN RECORDS IN 2004-2005

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Wildlife rehabilitation clinics offer an outstanding opportunity to document the status and distribution of birds. In Florida alone, over 200 licensed people and clinics collectively take in tens of thousands of birds each year (*vide* Florida Fish and Wildlife Conservation Commission; FFWCC). Most of these birds, which are injured or sick, are found by concerned citizens and brought to the clinics for rehabilitation and eventual release back to the wild. However, severe injuries and prolonged starvation result in unavoidable mortality rates of 25-40% at most clinics. Individuals of species away from their normal distribution or season of occurrence are particularly prone to be encountered in a weakened state, in part because that species may not be adapted to find food or escape predation in those circumstances. For the past eight years, the Florida Museum of Natural History (FLMNH) has been working with wildlife rehabilitation clinics in Florida to gather specimens that die in the clinics for the research collections at the FLMNH. This very successful program (see Kratter et al. 2002), generously funded in 2003-2005 by the FFWCC, has added 1,000s of new, high-quality specimens to the FLMNH.

In the winter and spring seasons of 2004-2005, a number of especially interesting seabirds were found beached and in a weakened state on the coasts of Florida. These individuals were brought to wildlife rehabilitation clinics where most did not recover. The specimens were eventually brought to the FLMNH, where they were prepared as research specimens. These specimen records were part of a larger incursion of north Atlantic seabirds into the southeastern United States during the winter and spring of 2004-2005 (Davis 2005a, 2005b). In this paper, we provide documentation for the first Florida record of Northern Fulmar (*Fulmarus glacialis*), the second record for Atlantic Puffin (*Fratercula arctica*), the eleventh Florida record of Razorbill (*Alca torda*), and three records of the locally rare Black-legged Kittiwake (*Rissa tridactyla*).

On 19 April 2005, an unknown petrel was found in a weakened state at Satellite Beach, Brevard Co., and brought to the nearby Florida Wildlife Hospital in Melbourne. The staff at FWH correctly identified the bird as a Northern Fulmar (Fig. 1). The weakened bird, however, did not gain weight and died two days later at the FWH. In June 2005, AWK retrieved the specimen and prepared a round study skin, spread wing, and partial skeleton for the FLMNH research collections (UF 44664). Two samples of heart, liver, and flight muscle were saved, one each for the genetic resource collections at FLMNH and at Louisiana State University Museum of Natural Science.

The fulmar was a second year (hatched 2004) male, as indicated during dissection of the specimen. The testes were small (3×1 mm), and a large (16×11 mm) bursa was present (the bursa is an outpocketing of the terminal end of the intestines that is present in juvenile birds and gradually assimilated over the first year). The bird appeared to be just beginning to molt from juvenal to first basic plumage. The remiges were lightly worn, with no molt. The rectrices, also not molting, were somewhat more worn, typical for seabirds in juvenal plumage, because the rectrices wear faster than the wings as they develop before fledging. The bird had moderate overall body molt. Northern

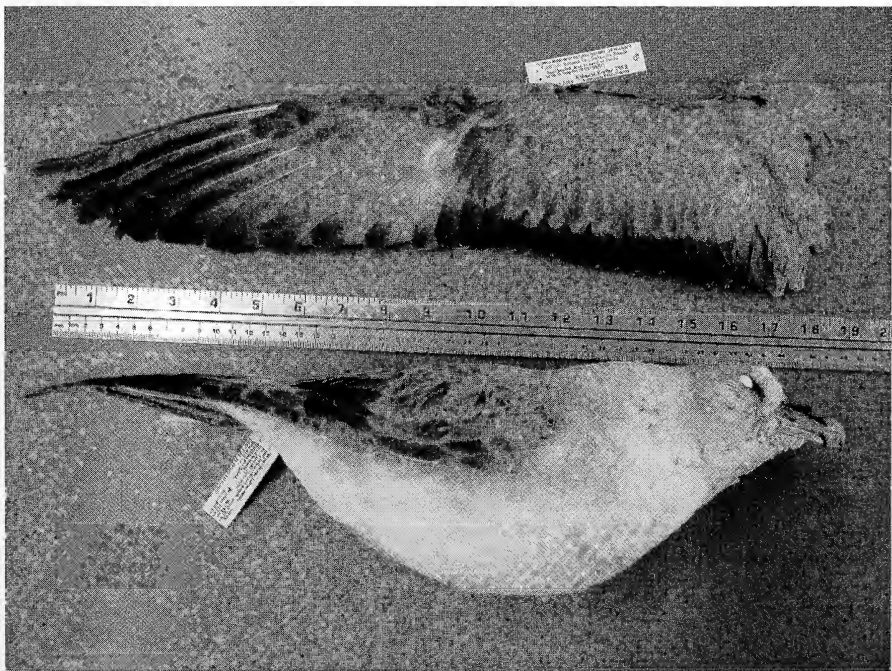


Figure 1. Northern Fulmar (UF 44664) from Satellite Beach, Brevard Co., Florida, 19 April 2005. Spread wing (top) and study skin (bottom).

Fulmars typically begin their first pre-basic molt in the spring following hatching, but do not begin molt in the wings until June (Hatch and Nettleship 1998). The bird had no subcutaneous fat and the flight muscles were much reduced. As a result, its mass (400 g) was far below that typical for males (725 g: Wynne-Edwards 1952, Watson 1955).

The polymorphic Northern Fulmar occurs in plumages ranging from white-bodied with a gray mantle to uniformly dark gray, with every gradation between (Hatch and Nettleship 1998). UF 44664 has an intermediate plumage, but toward the lighter end of the variation, with a very pale buffy-gray head and body, medium brownish-gray mantle, slightly paler brownish-gray rump and rectrices, medium gray wing coverts, and dark brownish-gray remiges. The distinctively short and deep bill is yellowish-horn, with the tube and base of the maxilla blackish-horn.

Florida's second record of an Atlantic Puffin is an individual found in weakened condition in St. Augustine Beach, St. Johns Co., by Margaret Cunningham on 23 December 2004. A hatching year female (ovary 7×4 mm, smooth; bursa 8×6 mm), the bird died at Noah's Ark Wildlife Care on 25 December 2004. It is now at the FLMNH (UF 44359, study skin, spread wing, partial skeleton, two tissue samples).

A Razorbill found 13 April 2005 at Honeymoon Island, Pinellas Co., was the first ever found in the Gulf of Mexico (AOU 1998) and only the 11th for Florida (Stevenson and Anderson 1994, Kratter et al. 2002, Anderson 2005). This second-year male (testes 6×1 mm, bursa 9×7 mm) died the same day at the Suncoast Seabird Sanctuary (UF 44677, study skin, spread wing, partial skeleton, two tissue samples).

Three Black-legged Kittiwakes were recorded in the winter and early spring of 2004-2005. This species is a rare winter visitor to Florida (Stevenson and Anderson 1994). The first, a hatching-year male (testes 4×2 mm, bursa 13×9 mm), was found in Satellite Beach, Brevard Co. on 30 December 2004. It was dead on arrival at the Florida Wildlife Hospital (UF 44403, skin, spread wing). Another first-winter Black-legged Kittiwake (UF 44971, complete skeleton), a female (ovary 12×4 mm, smooth; bursa 14×8 mm), was found with oiled plumage in Volusia Co. on 10 February 2005. It died the next day at the Marine Science Center. An adult Black-legged Kittiwake (female, ovary 11×9 mm, oviduct 4 mm wide, convoluted; no bursa) was found in Daytona Beach, Volusia Co., on 12 February 2005. It was also brought to the Marine Science Center, where it died on 14 February (UF 44942, skin and spread wing).

The specimens we report here were part of a major influx of north Atlantic seabirds reported in the southeastern United States during the winter of 2004-2005. Common Eiders (*Somateria mollissima*) were present in the Carolinas in "much higher than normal numbers" (Davis 2005a). Off North Carolina, 86 Northern Fulmars on 19 February 2005

was considered a “good count” (Davis 2005a). Four Black-legged Kittiwakes were recorded off northern Georgia on 12 February 2005 (Davis 2005b). A Common Murre (*Uria aalge*) present from 30 December 2004 to 29 January 2005 was the first record for South Carolina (Davis 2005b). Multiple Thick-billed Murres (*Uria lomvia*) were found in the Carolinas from January to March 2005 (Davis 2005b). In Florida, a Razorbill was found in Boynton Beach, Palm Beach Co. (Anderson 2005) on 18 January 2005, three months prior to the specimen record mentioned above. In northern Georgia, a state record-high number (106) of Razorbills was recorded on 12 February 2005 (Davis 2005b). Atlantic Puffins were found in record numbers in North Carolina (31 on 19 February 2005) and South Carolina (19 on 20 February) (Davis 2005a). A record number Dovekies (*Alle alle*) was recorded off Maryland and Delaware on 26 February 2005 (Day 2005) and “good numbers” reached the Carolinas (Davis 2005a).

ACKNOWLEDGMENTS

First, we thank the many people who find injured birds and deliver them to wildlife rehabilitation clinics. We also thank Florida’s wildlife rehabilitation clinics for not only the primary service they provide—rehabilitating injured and sick wildlife for return to the wild—but also for donating the specimens that die to the Florida Museum of Natural History. This research was supported through a grant from the Florida Fish and Wildlife Conservation Commission. The manuscript was improved by comments from David Steadman, Tom Webber, and an anonymous reviewer.

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**FIRST RECORD OF LESSER SAND-PLOVER
(*CHARADRIUS MONGOLUS*) IN FLORIDA**

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The Lesser Sand-Plover (formerly Mongolian Plover), *Charadrius mongolus*, comprises several subspecies that are geographically isolated to one degree or another. The subspecies *C. m. pamirensis*, *C. m. atrifrons*, and *C. m. schaeferi* breed in the Middle East and south-central Asia and winter in coastal areas of eastern Africa, southern Asia, and western Indonesia (Hirschfeld et al. 2000). The nominate *C. m. mongolus* and *C. m. stegmanni* breed primarily in eastern Russia. These latter two subspecies winter along the eastern coast of Asia from Japan south to eastern Indonesia, in Australia, and on islands in the southern Pacific Ocean (Hirschfeld et al. 2000).

Lesser Sand-Plovers are uncommon annual visitors to the outer Aleutians (Byrd et al. 1978, Gibson 1981) and to extreme northern Alaska, but there are fewer than 15 records from the rest of North America (Hirschfeld et al. 2000). In eastern North America, this species has been recorded in New Jersey (1990; Hanson 2005) and Rhode Island (1999; Peterson 1999) on the eastern seaboard, in Ontario on the Great Lakes (1984; McRae 1985), and in Louisiana (1977, 1986; Dittmann 1990, Loftin 1992) on the Gulf Coast, but it has not previously been recorded in Florida. On 17 September 2005 a single Lesser Sand-Plover was found associating with Semipalmated Plovers (*C. semipalmatus*) at St. Marks National Wildlife Refuge (NWR), Wakulla County. The bird remained at least through 21 September and subsequently was verified by a number of observers.

I observed the plover for a total of about 50 minutes on 17 and 18 September from distances of 10-40 m (estimated) using an 8×42 Zeiss binocular and a 20-40× Nikon spotting scope. Under conditions of bright overcast when the bird was frontlit, I watched the plover during early morning low tides as it foraged on an exposed mudflat. The overall size and general shape suggested a *Charadrius* species. In addition, the bird's behaviors were typical of those of other *Charadrius* plovers and were quite similar to those of nearby Semipalmated Plovers. The bird tended to forage within about two meters from the water's edge,

but this may simply be because the mudflat was small and surrounded by water on three sides. Nonetheless, I never saw it enter the water.

The bird was normally proportioned and fully feathered, and thus was not a downy chick of a larger plover species such as Killdeer (*C. vociferus*). The plumage was uniformly brownish on the back, and paler underneath. The presence of light edging on the secondaries and the grayish-green leg color suggested a hatch-year bird (older birds have darker legs; Hirschfeld et al. 2000). The undertail coverts were much whiter than the belly color, and there was the appearance of a sharp line of demarcation just behind the legs, separating undertail from belly. Observations during flight were very brief, and yielded little information. Another observer noted that the feet did not extend beyond the tail when the bird was flying, an important characteristic in differentiating Lesser from Greater Sand-Plover (*C. leschenaultii*; Hirschfeld et al. 2000). No details of the tail or rump were noted. There was a prominent white stripe above the eye that appeared to begin at about the eye and extended about half-way to the nape. The bill was solid black and was proportioned similar to that of Semipalmated Plover, although it appeared to be somewhat more pointed. No orange was noted on the bill.

Several notable characteristics separated the bird from nearby Semipalmated Plovers. First the bird appeared to be slightly larger (about 10 to 15%) than the Semipalmated Plovers, and lacked the white collar across the back of the neck typical of that species. The leg color was grayish-green, obviously different from the yellowish legs of nearby Semipalmated Plovers. In addition, the legs appeared to be longer than those of that species. The bird was somewhat lighter brown than a nearby Semipalmated Plover, but the latter bird was in adult plumage. There were no juvenal plumaged Semipalmated Plovers nearby for direct comparison. Observers reported only one vocalization that may have come from the sand-plover. When the bird in question and a Semipalmated Plover took off together, two distinct calls were heard. The first was the typical “chu-wee” or “tu-wee” of Semipalmated Plover. The second was a very rapid 3-4 note “tee-dee-dee” with a Western Sandpiper-like (*Calidris mauri*) quality. This call helped to eliminate the possibility that the subject bird was an unusual Semipalmated Plover.

I used a variety of characters (Paulson 2005) to eliminate other *Charadrius* species from consideration. The bill proportions eliminated large-billed Wilson’s Plover (*C. wilsonia*) and most subspecies of Greater Sand-Plover. The plumage color was too brown for Piping Plover (*C. melodus*) and this character plus bill shape eliminated Snowy Plover (*C. alexandrinus*). The relatively weak wingbar, the long legs, and the lack of a white collar and face removed Common Ringed Plover (*C. hiaticula*) from consideration, while the lack of an eye ring eliminated Little Ringed Plover (*C. dubius*). Size and the lack of breast

bands eliminated Mountain Plover (*C. montanus*) and Killdeer (*C. vociferus*), respectively. Finally, the bird was too large and its legs too dark for Collared Plover (*C. collaris*).

Analysis of digital photographs yielded further information. A total of 29 digital photographs were available for evaluation. From the digital images it was possible to measure tarsus length on 14 images and bill length on five images. Using the means of these measures, I calculated a tarsus:bill ratio for the bird in question as 1.91:1. Hirschfeld et al. (2000) gave tarsus:bill ratios of 1.86 to 1.98 (range 1.70 to 2.16) for subspecies of Lesser Sand-Plover, and 1.55 to 1.66 (range 1.43 to 1.78) for the closely related Greater Sand-Plover, for which there is a single North American record (Abbott et al. 2000). The tarsus:bill length ratio of 1.9 places the bird in question within the typical range of relative bill length of Lesser Sand-Plover, but well short of relative bill length of Greater Sand-Plover (Hirschfeld et al. 2000). It must be noted that this is considered a potential supporting characteristic and is not conclusive by itself. I also was able to measure bill length and eye-to-base-of-bill distance on the photographs. As the two measurements are equally affected by angle of the head, I was not restricted to only perfect profiles and thus I could acquire measurements from 14 images. The resulting eye-to-bill distance:bill-length ratio was 1.1 ± 0.3 (Mean \pm SE), suggesting that the bill was shorter than the distance from the back of the eye to the bill. Greater Sand-Plover tends to have a bill length that is longer than this distance. Overall, this ratio falls into the range for Lesser Sand-Plovers, but it does not eliminate *C. l. columbinus*, a small subspecies of the Greater Sand-Plover. Hirschfeld et al. (2002) pointed out that the ratio overlap with *C. l. columbinus* makes this an unreliable characteristic for determining species. Nonetheless the calculated ratio does argue against the possibility that the bird in question can *only* be Greater Sand-Plover. Further, a strong character that was observed in the bird at St. Marks NWR, the short, relatively stout, blunt-tipped bill, does rule out *C. l. columbinus* which has relatively slender, pointed bill. Confirming characters of the St. Marks bird were the long-legged look with relatively short tibia, the rounded head, and the forward-balanced appearance of the body ("jizz") (Hirschfeld et al. 2000).

Although it is impossible to positively identify the population from which this bird originated, several lines of evidence suggest that it likely came from an east Asian population. This species has been recorded even fewer times in Europe than it has in North America (even excluding Alaska) (Hirschfeld et al. 2000); thus it is unlikely that the bird arrived from the east. Hirschfeld et al. (2000) identified six breeding populations, three from western Asia and the Middle East (three subspecies collectively known as the *atrifrons* group), and three from eastern Asia (the *mongolus* group, including *C. m. stegmanni*). Since

the migration routes of all members of the *atrifrons* group tend to be due south or westward, vagrants from this group would first have to travel several thousand miles in the wrong (easterly) direction, traversing all of Asia, before entering North America. In contrast, the easternmost breeding population of the *mongolus* group (*C. m. stegmanni*), that on the Commander Islands (Hirschfeld et al. 2000), occasionally extends into Alaska (Byrd et al. 1978). Specimens from several Alaskan islands were identified as *C. m. stegmanni* (Byrd et al. 1978, Thompson and DeLong 1969), and Gibson (1981) assumed that Lesser Sand-Plovers found in the western Aleutians were *C. m. stegmanni*, even though the only specimen that he reported could not be identified to subspecies. Thus, *C. m. stegmanni* is the most likely candidate for vagrancy to eastern North America.

The documentation provided above was reviewed by two biologists who have field experience with sand-plovers: E. Hirschfeld (Europe) and R. Boughton (Australia), and both concurred with the identification. Written documentation and photographs were submitted to the Florida Ornithological Society Records Committee (record #05-575) which confirmed the identification and added Lesser Sand Plover to the official state list of birds.

ACKNOWLEDGMENTS

I thank Paul Lehman, Bill Crins, and Jim Ingold for information regarding previous Lesser Sand-Plover sightings in Eastern North America, and Jon Greenlaw and Tom Webber for helpful suggestions during the preparation of this manuscript.

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FIELD OBSERVATIONS

Summer Report: June-July 2006.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32:7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: CWA = Critical Wildlife Area, EOS = end of season, NP = national park, NSRA = north shore restoration area, NWR = national wildlife refuge, SP = state park, STA = stormwater treatment area, STF = sewage treatment facility, and N, S, E, W etc., for compass directions. Bold-faced entries denote birds newly reported or verified in Florida, or record counts.

SUMMARY OF THE SUMMER SEASON

Summer 2006 was fairly typical weather-wise, although the western Panhandle was subject to what Bob Duncan called a “desiccating drought.” Also, Tropical Storm *Alberto* struck the Big Bend region on 13 Jun, causing minimal damage. But predictably, several pelagics, especially terns, were reported along the Gulf coast in the wake of the storm. FOSRC rarities reported this season were the Southern Lapwing at St. Marks NWR (if considered a native vagrant) and the South Polar Skua off Jacksonville. Juvenile Bronzed Cowbirds photographed at Homestead, where adults were observed all season, probably provide sufficient proof of breeding, thereby adding a new breeding species to Florida. No new native or exotic species were reported.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 18 adults at St. Marks NWR (*Wakulla*) 3 Jun (T. Curtis); 2 W of Tavares (*Lake*) 3 Jun (L. Atherton); 30 at Viera Wetlands (*Brevard*) 6 Jun (D. Freeland); 12 adults at Springhill Road STF (*Leon*) 12 Jun (G. Menk); 4 adults at Dade City (*Pasco*) 17 Jun (*vide* A. McRae); 7 adults at Lake Jackson (*Leon*) 24 Jun (G. Menk, M. Collins); 34 birds (2 separate broods) at the Mosaic phosphate mines 10 Jul established the first breeding in *Hillsborough* (P. Fellers); 16 at *Polk* phosphate mines 11 Jul (P. Timmer, C. Geanangel); 5 newly-hatched chicks at Alachua (*Alachua*) and 11 chicks at Hague (*Alachua*) 31 Jul (P. Burns).

FULVOUS WHISTLING-DUCK: 2 at Paynes Prairie Preserve SP (*Alachua*) 6-11 Jun (M. Manetz et al.); 10 at phosphate mine 11 Jul (P. Timmer, C. Geanangel) including 1 pair with 4 young, furnished the first breeding in *Polk*.

EGYPTIAN GOOSE: 3 at Lake Apopka NSRA (*Orange*) 23 Jul (H. Robinson).

CANADA GOOSE: 2 at Lake Marion (*Polk*) 29 Jul (T. Palmer); 5 summered at Sarasota (*Sarasota*; J. Dubi).

Table 1. Results of pelagic trips off Miami (*Miami-Dade*; first three trips; R. Torres et al.), off Jacksonville (*Duval*) 19 Jun (R. Clark), and to Marathon Hump (*Monroe*; final two trips; L. Manfredi et al.).

| Species | 15 Jun | 24 Jun | 3 Jul | 19 Jun | 24 Jun | 15 Jul |
|--------------------------|--------|--------|-------|--------|--------|--------|
| Black-capped Petrel | 0 | 0 | 0 | 0 | 1 | 0 |
| Cory's Shearwater | 0 | 3 | 9 | 300+ | 5 | 0 |
| Greater Shearwater | 0 | 0 | 1 | 300+ | 3 | 0 |
| Audubon's Shearwater | 0 | 1 | 6 | 1 | 10 | 0 |
| Wilson's Storm-Petrel | 2 | 2 | 1 | 0 | 2 | 6 |
| Band-rumped Storm-Petrel | 2 | 1 | 1 | 0 | 4 | 0 |
| Tropicbird species | 0 | 0 | 1 | 0 | 0 | 0 |
| Brown Booby | 4 | 7 | 1 | 0 | 0 | 0 |
| Glossy Ibis | 0 | 0 | 0 | 0 | 0 | 25 |
| Bridled Tern | 20 | 1 | 40 | 0 | 77 | 35 |
| Sooty Tern | 15 | 3 | 100+ | 0 | 37 | 8 |
| Brown Noddy | 0 | 0 | 2 | 0 | 7 | 1 |
| *South Polar Skua | 0 | 0 | 0 | 1 | 0 | 0 |
| Long-tailed Jaeger | 0 | 0 | 0 | 1 | 0 | 0 |

MALLARD × MOTTLED DUCK: 4 hybrids along with 142 Mottled Ducks and 1 Mallard at Trinity (*Pasco*) 10 Jun (K. Tracey).

MOTTLED DUCK: 580 at *Polk* phosphate mines 7 Jul (P. Timmer).

BLUE-WINGED TEAL: 1 male at Blue Heron STF (*Brevard*) 1 Jun (T. Dunkerton); 2 (male and female) at Viera 6 Jun-EOS (D. Freeland et al.); 18 at *Polk* mines 25 Jul (P. Fellers).

REDHEAD: 1 drake at Gulf Harbors, New Port Richey (*Pasco*) 13 Jun (K. Tracey, B. Pranty, photo to FOC).

GREATER SCAUP: 1 hen at Merritt Island NWR (*Brevard*) 9 Jun (R. Fewster, photo to FOC).

LESSER SCAUP: 1 drake at S Merritt Island (*Brevard*) 19 Jul (D. Freeland); 1 hen and 3 drakes summered at Springhill Road STF (G. Menk).

SURF SCOTER: 1 drake at S Merritt Island 8-14 Jun (D. Freeland et al.).

BLACK SCOTER: 2 drakes at N Merritt Island (*Brevard*) 9 Jun (D. Freeland).

BUFFLEHEAD: 1 hen at Springhill Road STF to 15 Jun (G. Menk).

RED-BREASTED MERGANSER: 3 drakes at St. Marks NWR 3 Jun (T. Curtis).

RUDDY DUCK: 4 at *Polk* phosphate mines 11 Jul (P. Timmer, C. Geanangel).

HORNED GREBE: 1 in alternate plumage at Fort Walton Beach STF (*Okaloosa*) 2 Jun (R. Smith et al.).

CORY'S SHEARWATER: 25 at Boynton Inlet (*Palm Beach*) 3 & 10 Jul, and 2 there 11 Jul (B. Hope); 1 at Destin (*Okaloosa*) 31 Jul (B. Garmon).

GREATER SHEARWATER: 1 at Boynton Inlet 10 Jul (B. Hope).

AUDUBON'S SHEARWATER: singles at Boynton Inlet 10 & 11 Jul (B. Hope).

NORTHERN GANNET: 3 immatures at St. Andrew SP (*Bay*) 5 Jun (R. Smith et al.).

AMERICAN WHITE PELICAN: 25 at St. Marks NWR 12 Jun (C. Borg); 375 at *Polk* mines 7 Jul (P. Fellers).

ANHINGA: 280 at Lake Apopka NSRA 26 Jul (H. Robinson).

MAGNIFICENT FRIGATEBIRD: 1 female at Alligator Point (*Franklin*) 2 Jun (R. McGregor); 1 at St. Marks NWR 5 Jun (M. Keys); at least 140 roosted on a spoil island near Honkeymoon Island SP (*Pinellas*) 8 Jun (K. Tracey); 2 birds 16 km inland over Spring Hill (*Hernando*) following Tropical Storm *Alberto* 13 Jun (A. & B. Hansen).

- LEAST BITTERN: 28 at Viera 6 Jun (D. Freeland); 1 at Melbourne Beach (*Brevard*) 22-27 Jul (A. Bankert).
- "GREAT WHITE HERON:" 1 in *Okaloosa* 19 Jun-14 Jul (L. Dougherty, P. Goodyear).
- SNOWY EGRET: 750 at Viera 30 Jun (D. Freeland).
- REDDISH EGRET: 2 juveniles at St. Marks NWR 12 Jun (C. Borg); 4, including 2 white morphs, at Nassau Sound (*Duval*) 15-22 Jul (P. Leary).
- GREEN HERON: 43 at Viera 6 Jun (D. Freeland).
- YELLOW-CROWNED NIGHT-HERON: up to 3 at Paynes Prairie Preserve SP 6 Jun (M. Manetz et al.).
- WHITE IBIS: 1800 at Tomoka Landfill (*Volusia*) 31 Jul (D. Freeland).
- GLOSSY IBIS: up to 2 at Lake Jackson 6-12 Jun (G. Menk).
- *WHITE-FACED IBIS: 1 adult at Paynes Prairie Preserve 7 Jun (H. Adams); 2 adults and 1 immature at St. Marks NWR 17 Jun (T. Curtis).
- ROSEATE SPOONBILL: up to 14 (1 adult and 13 juveniles, including 3 banded) at Bystre Lake (*Hernando*) 5-28 Jun (M. Gardler); 2 in E *Leon* 10 Jun (B. Ritchie); 6 at Lake Apopka NSRA 11 Jun (T. Rodriguez), and 4 there 28 Jul (H. Robinson); 50 at Gulf Harbors 14 Jun included 1 banded at Florida Bay and 4 banded at Tampa Bay (K. Tracey); up to 10 at Ocala (*Marion*) 20-23 Jun (A. Luzader, M. Paczolt); up to 22 at St. Marks NWR 24 Jun-8 Jul (S. McCool et al.); up to 3 at Gainesville (*Alachua*) 25 Jun-EOS (P. Sindelar, L. Hensley, R. Garren et al.); 53 at Merritt Island NWR (45 in *Brevard* and 8 in *Volusia*) 27 Jun (D. Freeman); 50 at Viera 30 Jun (D. Freeland); 7 at *Polk* mines 11 Jul (P. Timmer, C. Geanangel); 3 at Scott Lake, Lakeland (*Polk*) 21 Jul (T. Palmer).
- WOOD STORK: 70 active nests with young at Greenbrooke, Seven Springs (*Pasco*) 8 Jun (K. Tracey); 250 at Viera 30 Jun (D. Freeland); 125 at Tomoka Landfill 31 Jul (D. Freeland).
- OSPREY: 117 at *Polk* mines 11 Jul (P. Timmer, C. Geanangel).
- SWALLOW-TAILED KITE: 1440 at Lake Apopka NSRA 10 Jul, and 1560 there 26 Jul (H. Robinson).
- SNAIL KITE: 1 at Paynes Prairie Preserve 8-24 Jun (M. Manetz, B. Christensen et al.); 1 male at Shadow Ridge, Hudson 6 Jul (B. Skiba, photos to FOC) furnished the first record for *Pasco*; 1 adult male 6 km E of CR-951 (*Collier*) 30 Jul (T. Doyle).
- MISSISSIPPI KITE: 70 at Tram Road STF (*Leon*) 1 Jun (E. Woodruff) and 100 there 11 Jul (R. Lengacher); 3 at N Jacksonville 9 & 17 June (K. Dailey); 1 at Coleman (*Sumter*) 9 Jun (R. Rowan); 1 over Lake Weir (*Marion*) 25 Jun (R. Smith); 1 at S Jacksonville 4 Jul (J. Wheat); 33 at Fort Walton Beach STF 21 Jul (D. Ware).
- BALD EAGLE: one nest at Hudson fledged nestlings in Mar and Jun (K. Tracey).
- NORTHERN HARRIER: 1 in female plumage at the Sarasota Celery Fields (*Sarasota*) 27 Jun (J. Dubi, E. Miller).
- COOPER'S HAWK: 1 adult and 1 juvenile summered at West Kendall (*Miami-Dade*; J. Boyd), and 3 juveniles elsewhere at West Kendall 18 Jun (J. Weber); 1 at Naples (*Collier*) 21 Jun (D. Sutor); 1 frequently at Miami Shores (*Miami-Dade*) in Jul (A. Harper).
- RED-SHOULDERED HAWK: 101 at Lake Apopka NSRA 30 Jul (H. Robinson).
- BROAD-WINGED HAWK: 1 juvenile at Lake Apopka NSRA 12 Jul (H. Robinson).
- SHORT-TAILED HAWK: 1 light morph E of Brooksville (*Hernando*) 25 Jun (M. Gardler); 1 at Black Point Swamp (*Levy*) 30 Jun (J. Hintermister); 1 light morph at Avon Park Air Force Range (*Highlands*) 3 Jul (P. Fellers); 1 dark morph at Kissimmee Prairie Preserve SP (*Okeechobee*) 5 Jul (P. Miller); of 2 radio-tagged in South Florida in late 2005, 1 was found dead at Paynes Prairie Preserve in Jun and the other was at Newnans Lake (*Alachua*) 14-24 Jul (K. Meyer, S. Hofstetter); 1 light morph at Florida Forever (*Osceola*) 21 Jul (B. & L. Cooper); 1 dark morph at Casselberry (*Seminole*) 24 Jul (A. Vinokur).
- AMERICAN KESTREL: 4 (presumably *paulus*) at Golden Aster Scrub Preserve (*Hillsborough*) 18 Jun (G. Parsons); 1 at a *Polk* mine 16 Jul (P. Timmer, C. Geanangel).
- KING RAIL: 209 at Lake Apopka NSRA 23 Jul (H. Robinson).

- PURPLE SWAMPHEN: 100+ at STA 5 (*Hendry*) 24 Jun (M. England et al.).
- PURPLE GALLINULE: 1 adult with 4 chicks in mid-*Pinellas* 26 Jun (J. Fisher).
- AMERICAN COOT: 8 at *Polk* mines 11 Jul (P. Timmer, C. Geanangel); 1-2 each at four sites in *Leon* variously this summer (G. Menk); 2 summered at Lakewood Ranch, Sarasota (J. Dubi).
- SANDHILL CRANE: 1 near Mahogany Hammock, Everglades NP (*Miami-Dade*) 20 Jun (S. Schneider).
- *SOUTHERN LAPWING: 1 of the *cayennensis* group remained at St. Marks NWR to 11 Jun (J. Murphy).
- BLACK-BELLIED PLOVER: 15 at Merritt Island NWR 22 Jun (D. Freeland); 2 at Shiloh Marsh (*Volusia*) 18 Jul (B. Wallace).
- AMERICAN GOLDEN-PLOVER: 1 at Viera Wetlands 29 Jul (A. Bankert).
- WILSON'S PLOVER: 16 adults and 2 chicks at Cayo Costa SP (*Lee*) 4 Jun (C. Ewell); 16 adults, 1 juvenile, and 7 chicks at Little Estero Island CWA (*Lee*) 8 Jun (C. Ewell); 60, including 2 chicks, at Nassau Sound 15 Jul (P. Leary).
- SEMPALMATED PLOVER: 1 at Merritt Island NWR 9-22 Jun (D. Freeland); duos at Shiloh Marsh 15 Jun & 18 Jul (B. Wallace); 1 at a *Polk* mine 16 Jul (P. Timmer, C. Geanangel); 2 at Viera 27 Jul (T. Dunkerton).
- PIPING PLOVER: 3 at Nassau Sound 22 Jul (P. Leary).
- BLACK-NECKED STILT: 2 at Bystre Lake 1 Jun-EOS (M. Gardler); 2 at Paynes Prairie Preserve 6 Jun (M. Manetz); 181 at Loughman's Lake (*Brevard*) 19 Jun (M. Brothers); 9 at Melbourne Beach 27 Jul (A. Bankert).
- AMERICAN AVOCET: 3 at Shiloh Marsh 15 Jun, and 13 there 18 Jul (B. Wallace); 6 at Merritt Island NWR 22 Jun, and 15 there 24 Jul-EOS (D. Freeland); 10 at STA 5, 24 Jun (M. England et al.); 45 at *Polk* mines 11 Jul (P. Timmer, C. Geanangel); 2 at Lake Apopka NSRA 30 Jul (H. Robinson); 2 at St. Marks NWR 31 Jul (A. Wraithmell).
- GREATER YELLOWLEGS: 1 at Viera 6 Jun, and 2 there 30 Jun (D. Freeland); 1 at Merritt Island NWR 9 Jun, and 30 there 31 Jul (D. Freeland); 3 at Loughman's Lake 19 Jun (M. Brothers); 6 at Shiloh Marsh 22 Jun (D. Freeland), and 125 there 17 Jul (M. Brothers, B. Wallace); 2 at Springhill Road STF 29 Jun (G. Menk); up to 4 (21 Jul) at Lake Apopka NSRA 16-23 Jul (H. Robinson); up to 3 at *Polk* mines 11-16 Jul (P. Timmer, C. Geanangel).
- LESSER YELLOWLEGS: 1 at Viera 14 Jun (D. Freeland); 8 at Loughman's Lake 19 Jun (M. Brothers); 3 at Shiloh Marshes 22 Jun (D. Freeland), and 2 there 17 Jul (M. Brothers, B. Wallace); 2 at Springhill Road STF 29 Jun (G. Menk); singles at Lake Apopka NSRA 2 & 21 Jul (H. Robinson); 1 at Gainesville 5 Jul (R. Rowan); up to 33 (10 Jul) at *Polk* mines 10-16 Jul (P. Fellers et al.); 10 at Merritt Island NWR 31 Jul (D. Freeland).
- SOLITARY SANDPIPER: 1 at Lake Apopka NSRA 14-21 Jul (H. Robinson); 2 at Hague 24 Jul (M. Manetz); 9 at S Fort Myers (*Lee*) 24 Jul (V. McGrath et al.).
- SPOTTED SANDPIPER: 2 at Viera 6 Jun (D. Freeland); 6 at Shiloh Marsh 17 Jul (M. Brothers, B. Wallace); 5 at Hague 24 Jul (M. Manetz).
- UPLAND SANDPIPER: 1 at Springhill Road STF 29 Jun (G. Menk).
- WHIMBREL: 5 at St. Marks NWR 15 Jun (C. Borg); 1 at Satellite Beach 29 Jul (D. Freeland et al.).
- MARbled GODWIT: 2 in basic plumage at Little Estero Island CWA 8 Jun (C. Ewell); 2 at Fort De Soto Park (*Pinellas*) 13 Jun (R. Smith).
- RED KNOT: 1 at St. Marks NWR 3 Jun (T. Curtis); 19 in basic plumage at Cayo Costa SP 4 Jun (C. Ewell); 13 in basic plumage at Little Estero Island CWA 8 Jun (C. Ewell); 2 at Nassau Sound 15 Jul (P. Leary).
- SANDERLING: 79 in basic plumage at Little Estero Island CWA 8 Jun (C. Ewell).
- SEMPALMATED SANDPIPER: 1 at Newnans Lake 2 Jun (J. Bryan); 24 at Springhill Road STF 8 Jun (G. Menk); 2 at Merritt Island NWR 9 Jun, and 100 there 22 Jun (D. Freeland); 20 at *Polk* mines 11 Jul (P. Timmer, C. Geanangel); 100+ at Shiloh Marsh

- 15 Jun, and 2 there 17 Jul (M. Brothers, B. Wallace); 2 at Alachua 24 Jul (P. Burns); 10+ at Viera 27 Jul (T. Dunkerton).
- WESTERN SANDPIPER: 1 at *Polk* mines 10 Jul (P. Fellers), and 7 there 16 Jul (P. Timmer, C. Geanangel); 5 at Viera 13 Jul, and 30+ there 27 Jul (T. Dunkerton); 7 at Shiloh Marsh 17 Jul (M. Brothers, B. Wallace); 152 molting adults at Little Estero Island CWA 30 Jul (C. Ewell).
- LEAST SANDPIPER: 3 at Springhill Road STF 8 Jun (G. Menk); 1 at St. Marks NWR 12 Jun (C. Borg); 1 at Viera 14 Jun, 50+ there 13 Jul, and 250 there 26 Jul (D. Freeland, T. Dunkerton); 25 at Merritt Island NWR 22 Jun (D. Freeland); 3 at Springhill Road STF 1 Jul (S. McCool); 50 at Shiloh Marshes 17 Jul (M. Brothers, B. Wallace); 12 at Lake Apopka NSRA 21 Jul (H. Robinson).
- WHITE-RUMPED SANDPIPER: 18 at Fort De Soto 2 Jun (L. Atherton); 1 in alternate plumage at Cayo Costa SP 3 Jun (C. Ewell); 30+ at Shiloh Marsh 15 Jun (B. Wallace); 80 at the Everglades Agricultural Area (*Palm Beach*) 21 Jun (B. Hope); 3 at Merritt Island NWR 22 Jun (D. Freeland); 1 at Viera 27 Jul (T. Dunkerton).
- PECTORAL SANDPIPER: 1 at Hague 15 Jul (M. Manetz); 1 at Viera 27 Jul (T. Dunkerton); 50 at the Sarasota polo grounds 27 Jul (J. Dubi); 20+ at S Fort Myers 30-31 Jul (V. McGrath et al.).
- DUNLIN: 6 at Merritt Island NWR 24 Jul (D. Freeland).
- STILT SANDPIPER: 2 at Lake Apopka NSRA 12 Jul, and singles there 19 & 26 Jul (H. Robinson); 6 at Viera 13 Jul (T. Dunkerton), and 10 there 26 Jul (D. Freeland); 3 at Springhill Road STF 20 Jul (G. Menk); 9 at *Polk* mines 16 Jul (P. Timmer, C. Geanangel); 1 in alternate plumage 30 Jul provided the first for Ten Thousand Islands NWR (*Collier*; T. Doyle); 3 at S Fort Myers 30-31 Jul (V. McGrath et al.).
- SHORT-BILLED DOWITCHER: 18 in basic plumage at Little Estero Island CWA 8 Jun (C. Ewell); 3 at Merritt Island NWR 24 Jul (D. Freeland); up to 8 at Springhill Road STF 27 Jul-EOS (G. Menk et al.).
- AMERICAN WOODCOCK: 1 at Gainesville 16 Jul (M. Meisenburg).
- POMARINE JAEGER: 1 landed "right in front of us on the road" at No Name Key (*Monroe*) 4 Jul (K. Wysocki et al.).
- LAUGHING GULL: 7700+ at Huguenot Memorial Park (*Duval*) 27 Jul (R. Clark); 2 at Lake Apopka NSRA 28 Jul (H. Robinson).
- GULL-BILLED TERN: 1 at Fort Walton Beach STF 2 Jun (R. Smith et al.); up to 14 at *Polk* mines 11-16 Jul (P. Timmer et al.).
- CASPIAN TERN: 1 at St. Johns River Marshes (*Volusia*) 19 Jun (M. Brothers).
- ROYAL TERN: 2500+ at Huguenot Park 27 Jul (R. Clark).
- SANDWICH TERN: 2 at Lake Apopka NSRA 30 Jul (H. Robinson).
- COMMON TERN: 4 immatures at Gulf Harbors 13 Jun (K. Tracey); 3 at Fred Howard Park (*Pinellas*) 13 Jun (R. Smart); 1 at Fort De Soto 13 Jun (L. Atherton).
- LEAST TERN: 105 nests, 10 chicks, and 9 juveniles at Little Estero Island CWA 8 Jun (C. Ewell); 1 at Hague 10 Jun (H. Adams, B. Mollison); 50 nests at N Caladesi Island (*Pinellas*) were destroyed by Tropical Storm *Alberto* 13 Jun (S. Crawford); a breeding colony of 25 on salt flats along the St. Johns River 19 Jun (M. Brothers); over 100 successful nests at Fort Pickens (*Escambia*) and many juveniles in Jul (B. Duncan); 280 at *Polk* mines 16 Jul (P. Timmer, C. Geanangel).
- BRIDLED TERN: 2 at Boynton Inlet 10 Jul (B. Hope).
- SOOTY TERN: 1 at Gulf Harbors 13 Jun (K. Tracey); 15 at the Dunedin Causeway (*Pinellas*) 13 Jun (S. Crawford); 1 at Lake Apopka NSRA 14 Jun (H. Robinson); 10 at Boynton Inlet 10 Jul (B. Hope).
- BLACK TERN: 2 at St. Marks NWR 13 Jun (S. McCool); 3 at Gulf Harbors 13 Jun (K. Tracey, B. Pranty); 1 at Honeymoon Island SP 13 Jun (L. Kenney); up to 4 (16 Jul) at *Polk* mines 11-16 Jul (P. Timmer, C. Geanangel et al.); 130 at Gandy Bridge (*Pinellas*) 29 Jul (R. Smith).

- BROWN NODDY: 2 at St. George Island (*Franklin*) 13 Jun (K. Theodorou); 7 at the Dune-din Causeway 13 Jun (S. Crawford).
- BLACK SKIMMER: 6 nests at Boca Grande 1 Jun were the only breeding skimmers found along the entire *Lee* coastline (C. Ewell); 150 nests on N Caladesi Island were destroyed by *Alberto* 13 Jun (S. Crawford); 84, including young, at *Polk* mines 10 Jul (P. Fellers); over 30 successful nests at Pensacola Beach (*Escambia*) and many juveniles in Jul (B. Duncan).
- AFRICAN COLLARED-DOVE: 1 domesticated form (i.e., a "Ringed Turtle-Dove") along Bayshore Boulevard, Tampa (*Hillsborough*) late May-early Jun (D. Snyder, details to FOC).
- WHITE-WINGED DOVE: 20 or more summered S of Kissimmee Prairie Preserve (P. Miller, M. Korosy).
- MONK PARAKEET: 2 at South Daytona (*Volusia*) 24 Jun (M. Brothers); 1 at Panama City (*Bay*) 4-10 Jul (R. Ingram).
- YELLOW-BILLED CUCKOO: 52 at Lake Apopka NSRA 8 Jun (H. Robinson).
- CHIMNEY SWIFT: 150 at Lake Apopka NSRA 30 Jul (H. Robinson).
- BELTED KINGFISHER: 2 at Newberry (*Alachua*) 24 Jun (J. Bryan); 1 S of Florida City (*Miami-Dade*) 3 Jul (B. & L. Cooper); 1 at Orlando Wetlands Park (*Orange*) 4 Jul (E. Kwaher); 1 at Cape Romano (*Collier*) 5 Jul (D. Sutor); 1 at Lake Apopka NSRA 10 Jul (H. Robinson); 1 at Altamonte Springs (*Seminole*) 21 Jul (P. Hueber); 1 at Green Key Road, New Port Richey 21 Jul (K. Tracey); 7 at Merritt Island NWR 31 Jul (D. Freeland).
- HAIRY WOODPECKER: 1 at Lake Thonotosassa (*Hillsborough*) 12 Jun (G. & R. Kruezman).
- RED-COCKADED WOODPECKER: 2 at Golden Gate Estates (*Collier*) 17 Jun (D. Sutor); 1 at Longleaf Flatwoods Reserve 31 Jul (R. Cavalieros) provided the first *Alachua* report since 1997.
- WILLOW FLYCATCHER: 1 sang at Lake Apopka NSRA 28 Jul (H. Robinson).
- GRAY KINGBIRD: 2 birds 8 km inland at Weekiwachee Preserve (*Hernando*) 9 Jun (A. and B. Hansen); 11 at Green Key Road 19 Jul (K. Tracey); pairs bred at Gulf Breeze and downtown Pensacola this season (*vide* B. Duncan).
- YELLOW-THROATED VIREO: 1 sang at Winter Haven (*Polk*) 14 Jul (P. Fellers).
- RED-EYED VIREO: 1 at Lake Apopka NSRA 26 Jul (H. Robinson).
- HOUSE CROW: 1 of 4 at Nokomis Beach (*Sarasota*) 7 Jul flew into a powerline and was electrocuted (K. Blackshaw)! Specimen to Florida Museum of Natural History, UF 45329.
- PURPLE MARTIN: 6 pairs bred in cavities in cabbage palm snags at Viera 14 Jun (D. Freeland); 35 at Lake Jackson 21 Jun (G. Menk); 375 at *Polk* mines 11 Jul (P. Timmer, C. Geanangel).
- TREE SWALLOW: singles at Lake Apopka NSRA 10 & 19-21 Jul (H. Robinson); 1 at Fort Walton Beach STF 25 Jul (B. Duncan).
- NORTHERN ROUGH-WINGED SWALLOW: 4 at Brasher Park, Port Richey (*Pasco*) 3 Jun (K. Tracey).
- BANK SWALLOW: 1 at Lake Apopka NSRA 19 Jul, and 5 there 28 Jul (H. Robinson); 2 at Altamonte Springs 23 Jul (P. Hueber).
- CLIFF SWALLOW: 1 at Lake Apopka NSRA 23 Jul (H. Robinson); 1 at Merritt Island NWR 24 Jul (A. Bankert); 1 at Fort Walton Beach STF 25 Jul (B. Duncan).
- BARN SWALLOW: 1 leucistic individual at a colony under the SR-46 bridge across the St. Johns River (*Volusia*) 19 Jun was nearly wholly white with dusky feathers on the back and wings (M. Brothers); **3530** at Lake Apopka NSRA 28 Jul; all but 100 roosted in a cattail marsh (H. Robinson).
- AMERICAN ROBIN: 7 on the Hilliard Breeding Bird Survey route (*Nassau*) 3 Jun (D. Freeland).
- GRAY CATBIRD: 1 male sang at Lake Apopka NSRA 8 Jun-28 Jul (H. Robinson); 1 at Hauge 14-16 Jun (M. Manetz); 1 at Gainesville 27 Jul (J. Edwards).

- YELLOW WARBLER: 1 at Lake Apopka NSRA 26 Jul, and 2 there 30 Jul (H. Robinson); 5 at Green Key Road 29 Jul (K. Tracey).
- PRAIRIE WARBLER: 1 at Lake Apopka NSRA 16 Jul, and 7 there 28 Jul (H. Robinson); 14 at Green Key Road 19 Jul (K. Tracey); several at Arch Creek Park (*Miami-Dade*) 20 Jul (J. King); 1 at Gainesville 21 Jul (G. Parks); 2 banded at Wekiva Springs SP (*Orange*) 27 Jul (A. Boyle).
- BLACK-AND-WHITE WARBLER: 1 male sang at Cedar Key (*Levy*) 7 Jun (D. Henderson); 1 at Tallahassee (*Leon*) 11 Jul (D. Morrow); several at Arch Creek Park 20 Jul (J. King); 1 at Fort George Island (*Duval*) 27 Jul (R. Clark); 1 banded at Wekiva Springs SP 27 Jul (A. Boyle); 1 at Saddle Creek Park (*Polk*) 31 Jul (P. Fellers).
- AMERICAN REDSTART: 1 second-year male sang at Altamonte Springs 1 Jun (P. Hueber); 1 at St. Marks NWR 16 Jul (A. Wraithmell); 1 at Arch Creek Park 20 Jul (J. King); 1 at Fort George Island 27 Jul (R. Clark); 1 at Gainesville 27 Jul (G. Parks); 1 at Saddle Creek Park 31 Jul (P. Fellers).
- PROTHONOTARY WARBLER: 2 at Green Key Road 29 Jul (K. Tracey).
- NORTHERN WATERTHRUSH: 1 banded at Wekiva Springs SP 27 Jul (A. Boyle); 1 window casualty at Gulf Breeze (*Santa Rosa*) 28 Jul (T. King, specimen to Pensacola Junior College).
- LOUISIANA WATERTHRUSH: 1 at Chattahoochee (*Gadsden*) 4 Jun (R. Smith); 1 at O'Leno SP (*Alachua*) 28 Jun (C. Parenteau); 1 at Lake Apopka NSRA 12-16 Jul, and 3 there 28 Jul (H. Robinson); 1 at Fort George Island 14 Jul (R. Clark); 1 male sang at Tallahassee 23 Jul (G. Menk); 15 or more along the Santa Fe River between SR-47 and River Rise Preserve SP (*Alachua*) 29 Jul (A. Reakes).
- KENTUCKY WARBLER: 1 at Alligator Point 31 Jul (J. Murphy).
- YELLOW-BREADED CHAT: up to 12 (21 Jun) summered at Lake Apopka NSRA (H. Robinson).
- CHIPPING SPARROW: 1 at Paynes Prairie Preserve 3 Jun (B. Mollison, H. Adams).
- SAVANNAH SPARROW: 2 at Paynes Prairie Preserve 8 Jun (R. Rowan); 1 at Hague 11 Jun (S. Flamand).
- FLORIDA GRASSHOPPER SPARROW: 72 singing males during surveys at Kissimmee Prairie Preserve was the lowest count since surveys began in 1999 (P. Miller et al.).
- ROSE-BREADED GROSBEAK: 1 female and 1 male at Gulf Breeze 4 Jun (B. & L. Duncan).
- BLUE GROSBEAK: a nest with 2 small nestlings at Orangedale (*St. Johns*) 16 Jul perhaps represented a second brood, as adults and 2 juveniles were nearby (P. Powell); up to 33 (19 Jun) summered at Lake Apopka NSRA (H. Robinson).
- INDIGO BUNTING: up to 33 (10 Jul) summered at Lake Apopka NSRA (H. Robinson).
- DICKCISSEL: at least 4 males sang at Lake Apopka NSRA all summer (H. Robinson).
- BOBOLINK: 1 female at St. Marks NWR 11 Jun (J. Murphy).
- BOAT-TAILED GRACKLE: 12,000 at Lake Apopka NSRA 26 Jul (H. Robinson).
- SHINY COWBIRD: 2 (male displaying to female) at Bald Point (*Franklin*) 5 Jun (J. Dozier); 1 singing male at Cedar Key 5-10 Jun & 3-21 Jul, and 1 female there 9 Jul (D. Henderson); 2 males and 1 female at Flamingo 18 Jun (C. Newton); 1 male at Green Key Road 1 & 18 Jul (K. Tracey, photos to FOC); 1 adult male and 3 juveniles at Captiva Island (*Lee*) 4 Jul (V. McGrath); 1 at Alachua 14 Jul (M. Reetz; UF 45301); 1 male at Lake Apopka NSRA 16-21 Jul (H. Robinson); 1 male at Fort De Soto 17 Jul (L. Atherton).
- BRONZED COWBIRD: 1 near Florida International University (*Miami-Dade*) 3 Jun (S. Schneider); up to 14 at a Homestead feeder in Jul (L. Manfredi); 1 male, 1 female, and 2 juveniles at Pinecrest (*Miami-Dade*) 17 Jul (L. Manfredi); 1 at Miami Shores 22 Jul (A. Harper).
- ORCHARD ORIOLE: up to 12 (4 & 16 Jun) summered at Lake Apopka NSRA (H. Robinson).
- HOUSE FINCH: up to 5 at Weeki Wachee (*Hernando*) 1 Jun-EOS (M. Gardler); 6 at St. Augustine (*St. Johns*) 10 Jun (N. Nader); 1 yellow morph at S Orlando (*Orange*) 23 Jun (T. Dunkerton); 3 at Fernandina Beach (*Nassau*) 22 Jul (K. Dailey); 1 male sang at Tampa 31 Jul (L. Snyder).

AMERICAN GOLDFINCH: 1 at Gainesville 1 Jun (M. Jones).
 PIN-TAILED WHYDAH: 1 at Lake Apopka NSRA 11 Jun (H. Robinson).
 NUTMEG MANNIKIN: 1 at E Pensacola 29 Jul (M. J. Miller).

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Spring 2006 reports not previously published: Gray-cheeked Thrush: 1 at Port Orange (*Volusia*) 22 May (Michael Brothers); Yellow-breasted Chat: 1 male sang at Ormond Beach (*Volusia*) 27 May (Michael Brothers).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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- (5) use the form "7 June 2003" for all dates;
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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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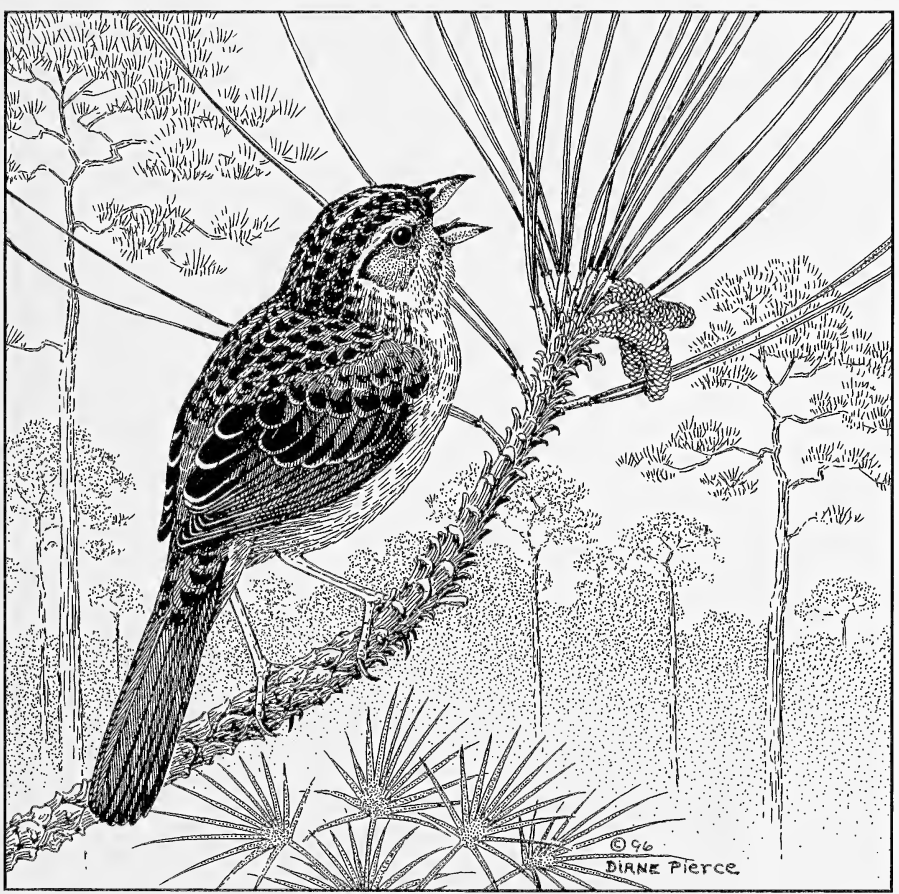
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PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 2

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The *Florida Field Naturalist* is published quarterly (February, May, September, and November) by the Florida Ornithological Society. It is printed by E.O. Painter Printing Co., P.O. Box 877, DeLeon Springs, FL 32130. The permanent address of the Florida Ornithological Society is Division of Birds, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at www.fosbirds.org

THIS PUBLICATION IS PRINTED ON NEUTRAL PH PAPER

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 2

MAY 2007

PAGES 39-72

NOTES

Florida Field Naturalist 35(2):39-42, 2007.

AVIAN POX-LIKE LESIONS IN A FLORIDA SCRUB-JAY POPULATION

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Wild birds in Florida suffer from a variety of infectious diseases, including avian pox caused by the virus *Poxvirus avium*. Although poxvirus infections have been reported for a large number of passeriform birds globally (Kirmse 1967, Bolte et al. 1999), infections have been documented in only 6 passerine species in Florida: Blue Jay (*Cyanocitta cristata*), Northern Mockingbird (*Mimus polyglottos*), Chipping Sparrow (*Spizella passerina*), Red-winged Blackbird (*Agelaius phoeniceus*), Common Grackle (*Quiscalus quiscula*), and House Finch (*Carpodacus mexicanus*) (Forrester and Spalding 2003). Although most poxvirus infections on passerines in Florida have been mild and self-limiting (Forrester and Spalding 2003), the potential mortality rate from poxvirus can be high for certain taxa (Tripathy and Reed 1997, van Riper et al. 2002). In addition, the pox virus can indirectly affect survival of birds by reducing their body condition (Tripathy and Reed 1997, Forrester 1991), by impairing feeding ability, respiration, and vision (Tripathy et al. 2000), and possibly by increasing susceptibility to other diseases (Atkinson et al. 2005). Given the paucity of data on poxvirus in Florida and that there is no effective treatment for the disease (Bolte et al. 1999), any occurrence in imperiled or listed species warrants concern. We report here on the prevalence of pox-like lesions in Florida Scrub-Jays (*Aphelocoma coerulescens*) in suburban areas of Charlotte County during the 2005 breeding season.

Federally listed as threatened in 1987 because of habitat loss and fragmentation (Woolfenden and Fitzpatrick 1996), the Florida Scrub-Jay is restricted to peninsular Florida in patches of scrub oak (*Quercus* spp.) habitat. Our study area is located in the Deep Creek and Harbour Heights suburban subdivisions in Charlotte County, which comprise the second largest population of Florida Scrub-Jays in southwestern Florida.

In the course of an ongoing color-banding study of the demographics of Florida Scrub-Jays, we examined, measured, and banded nestling jays when they were 11 days old and then recaptured the birds when they were fledglings at ≥ 6 weeks old to add a unique combination of colored bands. Pox-like swellings on the featherless body parts of a few fledglings were first observed with the aid of binoculars in early June 2005; subse-

quently, we began looking carefully for current or old lesions on all nestlings, fledglings, and adults. We carefully washed hands and equipment with a 10% Nolvasan (Fort Dodge, Iowa) solution when handling birds to prevent further transmission.

We did not observe lesions on any of the 116 nestling Florida Scrub-Jays we handled between 28 March and 17 June 2005. We observed lesions on 13 of the 39 (33%) fledglings we captured between 23 June and 18 July 2005; lesions were primarily on the feet (12 of the infected fledglings), but also on the cere (3 of the infected fledglings), eyelids (2 of the infected fledglings), and in one case on the axillary region at the base of the wing (Figs. 1-2). The largest of these wounds were approximately 9-10 mm in diameter. Survival of fledglings was independent of whether they had pox-like lesions; 4 of the 13 fledglings with lesions disappeared before September 2005, whereas 5 of the 26 fledglings without lesions disappeared before September 2005 (Fisher's exact; $P = 0.45$). Not all fledglings within a brood showed signs of infection.

The apparent infection was more frequent in fledglings than in adults. With binoculars, we frequently observed lesions on fledglings but never on adults, although we did trap one adult (out of 5 caught during June-July) with a small 2-3 mm scabby lesion on the right hallux on 19 July.

The observed lesions were consistent with avian pox (*M. Cunningham and D. Forrester, personal communication*). However, we did not sample blood or tissue for laboratory analysis given time constraints and limited resources. Therefore, we cannot definitively rule out the possibility of other less likely potential causes, including papilloma virus, scaly leg mites, mycotoxins, or nutritional deficiencies (Tripathy and Reed 1997, Pennycott 2003). Pox-like lesions on Florida Scrub-Jays have been observed occasionally in central Florida (*R. Bowman, personal communication*), but have not been re-



Figure 1. Pox-like lesions on the feet of a two-month old Florida Scrub-Jay.



Figure 2. Pox-like lesions on the head of a two-month old Florida Scrub-Jay. Photos taken by C. Faulhaber.

ported in frequencies as high as we found in our study. The cause of the outbreak in our study is unknown; we did not observe any instances in 2004 or 2006. It is notable that the 2005 breeding season was preceded by the passage of Hurricane Charley, which caused considerable damage to the vegetation and to housing and infrastructure in the study area. The virus is generally transmitted mechanically, often by mosquitos (Buenestado et al. 2004), and poxvirus is most widespread in Florida during the late summer when mosquito abundance peaks (Forrester and Spalding 2003). Potential effects of the hurricane on mosquito abundance, food availability, and microhabitat use are unknown.

Monitoring and understanding disease outbreaks is important for managing Florida Scrub-Jay populations, particularly those populations that are small or declining or facing other threats such as habitat loss and degradation from human development. Poxvirus could have a negative impact on scrub-jay populations if it increases in frequency following hurricanes or other environmental perturbations.

Funding for this project was provided by the Nongame Wildlife Trust Fund of the Florida Fish and Wildlife Conservation Commission. We thank M. Cunningham, D. Forrester, J. Rodgers, and an anonymous referee for reviewing the manuscript.

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FIRST VERIFIABLE RECORDS OF THE ROUGH-LEGGED HAWK IN FLORIDA

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Prior to 2000, the status of the Rough-legged Hawk (*Buteo lagopus*) in Florida was uncertain. Robertson and Woolfenden (1992) placed it on their list of unverified species as “ostensibly a rare, occasional to irregular winter visitor.” Stevenson and Anderson (1994) called it a “very rare, irregular winter visitor to Florida, with at least 24 reports by credible observers.” Reports of Rough-legged Hawks in Florida date back to 1937 (Sprunt 1940), and more than 60 reports had accumulated by 1991 (Stevenson and Anderson 1994). However, despite the large number of reports in the state, verifiable evidence in the form of specimens, photographs, or videotapes was lacking, and some reports undoubtedly were incorrect (e.g., the pair that nested and raised two young [!] on an island in Lake Okeechobee; Sprunt 1940). All five Rough-legged Hawk reports that were submitted to the Florida Ornithological Society Records Committee (FOSRC) between 1981 and 2001 were rejected (FOSRC records *vide* A. Kratter in litt.). Here, we describe the first documented occurrences of Rough-legged Hawks in Florida based on three individuals photographed at Lake Apopka North Shore Restoration Area (LANSRA) in Orange County during 2000.

OBSERVATIONS

While conducting his twice- or thrice-weekly bird surveys at LANSRA, Robinson observed a first-winter dark-morph Rough-legged Hawk in the southeastern corner of the restoration area on 16 February 2000 (see Pranty et al. 2002 for a description of the property). The following day, Radamaker photographed a light-morph Rough-legged Hawk at the same location. It eventually was determined that there were three first-winter Rough-legged Hawks at LANSRA during this period: one light morph and two dark morphs. All three Rough-legged Hawks were observed through 11 April 2000, and two (the light morph and one dark morph) lingered to 19 April 2000 (Pranty 2000a, b; Robinson, pers. obs.).

The light morph was readily identifiable by plumage characters such as the large black carpal patches that contrasted with mostly light underwings, the solid dark belly band, the wide dusky subterminal tail band, and the broad white uppertail coverts. The identification of the two dark morphs was complicated by the presence of other dark-morph *Buteos* at LANSRA during the same period, including two Red-tailed Hawks (*B. jamaicensis*) and one Swainson's Hawk (*B. swainsoni*). The dark-morph Rough-legged Hawks were studied at length and were identified using a combination of plumage and morphological characteristics such as the smallish bills and feet, black-tipped white underwing flight feathers, feathered tarsi, and the habit of perching on thin branches of shrubs (Bechard and Swem 2002). Among North American *Buteos*, feathered tarsi are shared only with the Ferruginous Hawk (*B. regalis*), which lacks a bold black subterminal tail band in all plumages.

Rademaker, Weatherman, and others took photographs of the LANSRA Rough-legged Hawks and submitted them to the FOSRC with detailed descriptions of all three individuals (logged separately as FOSRC 00-415, 00-416, and 00-418). The FOSRC accepted each observation as representing one of the first three verifiable records of the Rough-legged Hawk in Florida (Bowman 2000). Although the photographs taken of the birds show field marks diagnostic of Rough-legged Hawks, none of the photographs is of sufficient quality to be published here.

DISCUSSION

The three Rough-legged Hawks found at LANSRA during early 2000 corresponded with a substantial movement of the species into much of the eastern United States between late winter and mid-spring. The Hudson-Delaware region witnessed the "largest invasion . . . in perhaps a decade," and in New York on 27 February 2000, 128 Rough-legged Hawks were seen at Braddock Bay and 121 others were observed at Derby (Burgeil et al. 2000: 159). The raptor season was "superb" in the Middle Atlantic Coast region, with at least 20 Rough-legged Hawk reports in Virginia (Ilf 2000: 164), and Appalachia recorded its "best numbers . . . in several years," with more than 80 reported (Leberman 2000: 178). Rough-legged Hawks were found in "a record 56 counties in Minnesota, while Michigan also had an above-average number" during winter (Granlund 2000a: 181), and a record number of Rough-legged Hawks—**2600**—was noted at Whitefish Point, Michigan during spring, with 525 birds tallied there on 23 April 2000 (Granlund 2000b).

Rough-legged Hawks winter regularly south to Arkansas, Tennessee, and Virginia, and occur casually to the Gulf coast, with at least one verifiable record from Georgia (AOU 1998, Bechard and Swem 2002, Beaton et al. 2003). There have been several subsequent reports of Rough-legged Hawks in Florida following the LANSRA records of 2000, but none is supported by verifiable evidence. However, a report of one light morph at LANSRA 21 December 2005 (FOSRC 06-603) was accepted by the FOSRC (A. Kratter in litt.). Thus, the three Rough-legged Hawks recorded at Lake Apopka North Shore Restoration Area during February–April 2000 represent the first and only verifiable records obtained in Florida.

ACKNOWLEDGMENTS.—We thank Lyn Atherton for providing copies of her photographs and for her commentary, Gianfranco Basili for facilitating access to LANSRA and for providing information about the site, and Andrew Kratter for providing copies of the FOSRC documentation forms. We thank Gian Basili and Andy Kratter for improving drafts of the manuscript.

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ACADIAN FLYCATCHER CAUGHT IN THE WEB OF A GOLDEN SILK ORB-WEAVER

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The golden silk orb-weaver (*Nephila clavipes*), which is known as the “banana spider” in many parts of Florida, creates strong webs (Griffiths and Salantri 1980) capable of ensnaring a variety of invertebrate prey (Robinson and Mirick 1971). Orb-weaver webs also are capable of ensnaring small birds, particularly hummingbirds (Graham 1997), but published accounts of this phenomenon are uncommon. We report a case of an Acadian Flycatcher (*Empidonax vireescens*) becoming ensnared in the web of a golden silk orb-weaver in Florida.

The spider web was constructed under the eave of our home in Tallahassee (Leon Co.) approximately 2 m above the ground. We discovered the ensnared flycatcher (Fig. 1) on 23 September 2006 at 14:30. We watched the bird struggle for approximately 5 min, and when it appeared incapable of freeing itself, we removed it from the web. The bird was identified as an after-hatch-year Acadian Flycatcher based on the yellow wash along the flanks and lower belly, the truncated shape of the retrices, and the absence of a yellow wash along the throat (Pyle 1997). The bird was released after webbing stuck to the body was removed.

Bibliographic and Internet searches unearthed two published records and several anecdotal reports of birds ensnared in the webs of this orb-weaver. Graham (1997) found *Phaethornis* hummingbirds ensnared in the webs of silk orb-weavers in Central America and suggested this might be a potentially important source of mortality for tropical hummingbirds. Forbush and May (1939) found fledgling White-eyed Vireos (*Vireo griseus*) entangled in the webs of silk orb-weavers in Bermuda. Archives of on-line listserves (e.g., Floridabirds-L, BirdChat, and Georgia Birds on-line) provided additional reports of Northern Parula (*Parula americana*), American Redstart (*Setophaga ruticilla*), Magnolia Warbler (*Dendroica magnolia*), Wilson’s Warbler (*Wilsonia pusilla*), and Hooded Warbler (*Wilsonia citrina*) caught in webs that most likely were constructed by the golden silk orb-weaver. Finally, Bent’s (1953) account of the Yellow-throated Warbler (*Dendroica dominica*) described this species becoming entangled in tough spider webs that also were most likely constructed by *N. clavipes*.

The case we observed seemed noteworthy because the mass of Acadian Flycatcher (12-14 g, Whitehead and Taylor 2002) is greater than the mass (<10 g) of many of the other bird species found in webs of this orb-weaver and those of other spiders (e.g., McKenzie 1991, Ross 1950, Stott 1951). An exception in the case of the golden silk orb-weaver is the fledged White-eyed Vireos recorded by Forbush and May (1939). This vireo has a mass similar to that of Acadian Flycatcher, however Forbush and May (1939) suggested the weaker flight of fledgling vireos was a contributing factor to the captures they observed. The incident we observed involved an adult in migration and capable of rapid, darting flight (Whitehead and Taylor 2002). The flycatcher also may have been pursuing prey that was trapped in the web.

Species of *Nephila* found in Asia, Australia, and Africa capture and eat small birds frequently (Robinson and Robinson 1976). The largest bird reported to have been captured in a *Nephila* web was a 30-35 g Lewin’s Honeyeater (*Meliphaga lewinii*, Anonymous 2006). Species of *Nephila* that catch and eat birds all are larger than *N. clavipes* at



Figure 1. Acadian Flycatcher caught in the web of a golden silk orb-weaver.

maturity, and *Nephila* with larger body sizes are known to create thicker silk strands potentially capable of withstanding greater forces (Griffiths and Salanitri 1980). Even so, a slow approach speed and indirect angle could lead to the occasional entrapment in spider webs of birds much larger than the Acadian Flycatcher. Pratt (1974) found a 90-110 g Black-faced Cuckoo-Shrike (*Coracina novaehollandiae*) trapped in the web of a European spider, while Terres (1939) found an 18 g Grasshopper Sparrow (*Ammodramus savannarum*) ensnared in a low-hanging spider web in New York.

The golden silk orb-weaver disables large prey items by wrapping the prey in additional webbing. The orb-weaver we watched did not venture near the flycatcher, and we found no reports of this species eating birds trapped in their webs. Silk orb-weavers cut their webs to free large, non-prey items such as leaves and twigs (Robinson and Mirick 1971). This report may have benefitted by allowing nature to run its course and determining whether the spider eventually ate or released the flycatcher once it had expired. However, the web was near our dining table, and this swayed us to provide a helping hand to one of the subjects.

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**SIXTEENTH REPORT
OF THE FLORIDA ORNITHOLOGICAL SOCIETY
RECORDS COMMITTEE: 2006**

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Abstract.—The Florida Ornithological Society Records Committee reached decisions on 38 reports involving 22 species and two distinctive subspecies. Twenty-seven of the reports were accepted, seven not accepted, and four were tabled pending further consideration or resolution of requests for more information. Among the 27 reports endorsed by the Committee, 18 are based on specimens, photographs, or videotapes. The occurrence history of the rare species represented by accepted reports is reviewed in the species accounts. Species new to the Florida list are Northern Fulmar (*Fulmarus glacialis*), based on a specimen, and Lesser Sand-Plover (*Charadrius mongolus*), supported by photographs. These two additions bring the Florida list to 497 species.

The 16th report of the Florida Ornithological Society Records Committee (FOSRC) constitutes an annual report for 2006. The FOSRC critically reviews submitted reports of rare or unusual birds in Florida, as well as potential new records for the state. Submissions are accepted only for species that are believed to be first-time vagrants in Florida, or that appear on the current Species Review List of the Birds of Florida, published on-line in the Florida Ornithological Society's (FOS) website (<http://www.fosbirds.org/RecordCommittee/FOSRC.php>). This list is reviewed and updated periodically and consists mostly of species on the Official State List of the Birds of Florida for which 10 or fewer accepted records exist, including records previously reviewed and accepted by the FOSRC or substantiated records (based on specimens, photographs, or video/audio tape) published in Robertson and Woolfenden (1992). In a few cases, species or distinctive subspecies are included in the Review List because the Committee wished to obtain further information on their status in the state. The FOSRC web pages (see above) also include the Official State List, the Rules and Procedures that govern the activities of the Committee, a reporting form for the direct on-line submission of reports to the FOSRC, the names and addresses of current Committee members, reports to the FOS Board on the proceedings of all recent FOSRC meetings, and a growing gallery of photographs of rare birds in Florida processed by the FOSRC.

This report details the evaluations of 34 new submissions totaling nearly 65 individuals and involving 22 species and two distinctive subspecies. Of the 34 reports, received from 22 September 2005 to 10 July 2006, 24 were reviewed and accepted, six were not accepted, and four were tabled pending further consideration of available evidence and specimen examination. In addition, the Committee resolved the following four reports that had been tabled pending further information or were otherwise previously unresolved: White-tipped Dove (*Leptotila verreauxi*, 03-504, accepted), Yellow-green Vireo (*Vireo flavoviridis*, 04-526, accepted), Say's Phoebe (*Sayornis saya*, 05-561, not accepted), and Golden-crowned Sparrow (*Zonotrichia atricapilla*, 05-562, accepted).

Thus, overall, the Committee evaluated or reevaluated a total of 38 reports in its 2006 meetings, accepting 27 of them (71%), not accepting seven of them (18%), and tabling the rest for future reconsideration. The current acceptance rate is only a little

below the average rate of 76 percent in the post-2000 period. Twenty-eight (74%) of the reports were accompanied by photographs (27) or a videotape (1), and two involved specimen records deposited in the Florida Museum of Natural History (FLMNH). Since 1996, three previous FOSRC reports have been published in the *Florida Field Naturalist* (FFN). During this time, the proportion of reports submitted with photographs increased from 38 percent in the 1996-2000 period (13th Report) to 74 percent in 2006 (current report). This increase in photo-documentation of rare bird sightings almost certainly reflects the recent availability of new digital technology in photographic equipment. Good photographs nearly always help to resolve difficult issues of identification. However, photographs not accompanied by a written description that describe what the observer saw do not always speak for themselves. An iconic case in the current report is exemplified by the White-tipped Dove observed and photographed by several people in the Dry Tortugas in 2003 (see below).

Bowman and Greenlaw (2006) reviewed the history of the Official State List of the Birds of Florida and provided an updated list (their Appendix 1) for the period ending 31 December 2005. This list comprised a total of 495 species, all of which are based on independently verifiable evidence (specimens, photographs or videotapes, and audio-recordings). To this list, we add two more species, thus updating the list in Bowman and Greenlaw (2006) through 31 December 2006: Northern Fulmar (*Fulmarus glacialis*, 06-584, specimen UF 44664) and Lesser Sand-Plover (*Charadrius mongolus*, 05-575, photographs). These additions bring the total number of species on the State List to 497. Both of the added species also now appear on the Review List. The Committee also removed four species from the Review List in 2006: Ross's Goose (*Chen rossii*), White-faced Ibis (*Plegadis chihi*), Calliope Hummingbird (*Stellula calliope*), and Cassin's Kingbird (*Tyrannus vociferans*). These species lose their asterisk (*) on the State List, a convention that signifies species on the Review List. One other taxon, "Audubon's" Warbler (*Dendroica coronata auduboni* and related yellow-throated subspecies), was added to the Review List as well, because of its vagrant status in Florida and the desire by the Committee to accumulate information on its occurrence in the state.

The most frequently reported species in 2006 were White-faced Ibis with four reports of single birds and Cassin's Kingbird with three reports of singletons. Calliope Hummingbird and Manx Shearwater (*Puffinus puffinus*) each were represented by two reports.

All documentation reviewed by the FOSRC, including descriptions, photographs, videotapes, audio recordings, and Committee comments is archived in the Division of Ornithology at the Florida Museum of Natural History, University of Florida, Gainesville, and is available for public access. All observers are encouraged to submit reports on Review listed species, and on species potentially new to the State List. Ideally, observers should record details of plumage, shape, size, behavior, and other pertinent information, in a timely fashion in the field. Reports to the Committee should provide all pertinent forms of documentation, including a written description of observations, in the original submission. All observations should be submitted on the standard report form available from the Secretary or on-line in the FOSRC web-pages (see link above). In addition to uniformity, the report form provides the Committee and the observer with guidelines to those criteria used by the FOSRC for its evaluation. Completed forms should be submitted to the Secretary of the FOSRC, who currently is Andrew W. Kratter (address above), e-mail at kratter@flmnh.ufl.edu.

This report was prepared on behalf of all members of the FOSRC serving during 2006 when the reports discussed here were evaluated. The members serving then and their home city and last year of tenure were Jon S. Greenlaw, Secretary (Cape Coral, 2006), Fred E. Lohrer (Lake Placid, 2007), Mickey C. Wheeler (Miami, 2008), R. Todd Engstrom (Tallahassee, 2009), Sally Jue (Tallahassee, 2010), Andrew W. Kratter (Gainesville, 2011), and Glen E. Woolfenden (Lake Placid, 2012). See the FOS website (above) for a list of the current members on the FOSRC and their addresses.

Contributors to this report: Lyn S. Atherton (LSA), Janine Bacquie (JB), Fred Bassett (FB), Mark Berney (MB), Rodney O. Cassidy (ROC), James Cavanagh (JC), Tom Curtis (TC), Michelle Davis (MD), Robin M. Diaz (RMD), Robert A. Duncan (RAD), Murray Gardler (MG), Vi Greenlaw (VG), John H. Hintermister V (JHH), Paul Johnson (PJ), Dean Jue (DJ), Andrew W. Kratter (AWK), Travis MacClendon (TMa), Larry Manfredi (LM), Trey Mitchell (TMi), Brennan Mulrooney (BM), Matthew Pike (MP), Ralph Pike (RP), Bill Pranty (BP), John Puschock (JP), Fran Rutkovsky (FR), Ted Stevens (TS), Philip Stoddard (PS), Darcy Stumbaugh (DS), Roberto Torres (RT), Alex Vinokur (AV), Robert D. Wallace (RDW), and Andrew Wraithmell (AW).

COMMITTEE NEWS, FORMATS, AND TERMINOLOGY

Committee news.—During 2006, FOSRC met twice, on 28 January at the Florida Museum of Natural History, Gainesville, and on 5 August at Archbold Biological Station, Lake Placid. At the January meeting, the Committee revisited the older reports of “Marbled Murrelet” that it had reviewed and accepted, and affirmed that they all referred to Long-billed Murrelet (*Brachyramphus perdix*) (see Mlodinow 1996, American Ornithologists’ Union [AOU] 1998).

At the August meeting, then-Secretary Jon S. Greenlaw reached his term limit on the Committee of seven years. After serving a full term, a member cannot be re-nominated to serve again until one or more years have passed. Andrew (Andy) W. Kratter was nominated by the Committee to serve as the new Secretary. This nomination was approved by the FOS Board at its fall meeting, 2006. Additionally, R. Todd Engstrom resigned from the Committee after serving a partial term. The two vacancies were filled by Mark Berney (Fort Lauderdale) and Bill Pranty (Bayonet Point).

Formats and terminology.—The following accounts report on all actions taken by the Committee during 2006, and provide information on the history of the rare species in Florida covered in the accepted reports. Additional information on the quality of the evidence available to the Committee and on identification issues may be found in the FOS board reports submitted during 2006 and available on-line (see above website). Complete summaries of previously accepted and not accepted reports for all species listed below may be found online as well in the board reports.

We follow current nomenclature and sequence in the species accounts that follow (AOU 1998 and subsequent supplements). Within accounts, reports on more than one submission on a species are introduced sequentially by the date of receipt. The code (in parentheses) associated with each submitted report to the Committee (e.g., 03-504) is the catalog number for the sighting or specimen report that is logged into an electronic catalog as it is received, and refers to year (03-) followed by sequential number (-504), beginning with the first entry in the catalog. The initials preceding the catalog number refer to one or more contributors who supplied information to the Committee (see list above). Although the FOSRC does not formally review age or sex of each bird, we often receive that information, and we will correct it when we find the report in error. We provide that information here as appropriate. Our terminology for age follows the calendar-based system outlined in Pyle (1997). We normally do not review subspecies, but on occasion (two here in this report) we accept submissions on distinctive, field-identifiable subspecies whose taxonomic rank may be revisited in the future by the American Ornithologists’ Union. Our use of the words “report” and “record” to describe occurrences of species in Florida follows Robertson and Woolfenden (1992).

Abbreviations used in this report are CBC, Christmas Bird Count; CP, county park, FOC, Field Observations Committee (reports prepared by B. Pranty since 1992 and published in *FFN*; the convention “FOC [year]” signifies a species occurrence reported in FOC and year of publication); nmi, nautical miles; NWR, National Wildlife Refuge; SP, state park; subsp. and spp., singular and plural for subspecies; UF, University of Florida (an acronym applied to specimens in the FLMNH collection).

ACCEPTED REPORTS

- ROSS'S GOOSE, *Chen rossii*. (a) (TC, AW, 05-579), one or two adults observed and photographed from 20 November to 29 December 2005 at Mound Pool 1 at St. Marks NWR, Wakulla Co.; (b) (RAD, PJ, 06-587), a flock of nine birds associated with Snow Geese (*Chen caerulescens*) observed and photographed in Fort Walton Beach spray fields, Okaloosa Co., on 10 December 2005. In the early 1990s, this species was regarded as very rare (Robertson and Woolfenden 1992) to accidental (Stevenson and Anderson 1994) in northwestern Florida. Only three occurrences were known in the state at that time, one of which was documented by a published photograph (Ogden 1988; 88-133). The FOSRC has accepted eight previous reports (see below) including two of those mentioned in Robertson and Woolfenden (1992). At least 12 other occurrences of this species not seen by FOSRC were reported to the FOC (1995-2003). Most reports and records were from Wakulla and Leon cos. westward in the panhandle, and a few were in the peninsula south to Brevard Co.
- NORTHERN FULMAR, *Fulmarus glacialis*. (AWK, 06-584), a specimen, UF 44664; a second year, intermediate-plumaged male, found weakened 19 April 2005 on Satellite Beach, Brevard Co., which died two days later at the Florida Wildlife Hospital in Melbourne. See Kratter and Small (2007) for additional details. This specimen represents the first record of this polymorphic species in Florida.
- MANX SHEARWATER, *Puffinus puffinus*. (a) (RDW, 06-602), three adults observed 42 nmi east of Ponce Inlet, Volusia Co., on 1 January 2006. Descriptive details eliminated Audubon's Shearwater (*Puffinus lherminieri*); (b) (RT, 06-609), single adult observed in the Gulf Stream about 9 nmi southeast of Key Biscayne, off Miami, Miami-Dade Co., on 29 July 2006. Again, descriptive details eliminated Audubon's Shearwater. Five previous reports and records (specimens, photographs) have been accepted by the FOSRC in the period from November 1994 through September 2001. A report not seen by the FOSRC involved a bird off Port Canaveral, Brevard Co., in November 2004 (FOC 2005). Robertson and Woolfenden (1992) listed four specimen records from Florida from both the Atlantic and Gulf coasts (one record, Escambia Co.), the earliest taken in 1960. Kratter et al. (2002) reported two other recent specimens in the FLMNH collection. About 20 sight reports from Florida were known through 1992, with occurrences distributed along the Atlantic coast from Jacksonville (Duval Co.) to Miami (Stevenson and Anderson 1994). Altogether, the species is a rare, perhaps regular visitor along the east coast of Florida, with approximately 25 sight reports (including at least two photographic records) and six specimens known through 2006.
- WHITE-FACED IBIS, *Plegadis chihi*. (a) (TC, 05-577), a single adult in breeding plumage observed and photographed at St. Marks NWR, Wakulla Co., on 6 June 2005; (b) (TC, 05-578), an immature bird at St. Marks NWR, observed (diagnostically described, photographs confirmed *Plegadis* sp.) on 20 November 2005; (c) (JHH, AWK, 06-595), an adult observed and photographed in Lake Tuscawilla, Micanopy, Alachua Co., on 25 February 2006; (d) (RAD, 06-605), an adult in breeding plumage observed and photographed at Fort Walton Beach spray fields near Mary Esther, Okaloosa Co., on 17 May 2006. The oldest record in Florida, 18 April 1886, is based on a specimen of a breeding female collected with a clutch of eggs in Brevard Co. (Robertson and Woolfenden 1992, Stevenson and Anderson 1994). The species was known from fewer than a dozen or so sightings before 1992, including at least two supported by photographs (Robertson and Woolfenden 1992). The FOSRC has accepted six additional reports from 1994 through 2004. At least 12 other recent reports not evaluated by the FOSRC have been received by the FOC (1992-2005). Most occurrences are from north Florida, but see Stevenson and Anderson (1994) for evidence in the mainland peninsula southward.
- ROUGH-LEGGED HAWK, *Buteo lagopus*. (RDW, 06-603), a single, immature pale-morph bird was observed by three people on the Zellwood CBC, Lake Apopka Restoration

Area, Orange Co., on 21 December 2005. Previously, based on photographs, the FOSRC has verified only three other records in Florida. These hawks, one pale and two dark morphs also near Lake Apopka, were present from 16 February to 11 April 2000 (two, to 19 April) (FOC 2000). They constituted Florida's first verifiable records, even though about 60 unverified reports had accumulated from throughout the state south to Key West by the early 1990s (Robertson and Woolfenden 1992). The species is probably a very rare and irregular winter visitor to Florida.

LESSER SAND-PLOVER, *Charadrius mongolus*. (TC, TM, AV, RDW, AW, 05-575), a single bird in non-breeding plumage observed and photographed at St. Marks NWR, Wakulla Co., from 17 to 21 September 2005 (Curtis 2007). Written documentation was provided by four observers, and images by three photographers. Available evidence concerning body size, bill shape and size (short, blunt-tipped bill), relative leg length and leg position, lack of white hindneck collar, body posture, leg color, and thin wing stripe visible in flight (Hirschfeld et al. 2000) all supported the original identification. Two foreign commentators, who had field experience with both sand-plover species in Europe (E. Hirschfeld) and Australia (R. Boughton), submitted confirmatory assessments. This acceptance verifies the first Florida record for the species, and also the first record east of the Mississippi River in North America.

BLACK-HEADED GULL, *Larus ridibundus*. (LM, TM, RT, 05-576), a single hatch-year bird in non-breeding plumage was observed and photographed at the Wetlands Mitigation Site and vicinity, Cutler Ridge, Miami-Dade Co., on 19 and 22 October 2005. The Committee considered two written reports and photographs from two sources. One photograph of the bird in flight permitted the Committee to discount the possibility of the similar immature Gray-hooded Gull (*L. cirrocephalus*) and Bonaparte's Gull (*L. philadelphia*). FOSRC has accepted five previous sightings, four supported by photographs, in Leon (August 1982), Collier (November 1990), Duval (December 1998), Alachua (January 2000), and Indian River (February 2002) cos. Robertson and Woolfenden (1992) provided one other record based on a photograph (in addition to the birds in Leon and Collier cos. mentioned above). About 25 other unverified reports were known from Florida by the end of 2006 (Stevenson and Anderson 1994; FOC 1992-2006).

RAZORBILL, *Alca torda*. (AWK, 06-586), a second-year male, preserved as a specimen (UF 44677), was found on Honeymoon Island, Pinellas Co., on 13 April 2005 (Kratzer and Small 2007). A record based on photographs (Brevard Co.), and eight or nine other specimens, including one from Santa Rosa Co. on the Gulf coast, are known from Florida (Duncan 1988, Robertson and Woolfenden 1992, Stevenson and Anderson 1994; FOC 1993, 1996). This rare and irregular winter visitor was first recorded in the state in 1967 (Cruikshank 1967).

WHITE-TIPPED DOVE, *Leptotila verreauxi*. (JB, MB, MG, VG, LM, JP, PS, RDW, AW, 03-504), originally observed by many birders and photographed by several of them on Garden Key, Dry Tortugas, Monroe Co., from 19 April to 2 May 2003. Three photographs unaccompanied by a written description and evaluation were submitted in 2003. These first photographs provided contradictory or ambiguous information about critical plumage colors and pattern (underparts, forehead/crown/nape) that were relevant in discriminating *L. verreauxi* from *L. jamaicensis* (Caribbean Dove). The report history spanned 2003-2006 and five meetings as it moved from non-accepted status to a re-opened file as more photographs of the dove were received. Sixteen additional photographs accumulated in the report file, but the identification was not resolved until the Committee finally obtained timely field notes from one of the original observers. During this process the Committee also examined specimens from the FLNMH and the Field Museum of Natural History (Chicago). Critical diagnostic characters were pale buff tones on the lower underparts and gray on the crown that did not extend onto the nape. Underparts color (buffiness extending from abdomen to undertail coverts) indicated likely origin in the Yucatan Peninsula, Mexico, where

L. v. fulviventris is a relatively distinctive subspecies. Only one other record is known from Florida, a bird observed and photographed 6-7 April 1995, on Garden Key, Dry Tortugas, also believed to represent *L. v. fulviventris* (FOSRC 95-337).

- ALLEN'S HUMMINGBIRD, *Selasphorus sasin*. (a) (FB, 06-599), an adult male banded, measured, and photographed in Tallahassee, Leon Co., on 14 January 2006. Measurements and images of the critical, diagnostic rectrices (R2, R5) were part of the detailed documentation provided by an experienced hummingbird bander; (b) (FB, 06-600), another adult male banded and measured in Tallahassee on 22 February 2006, constituted one more Florida record. The FOSRC has accepted six other in-hand identifications, all from north Florida (Pensacola, Escambia Co., east to Gainesville, Alachua Co.). An adult male photographed at a feeder on Cedar Key, Levy Co., 28 February 1988, regarded as "almost surely this species," was treated properly as unverified at that time (Robertson and Woolfenden 1992).
- SULPHUR-BELLIED FLYCATCHER, *Myiodynastes luteiventris*. (MD, RMD, 06-590), hatch-year bird captured, photographed, and banded at Bill Baggs Cape Florida SP, Miami-Dade Co., on 8 October 2005, was well-documented. Size and plumage eliminated other similar *Myiodynastes*, *Empidonomus*, and *Legatus* flycatchers from consideration. Only four other records, all supported by photographs, are known from Florida, 1995 through 2004 (FOSRC). One was in Pinellas Co. (September 2000), and the others also occurred in Miami-Dade Co.
- TROPICAL KINGBIRD, *Tyrannus melancholicus*. (ROC, 06-591), an unknown-aged bird observed and videotaped in a subdivision of Apalachicola, Franklin Co., on 7 January to 10 February 2005 at least. The videotape documented the diagnostic vocalization of the species. The taxonomic revision of the Tropical Kingbird complex (Traylor 1979) and the ensuing recognition of *T. couchii* in that complex (AOU 1983) cast doubt on all early reports of "*T. melancholicus*" in Florida (Robertson and Woolfenden 1992). Stevenson and Anderson (1994) provided a review of these early reports. The first verified record for Florida, based on call and photographic evidence, was a bird found in Birch SP, Ft. Lauderdale, Broward Co., on 11 October 1999 (FOSRC). A report of a bird photographed and videotaped at Fort DeSoto, Pinellas Co., in mid-May 1998 (FOC 1998), and identified as this species, was never submitted to the FOSRC, and thus was never verified. Other reports of an individual of this species (same?) in Fort DeSoto later in 1998 and in 1999 (FOC 1998-1999), and still others in Orange Co. in two consecutive winters (FOC 2002-2003), also were unverified. The current sighting constitutes the sixth verified record of Tropical Kingbird in Florida.
- CASSIN'S KINGBIRD, *Tyrannus vociferans*. (a) (BP, DS, 05-581), a single individual observed and photographed between Balm and Wimauma roads in southeastern Hillsborough Co., 18-20 December 2005; (b) (LA, 06-593), a single bird in a subdivision on Sweat Loop Road, Hillsborough Co., 6 February 2006, was treated as a different individual; and (c) (MP, RP, 06-598), a single bird was photographed along CR-835 south of Canon Hammock Park, Hendry Co., on 15 April 2006. Five photographic records and five written reports of this species in Florida have been verified or accepted by the FOSRC since 1984. One or two Cassin's Kingbirds have wintered near Lake Apopka, Orange Co., each season from 1999-2000 to 2004-2005 (FOC 2000-2005).
- THICK-BILLED VIREO, *Vireo crassirostris*. (RMD, 06-589), an after-hatch-year bird captured, photographed, and banded on 7 November 2005 at Bill Baggs Cape Florida SP, Miami-Dade Co. This Bahamian species was first reported in Florida in 1961 (Abramson 1974), but the first verifiable records were not forthcoming until 1989 and 1990 (Smith et al. 1990, Robertson and Woolfenden 1992). To date, including the current sighting, six photo- or audio-records and two accepted sight reports are known for Florida (FOSRC). Several other unverified reports were not seen by the Committee (e.g., FOC 1994, 1996).
- YELLOW-GREEN VIREO, *Vireo flavoviridis*. (BM, 04-526), single individual observed in Indigenous Park, Key West, Monroe Co., on 9 September 2002. Because the report sub-

mitted to FOSRC was prepared almost two years after the sighting, the Committee hesitated to accept the report based entirely on the memory of the observer. The description received was diagnostic, and clearly discounted other similar vireos, which were present at the same time. We recently received a photocopy of timely field notes that supported the original written report. One record (specimen, see Robertson and Woolfenden [1992]), six sight reports accepted by FOSRC since 1984, and several unverified reports constitute the known occurrences in Florida. The record and several reports concerned birds from the western panhandle, but other reports were from Pinellas, Palm Beach, and Monroe cos., all ranging in dates from 4-25 May and from 30 August to 11 September.

“AUDUBON’S” WARBLER, *Dendroica coronata* subsp. (LSA, 06-592), a well-marked bird (male?) in non-breeding plumage of this western form observed and photographed in East Beach Woods at Ft. DeSoto Park, Pinellas Co., on 28 September 2005. The first record for Florida was photographed on 3 May 1993 (B. E. Small) on the Dry Tortugas (Langridge 1993). Before 1994, about eight additional sight reports were known from the state (Stevenson and Anderson 1994). Since 1994, three photo-records (including 06-592) were added to the earlier list along with three unverified sight reports.

MACGILLIVRAY’S WARBLER, *Oporornis tolmiei*. (RMD, 06-588), a single bird observed and carefully described in timely field notes on 22 September 2005 at Bill Baggs Cape Florida SP, Miami-Dade Co. The report submitted to the Committee provided an analysis of the observations and elimination of similar species in the same genus. One record based on photographs and three accepted reports, including this one, constitute verified occurrences in Florida. The photo-record was a presumptive adult male seen by numerous observers in Sanibel Lighthouse Park, Lee Co., from 5-17 April 1998 (FOC 1998; 98-385). Verified reports concerned an individual in Fern Forest Park, Broward Co., from 17 February to 10 March 2001 (FOC 2001; 02-464), and a female in A. D. Barnes CP, Miami-Dade Co., 20 April to 4 May 2001 (02-487). Since 1995, five unverified sightings also have been reported (FOC 1995-2005).

GOLDEN-CROWNED SPARROW, *Zonotrichia atricapilla*. (TS, 05-561), an after-second-year bird observed on 6 February 2005 near Lake Apopka, Orange Co. Bold black lateral crown stripes that contrasted with a gray face, and a broad patch of yellow on the forecrown eliminated other *Zonotrichia* species. The only record of this species in Florida is based on a photograph of a bird observed at Islamorada, Upper Matecumbe Key, Monroe Co., on 21 June 1990 ([Anonymous] 1990, Hoffman et al. 1991, Robertson and Woolfenden 1992; 90-209).

BULLOCK’S ORIOLE, *Icterus bullockii*. (JC, DJ, FR, 06-607), a female-plumaged bird appeared at a Brookforest Drive feeder in Tallahassee, Leon Co., from 17 February through 18 March 2006. A photograph and the written description confirmed the identification. This species and the Baltimore Oriole (*I. galbula*) were recently reinstated as separate species by the AOU (1995). The issue of mis-identification of similarly plumaged female and immature Bullock’s and Baltimore orioles created initial uncertainty about the status of the former species in Florida following the reinstatement. Pranty et al. (2005) reviewed all archived, verifiable evidence (specimens, photographs) through 2004. They corrected mis-identifications and found only six verifiable records from the state. The Tallahassee bird featured here provides a seventh record. The species may be more regular as a winter resident in Florida than the number of records currently suggest.

REPORTS NOT ACCEPTED

ROSS’S GOOSE, *Chen rossii*. (06-583), an adult observed on 26 December 2005 north of Wesley Chapel, Pasco Co. The Committee examined one written report and several photographs. The size of the bird was smaller than associated Snow Geese, but not as

small as expected of a "typical" Ross's Goose. The bill had a slight "grin patch" and bill shape was somewhat longer than expected. The consensus on the Committee was that the bird represented a likely hybrid with Snow Goose. Reports accepted by FOSRC: 88-133, 92-252, 99-399, 00-423, 01-445, 03-523, 03-524, 05-579, 06-587; previously not accepted: none.

CAKCLING GOOSE, *Branta hutchinsii*. (06-596), a single bird, unknown sex and age, observed at Fort Walton Beach spray fields, Okaloosa Co., on 10 December 2005. The Committee examined a single written report prepared well after the sighting had occurred, and a single photograph of a distant bird associated on the ground with several Ross's Geese and two Canada Geese. The photograph showed a relatively small, white-cheeked goose with a small, triangular bill. The position of the head (slightly turned away) did not permit confident evaluation of head or bill shapes. The size of the goose was approximately equal to or slightly larger than the nearest Ross's Goose standing nearby. The description did not consider the possibility of the most difficult-to-separate small Canada Goose, *Branta canadensis parvipes*. The identification is likely correct on geographic grounds, but the evidence was insufficient for confirmation. Reports previously accepted by FOSRC: 05-560, based on a specimen; not accepted: none.

NORTHERN GOSHAWK, *Accipiter gentilis*. (06-597), an immature-plumaged bird observed briefly by one observer at Seagrove Beach, Walton Co., on 16 February 2006. Size was described as "huge", and a "light streak" was present above and behind the eye. Relative size of a solitary hawk can be difficult to judge. The pale superciliary is supportive of the identification. The written report did not mention body proportions, and tail length and tip-shape was uncertain. This species is very rare in Florida, while the similar Cooper's Hawk (*A. cooperii*) is common. The only verifiable evidence of occurrence in the state is a partial skeleton. Stevenson and Anderson (1994) mentioned only four sightings of goshawks through 1992 that they regarded as "acceptable", one of which was an adult. No other occurrences were reported in Florida during the 1992-2005 period covered by the FOC. Considering the rarity of this species in Florida, the Committee felt that only a photograph accompanied by a strong supporting description is acceptable for verification of an immature bird. Reports previously accepted by FOSRC: none; not accepted: 03-502.

SOUTHERN LAPWING, *Vanellus chilensis*. (06-606), presumptively a single bird observed on two separate occasions, 21 May and 10 June 2006, at St. Marks NWR, Wakulla Co. Previous sightings in Florida included some known escapees from captivity, but natural vagrancy in other cases is possible (Robertson and Woolfenden 1992). The documentation in this instance included a written description and evaluation, and several distant photographs. The identification of the St. Marks bird is not in dispute. Plumage characteristics suggested the present bird represented the northern subspecies, *V. c. cayennensis*, of this South American species. This subspecies, with nearest breeding populations in northeastern South America and Panama (Ridgely and Gwynne 1989, AOU 1998), is apparently relatively sedentary. A breeding record is now known for Costa Rica as well (May 2005). Some level of vagrancy does occur, with recent reports in Trinidad and Mexico, and evidence exists for range expansion westward in Panama (Ridgely and Gwynne 1989, Martin 1997). This species is sometimes kept in captivity, but probably not commonly. The St. Marks bird was not banded, and it did not bear any other indications of previous captivity. One week after the lapwing disappeared from St. Marks, an individual of this species and subspecies appeared in Maryland (<http://www.pbase.com/wcbirding/sola>). It is not out of the question that this was the same bird seen in Florida. At the moment, given the history of the species in Florida, any decision other than possible escapee (origin unknown) would be speculative. Southern Lapwing is not yet accepted on the North American species list by the American Birding Association (<http://www.americanbirding.org/checklist/>). Committee rules require that we be conservative in cases involving possible escapees

from captivity unless evidence of natural vagrancy is concrete and convincing. The evidence of recent vagrancy in Middle America and range expansion into Panama and Costa Rica suggests a developing pattern that must be watched. Reports previously accepted by FOSRC: none; not accepted: none.

VAUX'S SWIFT, *Chaetura vauxi*. (a) (05-580), apparently one individual observed in flight at St. Marks NWR on 17 to 18 December 2005 by several observers. One written description was provided, but the photographs documented only the genus. No vocalizations were heard; (b) (06-582), up to 20 individuals were observed and photographed over Paynes Prairie near Gainesville, Alachua Co., from 18 December 2005 to at least 5 January 2006. The birds were seen by several observers. No vocalizations were heard. Photographs documented *Chaetura* sp. only. Because Chimney Swift (*C. pelagica*) is known from a specimen taken in Florida on 1 December (1993; UF 38060), and from other specimens obtained in mid-November (Stevenson and Anderson 1994), identifications of late reports of *Chaetura* swifts in the absence of information on vocalizations must be regarded as uncertain. Throat color and even flight behavior overlap in the two species. Reports previously accepted by FOSRC: 95-331, 99-397; not accepted: 90-184, 00-426.

SAY'S PHOEBE, *Sayornis saya*. (05-561), an adult observed by one person at St. Marks NWR on 26 January 2005. A brief written description seemed to rule out alternative possibilities. The written account was ambiguous on whether the observer witnessed tail pumping, a behavior that is expected in the species. The issue was not resolvable without timely field notes. The observer had field experience with the species, and the identification was probably correct. Reports previously accepted by FOSRC: 88-158, 98-382, 03-520; not accepted: none.

REPORTS NOT RESOLVED

CAKTLING GOOSE, *Branta hutchinsii*. (06-601), written description of a small-bodied, small-billed, white-cheeked goose observed by several birders from 2 February to 1 March 2006 in Barefoot Bay, south of Palm Bay, Brevard Co. A single photograph featured the small goose with its head slightly turned standing beside a large Canada Goose (*Branta canadensis*). The perspective on the small goose's head made it difficult to confidently evaluate bill shape. The report was tabled pending a request to see other photographs, and further evaluation of plumage and bill-head shape characters.

RED-BILLED TROPICBIRD, *Phaethon aethereus*. (06-608), a subadult was observed and photographed about 13 km southeast of Key Biscayne, and about 3 km southeast of Fowey Rocks Light, Miami-Dade Co., on 3 July 2006. The documentation record contained four photographs, a written description and analysis, an evaluation of a new field character that may help to discriminate between young Red-billed and White-tailed (*P. lepturus*) tropicbirds, and remarks from online commentators. The Committee tabled the report pending examination of plumage variation in specimens of the two tropicbirds in relation to the efficacy of the proposed field mark.

"EUROPEAN" HERRING GULL, *Larus argentatus* subsp. (06-604), written descriptions and photographs of a single bird observed by multiple birders and photographed by two people at the Volusia County Landfill, Daytona Beach, Volusia Co., 11 February to 6 March 2006. Documentation included a written synopsis of the European taxa, *L. argentatus* ssp. (*L. a. argentatus* [north-central Europe, Finland to Germany] and *L. a. argenteus* [western Europe, from southern Scandinavia, British Isles, south to the Iberian Peninsula]), *L. michahellis* (Yellow-legged Gull, southwestern Europe, and Mediterranean and Black seas basins), and the American *L. a. smithsonianus* (northern North America). Fourteen superb photographs of the bird on the ground and in flight, showing all potential field characters, and submitted comments from several European and American gull aficionados, completed the body of information submit-

ted to the Committee. Not included in the written description and evaluation by the lead observer, but mentioned by one commentator, was *L. cachinnans* (Caspian Gull, interior eastern Europe east into Asia). The outside commentators disagreed among themselves on the identification of the Florida bird, although a leading gull authority, K. M. Olsen, senior author of the new book on gulls (Olsen and Larsson 2004), supported the "European" Herring Gull identification. Olsen and Larsson (2004) split the herring gulls on the two sides of the Atlantic Ocean. The British Ornithologists' Union presently has the taxonomic status of the Herring Gull complex under review (Sangster et al. 2005). Considering the potential complexity of the issues related to gull identification, especially with respect to trans-Atlantic and European taxa about which taxonomic questions remain open, the Committee tabled the report to allow additional time for a more deliberate evaluation of these issues.

ICELAND GULL, *Larus glaucooides*. (06-594), a single second-winter bird observed and photographed at the Volusia County Landfill, Volusia Co., on 11 February 2006. The submitted report also contained a photograph of a second individual of the same species. An unresolved question about which individual the description in the documentation report applied caused the case to be tabled until the issue was resolved. Parts of the description did not seem to aptly describe either individual, which were both well-photographed. The identifications of the two birds were not in dispute.

REPORT IN ERROR

ATLANTIC PUFFIN, *Fratercula arctica*. (06-585 = 05-558), a specimen (UF 44359) previously processed and accepted at the 15 January 2005 meeting of the FOSRC, and inadvertently assigned a second catalog number. The report was dropped from the January 2006 agenda at the meeting.

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FIELD OBSERVATIONS

Fall report: August–November 2006.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December–February), spring (March–May), summer (June–July), and fall (August–November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32:7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: AFB = air force base, EOS = end of season, NP = national park, NSRA = north shore restoration area (*Orange*), NWR = national wildlife refuge, SF = state forest, SP = state park, STA = stormwater treatment area, STF = sewage treatment facility, WMA = wildlife management area, and N, S, E, W etc., for compass directions. Bold-faced entries denote birds newly reported or verified in Florida, or record counts.

SUMMARY OF THE FALL SEASON

In contrast to the previous two autumns, fall 2006 was quiet from a tropical-storm perspective. Only Tropical Storm *Ernesto* struck the state, entering Everglades National Park on 30 August and dissipating over Merritt Island hours later. The storm caused little damage and no fallouts of birds. In the western Panhandle, Bob Duncan reports that the “searing drought of 2006” lasted into August, with only 50 cm of rain for the entire year up through the month. “Thereafter September and October were characterized by a series of moderate to strong fronts bringing with them wave after wave of migrants and ... the best fall birding in years. ... It was not a season for vagrants, however.”

FOSRC rarities were one or more Masked Ducks at Viera, Florida’s first Hammond’s Flycatcher and central Florida’s first Thick-billed Vireo at Fort De Soto Park, a Cassin’s Kingbird at Lake Apopka, and Northern Wheatears at Everglades National Park and Honeymoon Island State Park. Another significant development involves a state-sponsored eradication plan for the Purple Swamphen, with 256 individuals shot in three Everglades sites. It remains to be seen whether complete eradication is possible, or whether agencies will be forced to settle with reduced numbers of swamphens at key sites.

Finally, we report the deaths of three birders this season: Steve Fickett Jr., Bob Kelley, and Juan Villamil, along with Jack Dozier, who died in late July.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 82, including 15 young, at *Polk* phosphate mines 12 Aug (P. Fellers, E. Lane); 200 at Loxahatchee (*Palm Beach*) 19 Aug (D. Freeland, M. Gardler et al.); 2 near Flemington (*Marion*) 31 Aug (C. Black); 4 at Lake Killearny (*Leon*) 3 Sep (S. McCool); 8 over Mango (*Hillsborough*) 9 Sep (D. Goodwin); 3 near Fairfield (*Marion*) 11 Sep (C. Black); 3 at Lakes Park (*Hillsborough*) 8 Oct (T. Mann); 3 at Coleman Landing (*Sumter*) 30 Oct (C. Black); 2 at Lake City (*Columbia*) 4 Nov

- (J. Krummrich); 42 at The Villages (*Sumter*) 21 Nov (J. Dinsmore); 50+ at Bushnell (*Sumter*) 22 Nov-EOS (C. Black, R. Smith et al.).
- FULVOUS WHISTLING-DUCK: 500 at Loxahatchee 19 Aug (D. Freeland, M. Gardler et al.); 15 at Sebastian Inlet (*Brevard*) 8 Oct (A. Bankert); 2 at T. M. Goodwin Waterfowl Management Area (*Brevard*) 16 Nov (D. Simpson).
- GREATER WHITE-FRONTED GOOSE: 1 at Paynes Prairie Preserve SP (*Alachua*) 14 Oct (A. Kratter); 5 over Eustis (*Lake*) 27 Oct (P. Urban, photo to FOC); 2 over Viera Wetlands (*Brevard*) 28 Oct (D. Freeland et al.); 1 at St. Marks NWR (*Wakulla*) 29 Oct (R. McGregor).
- SNOW GOOSE: 7 at Lake City (*Columbia*) 28 Oct (P. Burns); 1 at Paynes Prairie Preserve 31 Oct (B. Wallace, L. Davis); 2 white morphs at Southwood (*Leon*) 3-6 Nov (P. Fulkerson, S. McCool); 12 at Lake Apopka NSRA 5 Nov (H. Robinson); 1 blue morph SSW of Bruce (*Bay and Walton*) 11 Nov (P. Sykes, S. Bass); 1 blue morph at Alligator Point (*Franklin*) 23 Nov (J. Murphy); 4 (adult blue morph, adult white morph, and 2 juveniles—a family?) at STA-5 (*Hendry*) 24 Nov (M. England et al., photos to FOC).
- MUTE SWAN: 1 at Green Key Park, New Port Richey (*Pasco*) 30 Aug (K. Tracey).
- GADWALL: 5 near Bowling Green (*Hardee*) 25 Nov (D. Goodwin).
- AMERICAN BLACK DUCK: 3 passed New Smyrna Beach (*Volusia*) 29 Oct (B. Mulrooney, details to FOC); 2 at St. Marks NWR 27 Nov (M. Collins).
- MOTTLED DUCK: 5 E of Williston (*Levy*) 16 Sep (S. McCool).
- BLUE-WINGED TEAL: 1 at Cross Creek (*Alachua*) 13 Aug (G. Kiltie); 12 at Green Key 30 Aug (K. Tracey); 500 in W *Pasco* 20 Sep (K. Tracey); 830 at *Polk* mines 28 Sep (P. Fellers); 5750 at Viera 30 Nov (D. Freeland).
- CINNAMON TEAL: up to 2 at Viera 11 Nov-EOS (T. Dunkerton et al.).
- GREEN-WINGED TEAL: 1500 at Viera 29 Nov (M. Gardler).
- CANVASBACK: 1 at Lake Rowell (*Bradford*) 17 Nov (J. Hintermister).
- RING-NECKED DUCK: 1 female at The Villages (*Sumter*) 5 Aug-24 Sep (J. Dinsmore); 1 at *Polk* mines 20 Aug (P. Fellers, D. Brooke).
- COMMON EIDER: 1 juvenile male at Fort Clinch SP (*Nassau*) 19 Nov-EOS was joined by a female 27 Nov (A. Turner, B. Richter et al.); 1 female at Jupiter Inlet (*Palm Beach*) 22 Nov (J. & L. Hailman).
- SURF SCOTER: 1 at Sebastian Inlet (*Brevard/Indian River*) 5 Nov (A. Bankert).
- WHITE-WINGED SCOTER: 1 at Ponce de Leon Inlet (*Volusia*) 1 Nov (M. Brothers); 1 at Port Orange (*Volusia*) 24 Nov (M. Brothers).
- BLACK SCOTER: 15 or more off Ponce de Leon Inlet 1 Nov (M. Brothers); 2 in female plumage at Lake Apopka NSRA 22 & 29 Nov (H. Robinson).
- RED-BREASTED MERGANSER: 4 at Lake Apopka NSRA 22 Nov (H. Robinson).
- *MASKED DUCK: at least 1 in female plumage at Viera 6 Nov-EOS (B. Campbell et al.).
- COMMON LOON: 3 on Lake Apopka at Oakland Nature Preserve (*Orange*) 25 Nov (T. Rodriguez).
- EARED GREBE: 1 at Fort Walton Beach STF (*Okaloosa*) 5 Sep-2 Nov (B. Duncan, D. Ware); 1 juvenile at Green Cay Nature Center (*Palm Beach*) 23 Nov-EOS (L. McCandless et al.).
- BLACK-CAPPED PETREL: 1, 160 km off Ponce de Leon Inlet 26 Aug (M. Brothers, B. Wallace).
- CORY'S SHEARWATER: 100+ off Ponce de Leon Inlet 26 Aug, and 30+ there 12 Nov (M. Brothers et al.); 6 off Miami (*Miami-Dade*) 16 Sep (L. Manfredi et al.); 1 in Florida Bay (*Monroe*) 21 Nov furnished the first for Everglades NP (B. Mulrooney [photo to FOC], B. Langan).
- GREATER SHEARWATER: 1 off Ponce de Leon Inlet 26 Aug (M. Brothers, B. Wallace).
- AUDUBON'S SHEARWATER: 1 found alive at Vero Beach (*Indian River*) 10 Aug died later (B. Wagner, photo to FOC); 4 off Ponce de Leon Inlet 26 Aug (M. Brothers, B. Wallace); 1 salvaged at Daytona Beach Shores (*Volusia*) 4 Nov (UF 45541, *vide* A. Kratter).
- WILSON'S STORM-PETREL: 6 off Ponce de Leon Inlet 26 Aug (M. Brothers, B. Wallace).
- BAND-RUMPED STORM-PETREL: 2 off Miami 11 Aug (R. Torres et al.).

- TROPICBIRD SPECIES: 1 adult 96 km off *Okaloosa* 8 Oct (N. Friedman *vide* L. Atherton).
- MASKED BOOBY: 1 subadult at Ponce de Leon Inlet 27 Aug-3 Nov (M. Brothers et al.); 1 adult at Eglin Air Force Base (*Okaloosa*) 14 Nov (Joe Kern).
- BROWN BOOBY: 1 immature at Ponce de Leon Inlet 14-15 Sep (M. Brothers et al.).
- NORTHERN GANNET: 500+ heading S from Ponce de Leon Inlet 21 Nov (M. Brothers).
- AMERICAN WHITE PELICAN: 200 at Green Key 9 Oct (K. Tracey); 400 over New Port Richey 12 Oct (K. Tracey); 60 at Hickory Mound Impoundment (*Taylor*) 17 Oct (D. Bryan); 12 at Lake Munson (*Leon*) 19 Oct (M. Hartley); 200 in *Franklin* 10 Nov (D. Bryan); 78 near Bowling Green 25 Nov (D. Goodwin).
- BROWN PELICAN: 1 at Orlando (*Orange*) 16 Sep (N. Christman).
- ANHINGA: 304 at Lake Apopka NSRA 8 Aug (H. Robinson).
- MAGNIFICENT FRIGATEBIRD: 1, 40 km S of St. Marks NWR 3 Aug (P. Small); 500 at Cape Romano (*Collier*) 3 Oct (D. Suito); 1 at Ponce de Leon Inlet 1 Nov (M. Brothers); 7 at South Melbourne Beach (*Brevard*) 2 Nov (A. Bankert).
- AMERICAN BITTERN: 1 at Paynes Prairie Preserve 3 Sep (C. Burney); 1 at Tall Timbers Research Station (*Leon*) 10 Sep (A. Wraithmell); 1 at South Melbourne Beach 24 Sep (A. Bankert); 20 at Lake Apopka NSRA 19 Nov (H. Robinson).
- GREAT BLUE HERON: southbound flocks of 7 & 27 over Jupiter Inlet Colony (*Palm Beach*) 8 Sep (J. & L. Hailman); 15+ flew S over Ormond Beach (*Volusia*) 2 Oct (M. Brothers); 1 at Lake Sampson (*Bradford*) 12 Nov attempted to eat a Pied-billed Grebe (R. Rowan et al.).
- "GREAT WHITE HERON:" 1 at Fort Pickens (*Escambia*) 18 Aug-6 Sep (B. & L. Duncan et al.); 1 at Alligator Lake, Lake City 23 Aug-14 Sep (R. Rowan, P. Burns et al.).
- GREAT EGRET: 2100 at the Everglades Agricultural Area (*Palm Beach*) 20 Aug (B. Hope, P. Cohen); flocks of 52, 11, 11, 7, and 6 headed S high over Jupiter Inlet Colony 8 Oct (J. & L. Hailman).
- SNOWY EGRET: 1500 at the Everglades Ag Area 20 Aug (B. Hope, P. Cohen).
- SNOWY EGRET × LITTLE BLUE HERON: 1 at Salt Lake (*Brevard*) 28 Oct (A. Bankert et al.).
- REDDISH EGRET: 8 at St. Marks NWR 4 Sep (A. Wraithmell); 1 white morph at Sand Bay, Holiday (*Pasco*) 11 Oct (K. Tracey); 1 at Paynes Prairie Preserve 22 Oct (D. Steadman).
- BLACK-CROWNED NIGHT-HERON: 86 at the Everglades Ag Area 19 Aug (D. Freeland, M. Gardler et al.).
- GLOSSY IBIS: 6 at Fort Walton Beach STF 11 Sep (B. Duncan); 5 at Sebastian Inlet (*Brevard*) 8 Oct were rare along the coast (A. Bankert); 1 over Key Largo (*Monroe*) 25 Oct (B. Mulrooney); 610 at Lake Apopka NSRA 12 Nov (H. Robinson).
- WHITE-FACED IBIS: 1 juvenile at St. Marks NWR 12 Sep (A. Wraithmell); 1 at Lake Apopka NSRA 10 Nov (H. Robinson); 1 at Paynes Prairie Preserve 27 Nov (R. Rowan).
- PLEGADIS SPECIES: 1 "apparent hybrid" Glossy × White-faced ibis at Fort Walton Beach STF 2 Aug had three white bands across the upper neck, a prominent white border across the upper face, and dark irides (B. Duncan).
- ROSEATE SPOONBILL: 1 at Gainesville to 2 Aug (S. Hofstetter); 420 at the Everglades Ag Area 19 Aug (D. Freeland, M. Gardler et al.); 1 at Lake City 20 Aug (P. Southall); 92 at St. Augustine (*St. Johns*) 4 Sep (Jackie Kern); 3 along CR-724 (*Okeechobee*) 14 Sep (P. Miller); 46 at Gulf Harbors, New Port Richey 20 Sep (K. Tracey); 1 at Tallahassee 25-26 Sep (J. Cavanagh); 10 at St. Marks NWR 10 Oct (A. Wraithmell); 125 at Myakka River SP (*Sarasota*) 6 Nov (B. Ahern); 20 at Lake Apopka NSRA 8 Nov (H. Robinson).
- WOOD STORK: 1200 the Everglades Ag Area 20 Aug (B. Hope, P. Cohen).
- TURKEY VULTURE: among 120+ at Alligator Point 4 Nov was 1 "totally white" albino (J. Murphy).
- SWALLOW-TAILED KITE: 674 at Lake Apopka NSRA 2 Aug (H. Robinson); 1 at Tallahassee 10 Aug set the latest county departure date (G. Menk).
- SNAIL KITE: several sightings of 2 or more along US-41 between CR-951 and SR-29 (*Collier*) 10 Aug-18 Nov (D. Suito, T. Doyle et al.); 1 near Everglades City (*Collier*) 16 Sep (D. Suito); 2 along Sarno Extension (*Brevard*) 16 Oct-14 Nov (A. Bankert).

- BALD EAGLE: 48 at Lake Apopka NSRA 29 Nov (H. Robinson).
- NORTHERN HARRIER: 1 male at Viera 28 Aug (T. Dunkerton); 259 at Lake Apopka NSRA 15 Nov (H. Robinson).
- COOPER'S HAWK: 45 at Lake Apopka NSRA 25 Aug (H. Robinson).
- RED-SHOULDERED HAWK: 133 at Lake Apopka NSRA 29 Sep (H. Robinson).
- BROAD-WINGED HAWK: 1 at Dunedin Hammock (*Pinellas*) 25 Sep (P. Fellers); 3 at Lake Apopka NSRA 29 Sep (H. Robinson); 1 at Ormond Beach 2 Oct (M. Brothers).
- SHORT-TAILED HAWK: 12 reports of 15 birds (including 5 light & 5 dark), with 3 at Gainesville 16-23 Sep (R. Rowan, J. Bryan, A. Kratter et al.), 1 dark morph at Turkey Creek Sanctuary (*Brevard*) 9 Sep (A. Bankert), and one dark morph at New Port Richey 11 Oct that dove on an immature Bald Eagle (K. Tracey).
- SWAINSON'S HAWK: 1 at Lake Apopka NSRA 8-19 Nov (H. Robinson); 1 light morph at Frog Pond WMA (*Miami-Dade*) 11 Nov (M. Berney); 7 light morphs headed E over Paurotis Pond, Everglades NP (*Miami-Dade*) 18 Nov (M. Berney); 2 at Bill Baggs Cape Florida SP (*Miami-Dade*) 23 Nov (M. Davis); 1 juvenile dark morph at Brandon (*Hillsborough*) 26 Nov (D. Goodwin).
- CRESTED CARACARA: 1 at Orlando Wetlands Park (*Orange*) Sep 16 (L. Malo); 1 at Chulota (*Seminole*) 10 Nov (M. Plaughner); 1 along US-98 between Apalachicola and Port St. Joe (*Gulf*) 15 Nov (F. Bassett) provided a very rare report W of the Apalachicola River; 1 S of Zephyrhills (*Pasco*) 24 Nov (S. Peacock); 1 at Lake Apopka NSRA 30 Nov (*vide* H. Robinson).
- PEREGRINE FALCON: 1 at Siesta Tower (*Sarasota*) 17 Oct had returned for its apparent 6th year (T. Mossbarger).
- KING RAIL: 523 at Lake Apopka NSRA 23 Aug (H. Robinson).
- SORA: 1 found dead at Green Key 7 Aug (K. Tracey, specimen to UF); 100 at River Lakes Conservation Area (*Brevard*) 22 Oct (A. Bankert); 394 at Lake Apopka NSRA 19 Nov (H. Robinson).
- PURPLE SWAMPHEN: population control by the state has begun: 100 shot at Water Conservation Area 2B (*Broward*) and 59 shot at STA-1W (*Palm Beach*), both 6-7 Oct. A return trip to STA-1W in Nov resulted in the shooting of 92 more swamphens, along with 5 at STA-5 (*Hendry*; *vide* B. Pranty); 1 at Wakodahatchee Wetlands, Delray Beach (*Palm Beach*) 10 Nov (W. Soto).
- PURPLE GALLINULE: 2 at Withlacoochee SF (*Sumter*) 16 Sep (R. Smith).
- COMMON MOORHEN: 2370 at Lake Apopka NSRA 11 Oct (H. Robinson).
- LIMPKIN: 7 along the Wacissa River (*Jefferson*) 26 Sep (F. Dietrich); 10 (5 adults and 5 juveniles) at Lake Munson 16 Oct (M. Hill); 2 at Tallahassee 13 Nov (G. Menk). The increase in Limpkins in the region was thought to be due to a great invasion of exotic channeled apple snails (*vide* G. Menk).
- AMERICAN GOLDEN-PLOVER: singles at the Everglades Ag Area 13 Aug (B. Roberts et al.) & 27 Aug (R. Torres, T. Mitchell); 1 at Redlands (*Miami-Dade*) 30 Aug (R. Torres, T. Mitchell); 1 at Fort Walton Beach STF 31 Aug (L. Fenimore); 1 at Crandon Park (*Miami-Dade*) 21 Sep (R. Diaz); 1 at St. Marks NWR 23 Sep (M. Collins); 2 at Hamilton phosphate mines 30 Oct (J. Krummrich); 1 at Merritt Island NWR (*Volusia*) 3 Nov (T. Dunkerton); 1 at Viera 3-6 Nov (T. Dunkerton, D. Freeland).
- SNOWY PLOVER: good nesting success at Santa Rosa Island, Gulf Islands National Seashore (*Escambia*) due to damage to the island from Hurricane *Ivan* in 2004, which prevented vehicle access to breeding habitats; 28 plovers were counted 31 Aug (B. & L. Duncan); 1 at Ponce de Leon Inlet 16 Nov (*vide* M. Brothers); 1 at Nassau Sound (*Duval*) 30 Nov (P. Leary) represented the 7th successive year with reports in the area.
- SEMIPALMATED PLOVER: 12 at *Polk* mines 12 Aug (P. Fellers, E. Lane); up to 3 at Lake City 30 Aug-19 Oct (P. Burns); 80 at Eagle Point Park, Holiday 14 Sep (K. Tracey).
- PIPING PLOVER: 2 at Fred Howard Park (*Pinellas*) 2 Aug (M. Gardler); 2 at Sebastian Inlet (*Indian River*) 12-14 Aug (A. Bankert); 1 at Durney Key, New Port Richey 23 Aug

(K. Tracey); 11 at Nassau Sound 30 Nov included birds banded in Michigan (2) and the Canadian Maritimes (1; P. Leary).

AMERICAN AVOCET: 1 at Lake City 31 Aug-19 Nov (J. Hintermister et al.); 7 at St. Marks NWR 4 Sep (A. Wraithmell et al.), and 2 there 27 Nov (M. Collins); 18 at Sawpit Creek (*Duval*) 4 Sep (P. Leary); 7 at Longboat Key (*Sarasota*) 13 Sep (R. Peipert); 30 at the Everglades Ag Area 16 Sep (A. Bankert); 6 at Green Key 27 Sep (K. Tracey, B. Pranty); 5 at Fort De Soto 27 Sep (L. & R. Smith); 1 at Cape Romano 3 Oct (D. Sutor); 50 at *Hamilton* mines 30 Oct-EOS (J. Krummrich); 6 at Myakka River SP 4 Nov (J. Dubi).

SOLITARY SANDPIPER: 1 at Withlacoochee SF 21 Oct (R. Smith, D. Goodwin).

SPOTTED SANDPIPER: 18 at *Polk* mines 12 Aug (P. Fellers, E. Lane).

UPLAND SANDPIPER: 1 along SR-305 just S of SR-100 (*Flagler*) 1 Aug (B. Wallace); up to 2 at Lake Apopka NSRA 4-13 Aug, and 1 there 1 Sep (H. Robinson); 11 at the Everglades Ag Area 19 Aug (D. Freeland, M. Gardler et al.); 2 at Eglin AFB 27 Aug (L. Fenimore); 2 at Viera 29 Aug (D. Freeland).

LONG-BILLED CURLEW: 1 female at Cape Romano 1 Aug (D. Sutor, photo to FOC); 1 at Coconut Point (*Brevard*) 30 Aug (A. Bankert); 1 male at Bunche Beach (*Lee*) 11 Nov (C. Ewell).

HUDSONIAN GODWIT: 1 at Tram Road STF 7-9 Sep (G. Menk, J. Hintermister et al.).

MARbled GODWIT: 120 at MacDill AFB, Tampa (*Hillsborough*) 11 Oct (C. Rasmussen).

RUDdy TURNSTONE: 30 at the Everglades Ag Area 16 Sep (A. Bankert).

RED KNOT: 400 at Nassau Sound in late Aug (P. Leary); 450 (22 banded) at Little Estero Critical Wildlife Area (*Lee*) 5 Sep (C. Ewell); 46 at Sand Bay 17 Sep (K. Tracey); 300 at Huguenot Memorial Park (*Duval*) 30 Sep included 11 banded birds (P. Leary); 350 along Courtney Campbell Causeway (*Pinellas*) 8 Oct (K. Tracey); 200 at MacDill AFB 11 Oct (C. Rasmussen).

SANDERLING: 200 at Fort De Soto 14 Aug (R. Smith); up to 2 at Lake City 30 Aug-14 Sep (P. Burns); 100 along Courtney Campbell Causeway 8 Oct (K. Tracey).

WHITE-RUMPED SANDPIPER: 1 at Lake City 14 Sep (P. Burns); 2 adults at Merritt Island NWR (*Volusia*) 10 Nov (T. Dunkerton).

BAIRD'S SANDPIPER: singles at Santa Rosa Island 24 Aug & 8 Sep (B. Duncan et al.); 2 at Lake City 10 Sep (P. Burns); singles at Lake Apopka NSRA 10 Sep & 4 Oct (H. Robinson).

PECTORAL SANDPIPER: 1800 at the Everglades Ag Area 6 Aug (B. Hope, M. Berney); 1 at Cutler Ridge (*Miami-Dade*) 18 Nov (R. Torres).

STILT SANDPIPER: 500 at the Everglades Ag Area 19 Aug (D. Freeland, M. Gardler et al.); up to 19 at Lake City 25 Aug-19 Oct (P. Burns, R. Rowan et al.).

BUFF-BREASTED SANDPIPER: 1 at Santa Rosa Island 24 Aug-6 Sep (B. & L. Duncan); up to 2 at Lake City 24 Aug-14 Sep (R. Rowan, P. Burns et al.); 3 at Lake Apopka NSRA 25 Aug (H. Robinson); 3 at Viera 1 Sep, and 1 there 20-21 Oct (D. Freeland et al.); 1 at St. Marks NWR 4 Sep (A. Wraithmell); singles in the Everglades Ag Area 10 & 24 Sep, and 3 there 16 Sep (M. Berney, A. Bankert); 2 at Fort Walton Beach STF 11 Sep (B. Duncan).

RUFF: 1 at the Everglades Ag Area 9 Aug (B. Hope, P. Cohen) & 26 Aug (A. Bankert et al.).

SHORT-BILLED DOWITCHER: 1500 at Dunedin Causeway 14 Aug (M. Gardler).

LONG-BILLED DOWITCHER: 1 at Tram Road STF 11 Sep (A. Wraithmell).

WILSON'S SNIFE: 1 at Lake Apopka NSRA 16 Aug (H. Robinson); 1 at Weekiwachee Preserve (*Hernando*) 11 Sep (A. Hansen).

WILSON'S PHALAROPE: 1 at Santa Rosa Island 18 Aug-6 Sep (B. & L. Duncan); up to 8 (27 Aug) at the Everglades Ag Area 13 Aug-16 Sep (M. Berney, B. Hope et al.); 1 at Lake City 25-31 Aug (P. Burns); 55 at *Polk* mines 1 Oct (P. Fellers, E. Lane); 1 at Tram Road STF 26 Oct-22 Nov (A. Wraithmell, G. Menk et al.); 1 at Merritt Island NWR 10 Nov (K. Schmidt).

- RED-NECKED PHALAROPE: 3 in S *Miami-Dade* 3 Aug (R. Torres); 12 at *Polk* mines 12 Aug (P. Fellers, E. Lane); 10 off Ponce de Leon Inlet 26 Aug (M. Brothers, B. Wallace); 14 in a flock several km off Miami 16 Sep (B. Mulrooney, L. Manfredi, R. Torres); 1 adult at Merritt Island NWR 10 Nov (T. Dunkerton).
- RED PHALAROPE: 30 off Ponce de Leon Inlet 26 Aug, and 1 off there 12 Nov (M. Brothers et al.).
- PARASITIC JAEGER: 1 pirated a fish from a Forster's-sized tern 6-8 km off Alligator Point 17 Sep (J. Murphy).
- JAEGER SPECIES: 275 (110 looked like Pomarines and 45 looked like Parasitic) from S *Brevard* beaches 5 Nov (A. Bankert).
- FRANKLIN'S GULL: 4 (3 juveniles and 1 second-winter) at Bald Point SP (*Franklin*) 29 Oct (J. Murphy); up to 12 at St. Marks NWR 29-30 Oct (D. Morrow; A. Wraithmell); 1 at Lake Apopka NSRA 1 & 4 Nov, 14 there 5 Nov, and 2 there 15 Nov (H. Robinson); 1 at Green Key 3 Nov (K. Tracey, photo to FOC); 1 at Cutler Ridge 28 Nov (R. Torres, T. Mitchell).
- LESSER BLACK-BACKED GULL: 1 at Coconut Point 8 Aug (A. Bankert); 49 at Ponce de Leon Inlet 23 Oct (M. Brothers); 1 at Lake Apopka NSRA 15 Nov (H. Robinson).
- GLAUCOUS GULL: 1 juvenile at Destin (*Okaloosa*) 8 Oct (B. Garmon).
- SABINE'S GULL: 1 at Boynton Inlet (*Palm Beach*) 4 Nov (B. Hope).
- BLACK-LEGGED KITTIWAKE: 1 first-winter at Boynton Beach Inlet 4 & 6 Nov (M. Berney, B. Hope).
- GULL-BILLED TERN: 75 at the Everglades Ag Area 13 Aug (B. Hope).
- CASPIAN TERN: 30 in *W Hardee* 28 Oct (B. Ahern, R. Smith).
- ROYAL TERN: 1 at Viera 28 Oct (M. Gardler et al.); singles at Lake Apopka NSRA 3 & 15 Nov (H. Robinson).
- STERNA SPECIES: 1 juvenile with irregular patches of orange on the bill among Sandwich Terns at Destin (*Okaloosa*) 19 Oct (D. Edwards, photos to FOC).
- SANDWICH TERN: 312 at *Polk* mines 12 Aug, and 300 there 28 Sep (P. Fellers, E. Lane); 350 at Fred Howard Park 14 Aug & 11 Oct (M. Gardler); 210 at Fort De Soto 21 Oct (P. Sykes); 2 at Lake Pierce (*Polk*) 4 Sep (J. DuBois).
- FORSTER'S TERN: 150 at Dunedin Causeway 14 Aug, and 160 there 11 Oct (M. Gardler); 200 at Lake Talquin (*Leon*) 16 Oct (A. Wraithmell); 534 at Lake Apopka NSRA 29 Nov (H. Robinson).
- LEAST TERN: 180 at Fort De Soto 14 Aug (R. Smith); at least 315 at Crandon Beach 20 Aug (R. Diaz).
- SOOTY TERN: 500+, 160 km off Ponce de Leon Inlet 26 Aug (M. Brothers).
- BLACK TERN: 800 at the Everglades Ag Area 20 Aug (B. Hope, P. Cohen); 6800 at Santa Rosa Island 31 Aug (B. & L. Duncan); 1 juvenile at Merritt Island NWR 13-19 Nov (T. Rodriguez); 1 at Hole-in-the-Donut, Everglades NP (*Miami-Dade*) 25 Nov (B. Boeringer).
- BROWN NODDY: 1 landed on a skiff at Cockroach Bay (*Hillsborough*) 17 Sep and preened for 30 minutes (N. Holland, photos to FOC).
- BLACK SKIMMER: 2 at Lake Apopka NSRA 17 Sep (H. Robinson); 230 at Fort De Soto 21 Oct (P. Sykes); 500 at Cedar Key (*Levy*) 1 Nov (D. Johnston); 325 at Fred Howard Park 4 Nov (M. Gardler); 350 at Dunedin Causeway 4 Nov (M. Gardler).
- WHITE-WINGED DOVE: 6 at The Villages (*Marion*) 2 Aug (J. Dinsmore); 1 at Anclote Gulf Park (*Pasco*) 9 Aug (K. Tracey); 1 at Sebastian Inlet (*Indian River*) 10 Sep (A. Bankert); 1 at Alligator Point 30 Sep (J. Murphy); singles at St. Marks NWR 27 Oct (J. Hintermister) & 14 Nov (B. Monk); 35 at Mims (*Brevard*) 27 Oct (D. Freeland, M. Gardler); 1 at Ormond Beach 10 Nov (M. Wilson); 1 at Jacksonville (*Duval*) 12-16 Nov (P. Powell); 13 at Cape Florida 14 Nov (R. Diaz).
- BUDGERIGAR: 1 green morph at St. Petersburg 16 Aug had been present ~8 months (D. Margeson).

- BLACK-HOODED PARAKEET: 23 at St. Augustine Beach Pier (*St. Johns*) 7 Sep (D. Freeman); 37 at Dunedin Causeway 21 Oct (M. Gardler).
- MONK PARAKEET: 20+ at South Daytona (*Volusia*) 20 Nov (M. Brothers).
- BLUE-CROWNED PARAKEET: 12 at Sebastian Inlet (*Indian River/Brevard*) 25 Nov (A. Bankert).
- BLACK-BILLED CUCKOO: 1 at Gainesville 18 Aug (R. Norton); 1 at Cape Florida 25 Aug (R. Diaz); singles at Phipp's Park, Tallahassee 16 Sep (M. Hartley) & 22 Sep (A. Wraithmell); 1 at Newberry (*Alachua*) 23 Sep (L. Holt); 1 at Delray Beach (*Palm Beach*) 28 Sep (B. Hope, P. Cohen); 1 at Lake Apopka NSRA 29 Sep (H. Robinson).
- YELLOW-BILLED CUCKOO: 1 at River Lakes Conservation Area (*Brevard*) 16 Nov (D. Simpson); 1 at Deer Key, Everglades NP (*Monroe*) 20 Nov (B. Mulrooney).
- SMOOTH-BILLED ANI: 1 at Cape Florida 23 Aug (R. Diaz).
- GROOVE-BILLED ANI: 1 at Bald Point SP 12 Oct (J. Murphy).
- BARN OWL: 1 at St. Marks NWR 27 Nov (M. Collins) was a "presumed migrant" (G. Menk).
- SHORT-EARED OWL: 1 at Lake Apopka NSRA 22 Nov, and 2 there 26 Nov (H. Robinson); 1 found dead at St. Petersburg 21 Nov (T. Long, R. Smith).
- WHIP-POOR-WILL: 1 at Medart (*Wakulla*) 4 Sep (S. McCool).
- CHIMNEY SWIFT: 1200 at Lake Apopka NSRA 6 Sep (H. Robinson).
- BUFF-BELLIED HUMMINGBIRD: 1 at Eastpoint (*Franklin*) 10 Nov (S. Klink); 1 at Tallahassee 16 Nov (J. Elliott).
- RUFOUS HUMMINGBIRD: 1 banded female at Valrico (*Hillsborough*) 11 Aug-EOS returned for its 4th winter (S. Backes); 1 at Gainesville 20 Aug (R. Palenik); 1 at Pensacola 31 Aug (*vide* F. Bassett); 1 at Gulf Breeze 2 Sep (J. French); single males at separate Tallahassee yards 1-2 Sep (G. Simmons), 8 Sep (J. Armstrong), & 2 Nov (J. Langley).
- YELLOW-BELLIED SAPSUCKER: 1 at Lake Apopka NSRA 27 Aug (H. Robinson).
- HAIRY WOODPECKER: 1 at Tallahassee 21 Oct (M. Hartley); 1 in a suburban yard at Bayonet Point (*Pasco*) 1 Nov (B. Pranty) fit the pattern noted by Cruickshank (1980, *The Birds of Brevard County*, Florida Press, Orlando), who wrote that "... There may be some migration, as during Oct and early Nov it appears in city yards where none are seen the rest of the year;" 1 at Tiger Bay SF (*Volusia*) 24 Nov (M. Brothers, B. Wallace).
- OLIVE-SIDED FLYCATCHER: 1 at Gulf Breeze (*Santa Rosa*) 1 Sep (B. Duncan).
- EASTERN WOOD-PEWEE: 5 at Werner-Boyce Salt Springs SP (*Pasco*) 2 Sep (K. Tracey); 14 at Fort De Soto 12 Oct (B. Ahern et al.); 1 seen & heard at River Lakes Conservation Area (*Brevard*) 6 Nov (D. Freeland).
- YELLOW-BELLIED FLYCATCHER: 1 juvenile banded at Cape Florida 13 Sep was recaptured 18 & 23 Sep, both times with significant weight gain (R. Diaz, photo to FOC); 1 at Phipp's Park 18 Sep (F. Davis); 1 at Lake Apopka NSRA 27 Sep (H. Robinson); 1 called at Starkey Wilderness Park 27 Sep (K. Tracey); 1 called at Mead Garden, Winter Park (*Orange*) 28 Sep (P. Hueber); 1 called at Salt Springs SP 29 Sep (K. Tracey).
- ACADIAN FLYCATCHER: 20 at Fort De Soto 27 Sep (B. Ahern et al.).
- ALDER FLYCATCHER: 4 called at Southern Glades Wildlife and Environmental Area (*Miami-Dade*) 23 Aug (R. Torres, T. Mitchell), and 1 there 15 Sep (J. Boyd); 1 called at Matheson Hammock (*Miami-Dade*) 4 Sep (R. Torres).
- WILLOW FLYCATCHER: 1 called at Saddle Creek Park 1 Sep (P. Fellers); 1 called at A.D. Barnes Park (*Miami-Dade*) 23 Sep (J. Boyd).
- "TRAILL'S" FLYCATCHER: 18 banded at Cape Florida 7 Sep-11 Oct (M. Davis, R. Diaz et al.); 1 photographed at Wekiva Springs SP (*Orange*) 21 Sep was probably an Alder (A. Boyle); 2 probable Willow Flycatchers at Fort De Soto 21 Sep (B. Ahern et al.).
- LEAST FLYCATCHER: 1 at Paynes Prairie Preserve 16 Sep-5 Nov (J. Bryan, R. Rowan); 12 at Lake Apopka NSRA 27 Oct (H. Robinson); 1 at Oakland Nature Preserve 11 Nov (T. Rodriguez et al.).
- *HAMMOND'S FLYCATCHER: 1 that called at Fort De Soto 30-31 Oct (L. Atherton et al., photos to FOC; accepted by FOSRC) provided the first record for Florida.

- VERMILION FLYCATCHER: up to 2 at Paynes Prairie Preserve 15 Oct-EOS (T. Wronski, B. Scales et al.); up to 2 at Lake City 5 Nov-EOS (L. Hensley, M. Landsman et al.); 1 male at Lake Jesup Conservation Area, Sanford (*Seminole*) 11 Nov (B. Sicolo).
- ASH-THROATED FLYCATCHER: 1 at Lake Apopka NSRA 18 Oct-EOS (H. Robinson); 1 at St. Marks NWR 31 Oct (R. McGregor, details to FOC); 1 at Cedar Key 1 Nov (D. Johnston); 1 at Lantana Landfill (*Palm Beach*) 23 Nov (B. Hope); up to 2 at Paynes Prairie Preserve 27 Nov-EOS, where birds have wintered since 2000–2001 (J. Hintermister et al.).
- BROWN-CRESTED FLYCATCHER: 1 at Casselberry (*Seminole*) 27 Sep (A. Vinokur); 1 at Lake Apopka NSRA 27 Oct (H. Robinson); 1 at Frog Pond WMA (*Miami-Dade*) 11 Nov (M. Berney et al.).
- *CASSIN'S KINGBIRD: 1 at Lake Apopka NSRA 26 Nov (H. Robinson).
- WESTERN KINGBIRD: 12 reports of 76 birds 7 Oct-30 Nov included 1 at Seahorse Key (*Levy*) 7 Oct (T. Webber, D. Steadman et al.); up to 21 at The Villages (*Marion*) 22 Oct-EOS (J. Dinsmore); up to 36 at Lake Apopka NSRA 6 Nov-EOS (T. Rodriguez); 3 at Fort De Soto 30 Oct-19 Nov (L. Atherton et al.); 1 at Honeymoon Island SP (*Pinellas*) 17-24 Nov (W. Yusek, S. Crawford); 1 at Kissimmee Prairie Preserve SP (*Okeechobee*) 17 Nov (M. Korosy); 6 near Bartow (*Polk*) 18 Nov (T. Palmer); 3 at Bald Point 20 Nov (R. Lengacher); 1 at Coquina Baywalk Park (*Manatee*) 22 Nov (B. Ahern).
- EASTERN KINGBIRD: 48 at Altamonte Springs (*Seminole*) 1 Sep (P. Hueber); 350 at Fort De Soto 1 Sep (L. Atherton); 100s passed Sanibel Lighthouse (*Lee*) 10 Sep (V. McGrath).
- GRAY KINGBIRD: 16 at Brasher Park, Port Richey (*Pasco*) 9 Aug (K. Tracey).
- SCISSOR-TAILED FLYCATCHER: 16 reports of 24 birds 26 Sep-18 Nov included 2 at Bald Point 29 Oct (J. Murphy); 1 along SR-31 (*Charlotte*) 13 Oct (C. Ewell); up to 3 at The Villages (*Marion*) 22 Oct-EOS (T. Rodriguez); 1 at Honeymoon Island SP 30 Oct (G. Deterra); 4 at San Antonio (*Pasco*) 3 Nov (M. White); 1 near Turtle Mound, Canaveral National Seashore (*Volusia*) 6 Nov (M. Brothers); 1 at Gainesville 8 Nov (J. Hintermister, R. Rowan et al.); 1 at the North Naples STF (*Collier*) 10 Nov (K. Williams); 3 W of Trilby (*Pasco*) 16 Nov (C. Black); and 1 near Bartow 18 Nov (T. Palmer).
- FORK-TAILED FLYCATCHER: 1 adult male at North County Regional Park, Sebastian (*Indian River*) 20-21 Nov (D. Simpson et al., photos to FOC by D. Fairbanks-Simpson).
- *THICK-BILLED VIREO: 1 at Fort De Soto 12 Oct (J. Gaetzi, B. Ahern et al.; accepted by FOSRC).
- BELL'S VIREO: 1 at Spanish River Park (*Palm Beach*) 14 Sep (B. Hope); 1 at Lake Apopka NSRA 17 & 21 Sep (H. Robinson); 1 at Bald Point 25 Sep (A. Wraithmell); 1 at Medart 28 Sep (S. McCool); 1 at Alligator Point 30 Sep (J. Murphy); 1 at Bill Sadowski Park (*Miami-Dade*) 1 Oct (R. Torres); 1 banded at Tomoka SP (*Volusia*) 5 Oct (M. Wilson, photos to FOC); up to 2 at Frog Pond WMA 28 Oct-EOS (R. Torres, T. Mitchell et al.).
- BLUE-HEADED VIREO: 1 at Gainesville 26 Aug (B. Carroll, details to FOC).
- WARBLING VIREO: 1 at Fort De Soto 30 Oct (L. Atherton et al.).
- PHILADELPHIA VIREO: 13 reports of 16 birds 20 Sep-18 Oct included 1 at Archer (*Alachua*) 20 Sep (M. Meisenburg); 2 at Fort De Soto 27 Sep (B. Ahern et al.); duos at St. George Island SP 13 Oct (M. Hartley) & 21 Oct (E. Shaw); and 1 at Lake Lisa Park, Port Richey 15-20 Oct, the first for *Pasco* (K. Tracey, B. Pranty et al.).
- RED-EYED VIREO: 169 banded at Cape Florida 15 Aug-30 Oct (M. Davis et al.).
- BLACK-WHISKERED VIREO: 1 at Lake Apopka NSRA 10 Sep (H. Robinson).
- BANK SWALLOW: 760 at *Polk* mines 12 Aug (P. Fellers, E. Lane); 50 at St. Petersburg 31 Aug (D. Margeson); 1 at Viera 8 Nov (D. Freeland).
- CLIFF SWALLOW: 2 at Tram Road STF 24 Aug (G. Menk); 1 at Altamonte Springs 24 Aug (P. Hueber); 71 at Lake Apopka NSRA 1 Oct (H. Robinson); 1 at Green Key 9 Oct (K. Tracey).
- CAVE SWALLOW: 4 of the Mexican race at Lake Apopka NSRA 1 Oct (H. Robinson); 1 at Hatbill Park (*Brevard*) 27 Oct (M. Gardler); 6 at Canaveral National Seashore (*Volusia*) 11 Nov (D. Simpson).

- BARN SWALLOW: 1360 at Lake Apopka NSRA 23 Aug (H. Robinson).
- RED-BREASTED NUTHATCH: 1 at Medart 7 Nov (S. McCool); 1 at Tall Timbers 21 Nov (A. Wraithmell).
- BROWN CREEPER: 1 at Bald Point SP 14 Oct (J. Murphy); 1 at Gulf Breeze 21 Oct-2 Nov (B. & L. Duncan); 1 at St. George Island SP 21 Oct (E. Shaw); 1 at J. R. Alford Greenway (*Leon*) 6 Nov (A. Wraithmell); 1 at Cocoa Beach (*Brevard*) 3 Nov (T. Fiorillo, photo to FOC); 1 at Gainesville 17 Nov-EOS (P. Burns, M. Drummond et al.); 1 at Tall Timbers 21 Nov (A. Wraithmell).
- HOUSE WREN: 272 at Lake Apopka NSRA 20 Oct (H. Robinson).
- WINTER WREN: 1 at St. George Island SP 13 Oct (M. Hartley); 1 at Tall Timbers 16 Oct (R. McGregor); 1 at Tallahassee 19 Oct (F. Rutkovsky); 1 at Maclay Gardens SP (*Leon*) 13 Nov (A. Wraithmell); 1 at River Rise Preserve SP (*Alachua*) 4 Nov (M. Manetz et al.); 1 at Lake City 19 Nov (P. Burns); 2 at O'Leno SP (*Alachua*) 26 Nov (P. Burns).
- MARSH WREN: 1 sang at Shark Valley, Everglades NP (*Miami-Dade*) 21 Oct (J. Boyd).
- GOLDEN-CROWNED KINGLET: a major invasion of the Panhandle and northern third of the Peninsula began 21 Oct, with 29 variously in *Alachua* 21 Oct-EOS (P. Burns, R. Rowan et al.). The southernmost reports were 5 at Fort De Soto 28 Oct-8 Nov (L. Atherton et al.); 3 at Starkey Wilderness Park 30 Oct (K. Tracey); 1 at Rye Preserve (*Manatee*) 16 Nov (B. Ahern); and 1 at Valrico 17 Nov (S. Gross).
- RUBY-CROWNED KINGLET: 67 at Lake Apopka NSRA 17 Nov (H. Robinson); 1 at Key Largo 17 Nov (B. Mulrooney); 1 at Tavernier (*Monroe*) 22 Nov (B. Mulrooney).
- *NORTHERN WHEATEAR: 1 at Research Road, Everglades NP (*Miami-Dade*) 13-23 Sep (S. Bass et al., photos by M. Wheeler et al. to FOC; accepted by FOSRC); 1 at Honeymoon Island SP 25 Sep (S. Crawford et al., photos by C. Gjervold to FOC; accepted by FOSRC).
- VEERY: 10 heard at night over Weeki Wachee 27 Sep (M. Gardler).
- GRAY-CHEEKED THRUSH: 10 heard at night over Weeki Wachee 27 Sep (M. Gardler).
- SWAINSON'S THRUSH: 150 heard at night over Weeki Wachee 27 Sep (M. Gardler).
- WOOD THRUSH: 1 at Starkey Wilderness Park 27 Sep (K. Tracey); 1 at Lake Apopka NSRA 1 Oct (H. Robinson).
- AMERICAN ROBIN: 2 juveniles in *Leon* 14 Aug (G. Menk); 1 juvenile at Hampton Lake (*Bradford*) 9 Sep (R. Rowan).
- COMMON MYNA: 1 at Seven Springs (*Pasco*) 28 Oct (S. Peacock et al., photos to FOC by K. Tracey); 1 salvaged from a flock of 400 at the State Farmer's Market, Florida City (*Miami-Dade*) 9 Nov (G. Zimmerman, M. Avery; UF 45582).
- SPRAGUE'S PIPIPIT: 1 at Eglin AFB 9 Nov (L. Fenimore).
- BLUE-WINGED WARBLER: 20 reports of 32 birds 19 Aug-15 Oct; multiple reports were 3 along Wakulla Beach Road (*Wakulla*) 19 Aug (B. Crawford, J. Murphy); 3 at Ormond Beach 25 Sep (M. Brothers); 8 at Fort De Soto 27 Sep (B. Ahern et al.); and 2 at Pinecraft Park (*Sarasota*) 27 Sep (J. Dubi).
- GOLDEN-WINGED WARBLER: 16 reports of 18 birds 1 Sep-17 Oct, with duos at Fort De Soto 27 Sep (L. Atherton) and St. George Island SP 13 Oct (M. Hartley).
- TENNESSEE WARBLER: 25 at Fort De Soto 27 Sep (B. Ahern et al.).
- NASHVILLE WARBLER: 11 reports of 13 birds 18 Aug-25 Nov, with duos at Fort De Soto 27 Sep (P. Blair) and Jacksonville 22 Oct (J. Cocke).
- NORTHERN PARULA: 40 at John Chesnut Park 26 Aug (R. Smith); 1 at Lake City 19 Nov (J. Krummrich).
- YELLOW WARBLER: 1 at Piney Z Lake (*Leon*) 11 Aug (S. McCool); 22 at Green Key 9 Sep, and 42 in *W Pasco* 11 Sep (K. Tracey); 232 at Lake Apopka NSRA 15 Sep (H. Robinson); 1 along Sarno Extension (*Brevard*) 14 Nov (A. Bankert).
- CHESTNUT-SIDED WARBLER: 3 at Starkey Wilderness Park 27 Sep (K. Tracey); 8 at Fort De Soto 27 Sep (B. Ahern et al.).
- MAGNOLIA WARBLER: 10+ at Bald Point SP 20 Sep (S. McCool); 20 at Fort De Soto 27 Sep (B. Ahern et al.); 8 at Green Key 2 Oct (K. Tracey).

- BLACK-THROATED BLUE WARBLER: 1 at John Chesnut Park 26 Aug (R. Smith); 12 at Fort De Soto 27 Sep (B. Ahern et al.); 97 banded at Cape Florida 22 Oct (M. Davis et al.); 1 at St. Augustine 21 Nov (Jackie Kern).
- YELLOW-RUMPED WARBLER: 600 at Cape Florida 9 Nov (R. Diaz).
- BLACK-THROATED GRAY WARBLER: 1 in female plumage at Key Largo 20 Sep (B. Mulrooney, photo to FOC); 1 juvenile male at Cape Florida 11-12 Nov (R. Diaz).
- BLACK-THROATED GREEN WARBLER: 6 at Fort De Soto 12 Oct (B. Ahern et al.); 1 in *Hendry* 12 Nov (R. Smith, B. Ahern); 1 at Fisheating Creek (*Glades*) 12 Nov (R. Smith, B. Ahern); 1 male at Rye Preserve 16 Nov (B. Ahern).
- BLACK-BURNIAN WARBLER: 2 at Lake Lisa Park 28 Aug (K. Tracey); 3 males at Medart 14 Sep (S. McCool); 15 at Cedar Key 20 Sep (D. Henderson); "noticeably more common than usual in *Alachua* this fall" (R. Rowan, M. Manetz et al.).
- YELLOW-THROATED WARBLER: 10 at John Chesnut Park 13 Aug (L. & R. Smith).
- PRAIRIE WARBLER: 28 at Lake Apopka NSRA 1 Sep (H. Robinson).
- PALM WARBLER: 1 of the western race at Southeast Farm (*Leon*) 24 Aug (S. McCool); 46 in *W Pasco* 11 Sep (K. Tracey).
- BAY-BREASTED WARBLER: 5 at Fort De Soto 12 Oct (B. Ahern et al.); 15 at Fort George Island 13 Oct (R. Clark); 3 at Sawgrass Lake Park 17 Oct (R. Smith); up to 4 at Mead Garden 14-21 Oct (B. Anderson et al.); 5 at Hillsborough River SP 21 Oct (B. Ahern).
- BLACKPOLL WARBLER: 1 at Cape Florida 9 Nov (M. Davis et al.).
- CERULEAN WARBLER: 15 reports of 20 birds 13 Aug-8 Sep, with 2 at Sawgrass Lake Park 3 Sep (R. Smith), and trios at John Chesnut Park 13 Aug (R. Smith) and Paynes Prairie Preserve 3 Sep (J. Bryan).
- BLACK-AND-WHITE WARBLER: 1 aberrant male at Saddle Creek Park 2 Aug had a white head and yellow bill (P. Fellers et al.); 20 at Fort De Soto 27 Sep (B. Ahern et al.).
- AMERICAN REDSTART: 1 along Mandalay Road (*Taylor*) 13 Aug (S. McCool); 18 at Fort De Soto 27 Sep (B. Ahern et al.); "noticeably less common than usual in *Alachua* this fall" (R. Rowan, M. Manetz et al.).
- PROTHONOTARY WARBLER: 12 banded at Cape Florida 11 Aug-28 Sep (M. Davis et al.); 6 at John Chesnut Park 13 Aug (L. & R. Smith).
- WORM-EATING WARBLER: 1 along Mandalay Road 13 Aug (S. McCool); 3 at Werner-Boyce Salt Springs SP 26 Aug (K. Tracey).
- SWAINSON'S WARBLER: 20 banded at Cape Florida 2 Sep-22 Oct (M. Davis, R. Diaz et al.).
- OVENBIRD: 1 sang at Medart 19-20 Sep (S. McCool); 92 at Lake Apopka NSRA 27 Sep (H. Robinson); 10 at Starkey Wilderness Park 27 Sep (K. Tracey); 1 in *N Baker* appeared to be wintering for the 3rd year (B. Richter).
- NORTHERN WATERTHRUSH: 12 at Merritt Island NWR 18 Aug (D. Freeland, M. Gardler); 81 at Lake Apopka NSRA 17 Sep (H. Robinson).
- LOUISIANA WATERTHRUSH: 25 at Lake Apopka NSRA 20 Aug (H. Robinson); 1 at Eagle Point Park 12 Oct (K. Tracey); 1 at Anhinga Trail, Everglades NP (*Miami-Dade*) 23 Nov (J. Boyd).
- KENTUCKY WARBLER: singles at Cape Florida 23 & 31 Aug (R. Diaz); 1 at Salt Springs SP 2 Sep (K. Tracey); 2 at Sawgrass Lake Park 3 Sep (R. Smith); 3 at John Chesnut Park 4 Sep (R. Smith); 1 at Evergreen Cemetery (*Broward*) 17 Sep (M. Berney); 1 at Fort George Island 13 Oct (R. Clark).
- CONNECTICUT WARBLER: 1 at Henderson Beach (*Walton*) 25 Oct (D. Ware).
- MOURNING WARBLER: 1 salvaged at Pace (*Santa Rosa*) 12 Sep (UF 45409; *fide* A. Kratter); 1 at Spanish River Park 14 Sep (B. Hope).
- HOODED WARBLER: 1 at Ponce de Leon Inlet 21 Aug (M. Brothers); 8 at John Chesnut Park 4 Sep (L. & R. Smith); 8 at Fort De Soto 27 Sep (B. Ahern et al.); 1 at Greynolds Park (*Miami-Dade*) 7 Oct (J. Boyd).
- WILSON'S WARBLER: 15 singles 22 Aug-28 Nov included 1 near Wabasso (*Indian River*) 27 Oct (D. Simpson) and 1 at Hopkins Landing (*Gadsden*) 4 Nov (S. McCool).

- CANADA WARBLER: 1 at Turkey Creek Sanctuary 8 Sep (D. Bales et al.); 1 at John Chesnut Park 11-12 Sep (T. Arcos, L. Atherton); 1 at Phipp's Park 15 Sep (A. & J. Wraithmell); 1 at Sugden Park, Naples 17-18 Sep (A. Murray, D. Sutor); 1 at Cape Florida 12 Oct (M. Davis, R. Diaz et al.); 1 at Lake Munson 17 Oct (A. Wraithmell).
- YELLOW-BREASTED CHAT: singles at Cape Florida 8 & 28 Sep (R. Diaz et al.); 1 at Research Road, Everglades NP 16 Sep (A. Bankert); 1 at St. Augustine 22 Sep (Jackie Kern); 2 at Greynolds Park 7 Oct (J. Boyd); 1 at Altamonte Springs 4 Nov (P. Hueber); 6 at Frog Pond WMA 11 Nov (M. Berney et al.).
- SUMMER TANAGER: 6 at Honeymoon Island SP 26 Sep (P. Fellers); 20 at Fort De Soto 12 Oct (B. Ahern et al.).
- SCARLET TANAGER: up to 10 at Mead Garden 8-23 Oct (B. Anderson).
- WESTERN TANAGER: 2 (female and male) at John Chesnut Park 30 Sep (M. Peterson, M. Gardler); 1 male at Honeymoon Island SP 13 Oct (L. Kenney).
- CLAY-COLORED SPARROW: 2 at Bonsteel Park (*Brevard*) 7 Sep (A. Bankert); 1 at Key Largo 26 Sep (B. Mulrooney); 2 at Fort De Soto 30 Sep (B. Anderson et al.); 1 at Paynes Prairie Preserve 5 Nov (R. Rowan); 1 at Kendall (*Miami-Dade*) 29-30 Oct (B. Boeringer); 1 at Lake Apopka NSRA 19 & 29 Nov (H. Robinson); 1 at River Lakes Conservation Area (*Brevard*) 9 Nov (D. Freeland); 1 in mid-*Pinellas* 24 Nov (J. Fisher); 1 at Frog Pond WMA 25 Nov (B. Boeringer).
- LARK SPARROW: 1 at Gainesville 21 Sep (A. Kratter, R. Rowan); 1 at Alligator Point 25 Sep (A. Wraithmell et al.); 2 at Frog Pond WMA 29 Sep (R. Torres, T. Mitchell); 1 at St. George Island SP 10 Oct (M. Hartley); 1 at Boot Key (*Monroe*) 10 Oct (J. Palmer); 1 at Paynes Prairie Preserve 22 Oct (D. Steadman); 1 sang in mid-*Pinellas* 10-11 Nov (J. Fisher, photo to FOC); 1 at Lemon Bay Preserve (*Sarasota*) 15 Nov (M. Dunson); 1 at San Felasco Hammock 18 Nov (B. Simons).
- SAVANNAH SPARROW: 1 at Merritt Island NWR 16 Sep (T. Dunkerton).
- HENSLOW'S SPARROW: 1 at Odessa (*Pasco*) 26 Oct (T. Mann).
- LE CONTE'S SPARROW: 1 at St. Marks NWR 30 Oct (A. Wraithmell), and 2 there 26 Nov (E. Shaw et al.); 1 at Lake Jackson 16 Nov (A. Wraithmell); 1 at Alligator Point 19 Nov collided with a parked vehicle pre-dawn but recovered and was released (D. & J. Murphy); 1 at Tallahassee 2 Nov (M. Collins); 1 along Hatbill Road 24 Nov (A. Bankert).
- NELSON'S SHARP-TAILED SPARROW: 1 at Bald Point SP 29 Sep (J. Murphy); 2 at Shired Island (*Dixie*) 10 Oct (R. Rowan); 1 at Green Key 24 Oct (K. Tracey); 1 at Paynes Prairie Preserve 29-30 Oct (S. Rayer, details to FOC).
- FOX SPARROW: 1 at Gainesville 26 Nov (D. & J. Powell); 1 at Paynes Prairie Preserve 29 Nov (B. Scales).
- SONG SPARROW: 1 at Key West 25 Nov (L. Atherton, photo to FOC).
- LINCOLN'S SPARROW: 1 at Tram Road STF 26 Oct (A. Wraithmell); 1 at Lake City 28 Oct (P. Burns); singles at Lake Apopka NSRA 29 Oct & 26 Nov (H. Robinson); 1 at Key Largo Hammocks (*Monroe*) 24 Nov (L. Atherton, photos to FOC).
- WHITE-THROATED SPARROW: 1 at Siesta Key (*Sarasota*) 10 Nov (R. Greenspun); 1 at Upper Tampa Bay Park (*Hillsborough*) 19 Nov (C. Gjervold); 3 seen and several more heard at Clay Island, Lake Apopka NSRA (*Lake*) 26 Nov (C. Pierce).
- DARK-EYED JUNCO: singles at Tallahassee 25 Oct (T. Strohman), 21 Nov (G. Simmons), & 23 Nov (G. Menk); 1 along Bottoms Road (*Wakulla*) 14 Nov (S. McCool); a "small flock" at Tall Timbers 19 Nov (C. Borg); 2 at Fort Gadsden Historic Site (*Franklin*) 19 Nov (J. Murphy); 1 at Alachua (*Alachua*) 29 Nov (B. Wallace).
- BLACK-HEADED GROSBEAK: 2 males (adult and juvenile) at Fort Walton Beach STF 28 Sep (T. Phillips et al., details to FOC); 1 at Gainesville 23-24 Oct (J. & J. Metheny).
- BLUE GROSBEAK: 72 at Lake Apopka NSRA 1 Oct (H. Robinson).
- INDIGO BUNTING: 20 at Fort De Soto 12 Oct (B. Ahern et al.); 40 at Lake Apopka NSRA 22 Oct (H. Robinson).

- PAINTED BUNTING: 1 at Chassahowitzka WMA (*Hernando*) 6 Sep (A. & B. Hansen); 1 at Kissimmee Prairie Preserve 5 Oct (P. Miller); 7 at Oakland Nature Preserve 21 Nov (T. Rodriguez); 1 female at Cedar Key 23-27 Nov (D. Henderson).
- DICKCISSEL: 1 at Lake Apopka NSRA 2-13 Aug (H. Robinson); 1 at Fort De Soto 27 Sep (B. Ahern); 2 at Canaveral National Seashore (*Brevard*) 1 Oct (T. Dunkerton).
- BOBOLINK: 3000 at Viera 7 Sep (T. Dunkerton).
- YELLOW-HEADED BLACKBIRD: 1 juvenile male at St. Marks NWR 4 Sep (A. Wraithmell); 1 at Fort Walton Beach STF 28 Sep (B. Penhollow, T. Phillips); 2 at Lake Apopka NSRA 18 Oct, and 1 there 3 Nov (H. Robinson); 1 at Sarasota 24 Oct (D. Hayward); 1 at Hague 28 Oct (M. Manetz); 1 male at Lithia (*Hillsborough*) 26 Nov (L. & M. Weltin, photo to FOC).
- BREWER'S BLACKBIRD: 1 at Tram Road STF 26 Oct (A. Wraithmell); 1 at Lake Apopka NSRA 22 Nov (H. Robinson).
- SHINY COWBIRD: 3 at Flamingo, Everglades NP (*Monroe*) 4 Sep (J. Boyd); 3 at Lake Apopka NSRA 17 Sep (H. Robinson); 1 male at Tallahassee 8 Oct (S. Teisciero); 3 at Homestead (*Miami-Dade*) 29 Oct (J. Boyd); 2 at the Everglades Ag Area 3 Sep (B. Hope, M. Berney).
- BRONZED COWBIRD: 2 singles at Jupiter Inlet Colony 6 Sep (J. & L. Hailman); 1 female at Mashas Sands Park (*Wakulla*) 22 Oct (S. McCool); 1 at Lake Apopka NSRA 29 Oct (H. Robinson).
- ORCHARD ORIOLE: 1 at Paynes Prairie Preserve 23 Sep (A. Kratter).
- BALTIMORE ORIOLE: 11 at Altamonte Springs 16 Sep (P. Hueber).
- PURPLE FINCH: 1 at Lake Apopka NSRA 26 Nov (H. Robinson).
- HOUSE FINCH: 5 at Lake Lisa Park 24 Oct (K. Tracey); 3 flocks, from 3-10 individuals each were flying NE at Fort De Soto 1 Nov (B. Anderson et al.); 1 at Cape Florida 8-18 Nov (R. Diaz); 14+ at New Port Richey (*Pasco*) 26 Nov (K. Tracey).
- NUTMEG MANNIKIN: fledglings at Pensacola 20 Aug (B. Gilley); 1 at Captain Forster Hammock (*Indian River*) 27 Sep (D. Simpson).

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Spring 2006 report not published previously: SILVERY-CHEEKED HORNBILL: 1 at W Davie (*Broward*) 27 May 2006 (Rob Adams, photos to FOC).

Summer 2006 report not published previously: BURROWING OWL: 55 at Site B-70, Eglin AFB (*Okaloosa*) 29 Jul (Lenny Fenimore).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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- (2) include the scientific name at the first mention of each species;
- (3) include capitalized standardized English names for all birds, but lower case for English names of other organisms;
- (4) include metric units for all measurements;
- (5) use the form "7 June 2003" for all dates;
- (6) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
- (7) use the following abbreviations: s (second), min (minute), h (hour);
- (8) preferentially use active voice.

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, NO. 2

MAY 2007

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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SEPTEMBER 2007

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Subscription price for institutions and non-members is \$20 per year. Back issues (\$3.00 per issue) are available, prepaid, from the Treasurer. Notice of change of address, claims for undelivered or defective copies, and requests for information about advertising and subscriptions should be sent to the Treasurer.

The *Florida Field Naturalist* is published quarterly (February, May, September, and November) by the Florida Ornithological Society. It is printed by E.O. Painter Printing Co., P.O. Box 877, DeLeon Springs, FL 32130. The permanent address of the Florida Ornithological Society is Division of Birds, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at www.fosbirds.org

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 3

SEPTEMBER 2007

PAGES 73-103

Florida Field Naturalist 35(3):73-78, 2007.

FIRST RECORD OF ROSEATE TERNS NESTING IN THE KEY WEST NATIONAL WILDLIFE REFUGE: A BY-PRODUCT OF HURRICANE WILMA

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In the Western Hemisphere, the Roseate Tern (*Sterna dougallii*) exists as two distinct breeding groups: the endangered northeastern population (New York to Nova Scotia) and the threatened Caribbean population (see Smith 1996). In the U.S., birds of the latter group nest only in the Florida Keys, an arcuate string of islands stretching ca 355 km from Key Largo to the Dry Tortugas.

Despite the Florida Keys' considerable length, from 1974-1998 a peak of only four nesting colonies was active in a single year (1976), with only 34 known colonies (mean = 1.3 colonies per year) during the 25-year period (computed from Zambrano et al. 2000). That 11 (32%) of the colonies were on rooftops (computed from Zambrano et al. 2000) coupled with most other nesting occurring on islands cleared or created by man suggests that a lack of natural sites is a limiting factor.

On 24 October 2005, Hurricane Wilma obliterated Pelican Shoal, a low-lying offshore island 13 km southeast of Key West—the sole natural Roseate Tern nesting site and one of only two active colonies that year in the Florida Keys. Aerial reconnaissance on 7 November 2005 revealed that the hurricane had created a sand island (ca 400 m long, width 5-100 m) and a narrow, attached finger spit, located 0.1 km west of Boca Grande Key (19 km west of Key West and ca 38 km from Pelican Shoal). Hereafter this entire area will be referred to as Sand Island. Although within the administrative boundaries of the Key West National Wildlife Refuge, Sand Island and surrounding waters are under State of Florida jurisdiction.

TW boated past or stopped at Sand Island at least twice monthly from December 2005 through May 2006. Despite the remote location,

visitors were often present, with as many as 23 people and three unleashed dogs observed at one time. Flocks of shorebirds and Least Terns (*S. antillarum*), a state-listed threatened species, were observed being flushed en masse by the latter.

On 5 June 2006, we observed a Roseate Tern incubating one egg ca 20 m from the west terminus of the island (hereafter nest one). The egg was deposited on bare sand but nearly touched a small, branched coral fragment. On that same day, permission was requested from the State of Florida to close part of the island as an emergency measure until State personnel could arrive later in the month. On the following morning, we erected area-closed signs around the nesting area, providing a minimum buffer of ca 33 m. The bird remained in the incubating position.

By 12 June, nest one had been washed away. A new nest with an incubating Roseate Tern (hereafter nest two) was observed ca 10 m from the former site of nest one. The bird's scrape nearly touched a piece of carpet (ca 0.5×1 m) nailed to and protruding from a plywood panel (ca 1×1.5 m) that had washed ashore. The scrape was otherwise surrounded by short (ca 4-10 cm) fragments of branched coral and rope. On June 14, State personnel posted new area-closed signs, each connected by a rope to delineate the closed nesting area. They also placed a sign ca 75 m beyond the cordoned area to provide an additional buffer.

Observations on 19 June and 26 June revealed that the bird at nest two was still incubating, and on the latter date three additional Roseate Terns, all within the closed area, were nearby (Table 1).

On 3 July, two additional Roseate Terns, each in an incubating position, were observed within the closed area. The scrape of one nest (nest three), 1 m from nest two and on the opposite side of the carpet, nearly touched the plywood panel. Nest four was ca 12 m east of nest three.

On 5 July, we observed 16 Roseate Terns, including the three incubating birds, in the closed area. Two pairs engaged in courtship flights (see Gochfeld et al. 1998) shortly after our arrival. Both pairs were later observed copulating, one within the closed area, the other ca 80 m beyond it and alongside a water-filled depression on the island. Pre-copulatory behavior for the latter pair was observed: one of the birds made begging calls and the terns moved in short circles around each other for about 45 seconds. The female then held her body parallel to the sand whereupon the male mounted her. The copulation occurred amidst more than 50 Least Terns.

Copulation was a protracted affair for both pairs of Roseate Terns. We timed the length of copulation for the pair observed outside the closed area: 1 minute, 35 seconds or 35 seconds longer than reported for this species (see Gochfeld et al. 1998). In both instances, the female was standing when copulation began, but eventually sank to the sand

Table 1. Summary of Roseate Tern observations on Sand Island, June 5-August 21, 2006.

| Date | No. Roseate Terns ¹ | No. active nests ² | No. young |
|---------|--------------------------------|-------------------------------|----------------|
| 5 June | 1 | 1 | 0 |
| 12 June | 1 | 1 | 0 |
| 19 June | 4 | 1 | 0 |
| 26 June | 4 | 1 | 0 |
| 3 July | 3 | 3 | 0 |
| 5 July | 16 | 3 | 0 |
| 12 July | 23 | 3 | 0 |
| 15 July | 26 | 3 | 1 |
| 22 July | 5 | 2 | 0 ³ |
| 7 Aug | 10 | 0 | 0 ³ |
| 12 Aug | 15 | 0 | 3 |
| 21 Aug | 8 | 0 | 0 |
| 4 Sep | 0 | 0 | 0 |
| 6 Sep | 0 | 0 | 0 |
| 11 Sep | 0 | 0 | 0 |
| 18 Sep | 0 | 0 | 0 |

¹Exclusive of nestlings.

²Adult bird on scrape.

³No spotting scope on these dates; nestlings may have been overlooked.

with the male still on her back, with copulation continuing for 30 additional seconds in the second pair.

On 12 July (1044 hours) we visited Sand Island at the crest of the highest spring tide of the month. About half the island was inundated, including a small portion of the closed area, but all the tern nests were above water and the birds were incubating. Including the three nesting birds, 23 Roseate Terns were observed, 14 within the closed area, nine others near a flock of 35 Royal Terns (*S. maxima*).

On 15 July, 26 Roseate Terns were observed on the island. Birds were present at nests two, three and four. However, the bird at nest two was sitting higher in its nest than the other nesters, suggesting a hatchling was being brooded. Because incubation normally is completed in 24 days (Gochfeld et al. 1998) and nest two had one egg on 12 June, incubation may have been protracted at this nest. Incubation in Roseate Terns may last as long as 31 days (Nisbet 1981). Further, it is possible that a second egg was laid at nest two. Individual eggs may be laid as much as four days apart (Gochfeld et al. 1998). It may be that the first egg at nest two did not hatch (or if it did, we did not observe a nestling), and, perhaps, the bird was still sitting on the second egg (or a small hatchling) on 15 July.

On 22 July, no bird was present at nest two, but incubation was still underway at nests three and four. We had binoculars only (no spot-

ting scope) and did not observe any nestlings. Five Roseate Terns, including the incubating birds, were observed in the closed area.

On 7 August, no incubating Roseate Terns were observed, but 10 roosting birds were present in the closed area. Two men were on Sand Island, cast-netting from the shoreline at a point barely within the closed area. The men were oblivious to the signs; their activity did not cause the terns to flush. We did not have our spotting scope and may have overlooked nestlings if they had been immobile and cryptic due to the presence of the fishermen.

On 12 August, 15 adult Roseate Terns and three fledglings were observed. Age differences were readily apparent. One fledgling was nearly full grown (primaries well developed); the others were smaller, one considerably so. Given its advanced development, we believe that the largest fledgling was from nest two.

On 21 August, no birds were present in the closed area. Eight roosting birds (all adults) were observed elsewhere on the island. No Roseate Terns were observed on 4, 6, 11, and 18 September.

DISCUSSION

Prior to our observations, Roseate Terns had not nested within the administrative boundaries of the Key West National Wildlife Refuge (KWNWR). Since 1986, a few tropical storms and other hurricanes (e.g., Georges in 1998) have created tiny sand islands in KWNWR, but these were ephemeral and unsuitable for tern nesting (Wilmers pers. obs.). Thus, Hurricane Wilma's creation of Sand Island was noteworthy. The island had characteristics similar to that reported by Robertson (1978) for a Roseate Tern nesting site in the Dry Tortugas: a barren substrate of sand, shell, and broken coral.

Whether nesting occurred before our first observation on June 5 was unknown. Prior observations of public use (and the presence of free-roaming dogs) on Sand Island falsely led us to assume there would be no nesting by any bird species. Thus, we may have overlooked any earlier nest(s).

Egg-laying rangewide for the Caribbean population usually begins in May with hatching in mid-June (Gochfeld et al. 1998). However, two of the four Sand Island nests were laid after 26 June, which is more typical for Florida (Kushlan and White 1985, Smith 1996, Zambrano 2001). Roseate Terns nesting at Sand Island could also have been young adults, which in the northeastern population lay eggs later than their older counterparts (Burger et al. 1996).

Beaches and sand islands are rare in the FL Keys and attract boaters, some with dogs. Nesting Roseate Terns left unprotected in remote areas like Sand Island inevitably will be subjected to human-caused

disturbance. The deleterious impact of the latter (see Nisbet and Drury 1972) is unrecognized by some, if not most, visitors. Further, the birds of the Caribbean population are more prone to human disturbance impacts than their northern counterparts (Gochfeld et al. 1998).

Because nesting birds are particularly sensitive to disturbance during the courtship and incubation periods (Fyfe and Olendorff 1976), it was important that we quickly provided a buffer zone (see Rodgers and Smith 1995, 1997). Closing the entire island, while preferable, was not possible for a number of reasons, including a lack of officers to enforce the closure. We believe the small size of the buffer zone enhanced compliance because of its reasonableness: most of the island remained open to public use. Signs on Sand Island were not damaged and, with the noted exception, we did not see human trespassers in the closed area.

Although less than 10% of Sand Island was closed to public use, two letters of complaint appeared in a local newspaper denouncing the closure, including one entreaty to leave the entire island open so that dogs could run at will. Although the posted signs stated the area was closed for nesting birds, no news releases had been provided to avoid drawing undue attention to the nesting terns. Whether the latter was the more prudent action is a conjectural matter.

Lastly, Sand Island's importance was not limited to Roseate Terns. We observed four other tern species (as many as 290 Least Terns), 11 shorebird species (as many as eight Piping Plovers (*Charadrius melodus*), and three wading bird species (as many as four Reddish Egrets (*Egretta rufescens*).

ACKNOWLEDGMENTS

H. T. Smith and P. Hughes provided helpful comments on an early draft of the manuscript. We thank Anne Morkill, Project Leader of the Florida Keys National Wildlife Refugees, for supporting our efforts.

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FOOD-HANDLING DIFFICULTIES FOR SNAIL KITES CAPTURING NON-NATIVE APPLE SNAILS

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Abstract.—The non-native channeled apple snail, *Pomacea insularum*, has spread rapidly in a number of wetlands and lakes in Florida that fall within the range of the endangered Snail Kite (*Rostrhamus sociabilis*). We observed Snail Kites foraging on *P. insularum* on a central Florida lake and found that the kites had difficulties capturing and consuming the large non-native snails. Kites dropped 44% of channeled apple snails captured, compared to a 0% drop rate by kites capturing native apple snails (*P. paludosa*), and 1% reported by another study. Kites also took longer to extract the flesh from *P. insularum* compared to *P. paludosa*, but this may be offset by the larger caloric value of the former. The extremely high drop rate may preclude some Snail Kites (e.g., juveniles) from meeting their caloric needs, but this and many other questions regarding the potential impact of the spread of *P. insularum* needs to be investigated more thoroughly.

There has been a rapid expansion of non-native channeled apple snails in peninsular Florida wetlands and lakes. Rawlings et al. (2007) used genetic analyses recently to identify the most widespread non-native apple snail as *Pomacea insularum* (not *P. canaliculata* as previously thought). Another non-native, the spike-topped apple snail (*P. diffusa*) has existed in Florida for decades, but its populations remain restricted to a few small areas and their potential impacts appear less of a concern (Rawlings et al. 2007).

Growing concern about the invasive *P. insularum* stems, in part, from its rapid expansion into the range of the endangered Florida Snail Kite (*Rostrhamus sociabilis plumbeus*). Questions have been raised regarding the kites' ability to rely on the much larger *P. insularum* as a substitute for its normal prey, the native Florida apple snail (*P. paludosa*) (Rawlings et al. 2007). Takekawa and Beissinger (1983) reported that kites can capture and consume non-native spike-topped apple snails, and we had anecdotal evidence that kites also consumed *P. insularum*.

The Snail Kite has structural attributes in its claws and beak that make it adept at capturing and consuming the golf-ball sized native apple snail (Snyder and Snyder 1969). Florida apple snail adults typically range in size from 30-45 mm in height (see Fig. 1 for standard shell measurements) and rarely exceed 60 mm (Hanning 1979, Sykes 1987, Darby, unpublished data). In contrast, *P. insularum* found in

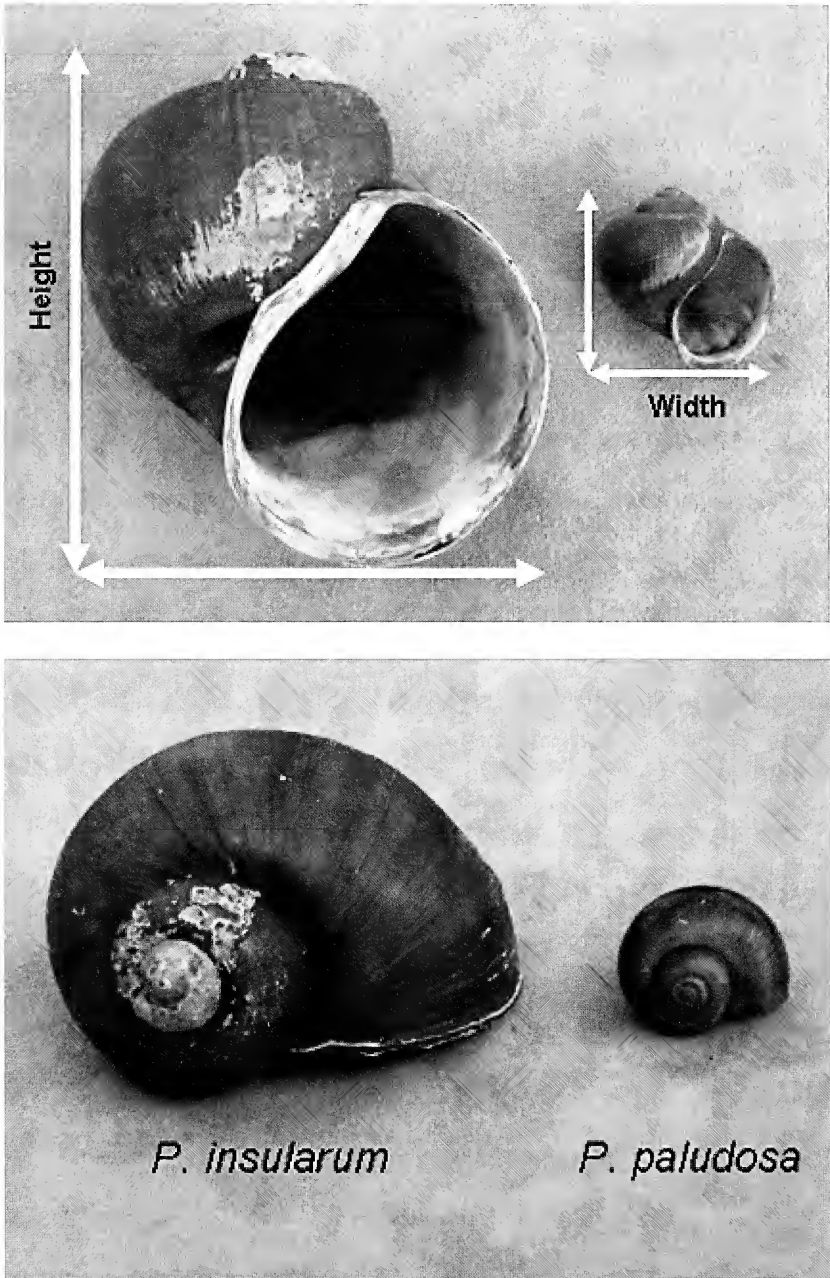


Figure 1. *Top panel*—view showing height (H) and width (W) measurements of a typical-sized *P. insularum* found on LTOHO (81 mm W × 93 mm H) (*left*) and a typical-sized *P. paludosa* found on LKISS (31 mm W × 34 mm H) (*right*). See text for details on sizes from field samples. *Bottom panel*—an additional perspective of the same specimens to illustrate the much larger overall size of *P. insularum*.

Florida often exceed 90 mm in height (pers. obs., also see Rawlings et al. 2007). We hypothesized that kites may experience difficulties capturing and consuming the large non-native apple snails.

STUDY SITE AND METHODS

We observed Snail Kites foraging on channeled apple snails in Goblets Cove (28°13.4N, 81°21.0W) on Lake Tohopekaliga (LTOHO), Osceola County, as part of a larger on-going study of apple snails on central Florida lakes. Only the channeled apple snail was found in Goblets Cove at the time we made our foraging observations. For comparison, we observed Snail Kites capturing native snails around Ox Island (27°56.2N, 81°13.6W) on nearby Lake Kissimmee (LKISS), Osceola County.

We observed kites foraging on channeled apple snails on LTOHO on 22 and 23 October 2004 in three different locations approximately 1-2 km apart along the shoreline. Based on plumage markings and the different locations, we were reasonably confident that we observed 10 different birds, but we could only be certain of distinguishing between individuals within a given day ($n = 4$ and $n = 6$). Two observers watched foraging kites from a stationary or slow moving airboat (see Bennetts et al. 2006). When a kite captured a snail, one observer kept sight of the kite with a binocular. Incidences of kites dropping captured snails were recorded. When the kite landed on a perch with a captured snail, we started a stop watch. We recorded the 'extraction time' as the time it took for the kite to extract and swallow the snail flesh. We inspected discarded shells under accessible kite perches to confirm that they were eating only the channeled apple snail.

We recorded the frequency of kites dropping native snails on LKISS in spring 2005. Extraction times were not recorded. We inspected accessible kite perches to confirm they were eating only the native apple snail.

In fall 2004, we used throw traps and dip nets in Goblets Cove on LTOHO to sample apple snails, a method that does not bias against capturing any snail sizes as long as they exceed 13 mm (Darby et al. 1999). We measured the shell widths (nearest mm, using vernier calipers) of 64 live channeled apple snails captured in throw traps. We also recorded shell widths for 22 native snails taken from throw traps in the vicinity of foraging kites on LKISS in spring 2005. Snails sampled in throw traps on LTOHO and LKISS were immediately returned to the water because our research on trends in snail abundance was on-going. Shells of snails consumed by kites were not measured, in part, because we could not be certain which snail in a pile of shells under a perch was the one just consumed. Also, in many cases, we could not access the perches because they were surrounded by impenetrable vegetation. Qualitative assessment of shells in piles beneath several accessible perches confirmed that the kites were eating snails of a size similar to those that we measured from throw traps.

As a routine part of our field sampling, we measured only shell width to represent overall snail size. In hindsight (after collecting kite foraging data), we realized that heights of those found in the field might be of interest for overall size comparisons of native vs. non-native snails. Heights of shells for which we had field measurements of widths were estimated as follows. First, we measured heights and widths from similarly sized empty shells stored in the lab ($n = 15$ for *P. paludosa* and $n = 15$ for *P. insularum*) and calculated an average height to width ratio. Then, we multiplied the average ratio (= 1.15 for both species) by the shell width recorded from field specimens in order to estimate their height. Although this approach may not be sufficiently precise to distinguish subtle differences in shell morphology (e.g., to compare species or gender within a species), it allowed us to quantify the large size differences between the native and the non-native snails. We also used a standard electronic laboratory scale to weigh one whole frozen specimen of *P. insularum* and *P. paludosa*, comparable in size to those on which kites foraged.

RESULTS

We recorded 25 cases of Snail Kites capturing a channeled apple snail. Kites dropped eleven of these captured snails (44%) before reaching a perch. Most often, kites held the captured snail for one to two seconds before dropping it (qualitative assessment). The tendency to drop channeled apple snails varied widely between kites (Table 1). We approached locations where the snails were dropped and never saw floating, empty shells. This was confirmation that kites were not mistakenly grabbing and then dropping empty shells. Also, the splash associated with dropped shells suggested that whole snails, not just relatively light, empty shells, were being dropped. In 136 records of a kite capturing a native snail on LKISS, no snails were dropped.

For those kites that made it to a perch with a channeled apple snail, the extraction time was, on average (\pm SD), 333 ± 178 s ($n = 10$). Shell widths of *P. insularum* found in throw traps on LTOHO were on average $81 \text{ mm} \pm 6 \text{ mm}$ (SD), and estimated heights averaged $95 \text{ mm} \pm 7 \text{ mm}$; these were also the approximate sizes found under kite perches (qualitative assessment) (see Fig. 1). The smallest shell found was 77 mm in height. On LKISS, native apple snail shells found under kite perches always exceeded 20 mm in width (qualitative assessment). Sykes (1987) reported no snails <20 mm under kite perches. Average widths and estimated heights collected from throw traps were 31 ± 8 mm and 35 ± 9 mm, respectively (four snails that were <20 mm were excluded from calculations to better reflect on what kites were foraging) (see Fig. 1). Whole frozen specimens representing the approximate average sizes of *P. insularum* and *P. paludosa* weighed 174 g and 35 g, respectively.

Table 1. The number of channeled apple snails captured by Snail Kites, the number dropped before getting to a perch, and the time (in seconds) required to extract and consume the snail's flesh in those cases where the Snail Kite ate the snail.

| Date | Kite number | Channeled apple snails captured | Channeled apple snails dropped | Extraction time (s) |
|--------|-------------|---------------------------------|--------------------------------|---------------------|
| 22 Oct | 1 | 4 | 4 | no data |
| 22 Oct | 2 | 6 | 4 | no data |
| 22 Oct | 3 | 3 | 2 | 62 |
| 22 Oct | 4 | 1 | 0 | 440 |
| 23 Oct | 1 | 3 | 1 | 280, 586 |
| 23 Oct | 2 | 1 | 0 | 220 |
| 23 Oct | 3 | 3 | 0 | 588 |
| 23 Oct | 4 | 1 | 0 | 463 |
| 23-Oct | 5 | 1 | 0 | 189 |
| 23 Oct | 6 | 2 | 0 | 299, 200 |

DISCUSSION

Snail Kites dropped the large channeled apple snails 44% of the time, compared to 1% or less noted for kites capturing native snails (Cary 1985, Sykes et al. 1995, this study). Channeled apple snails weighed approximately five times as much as native apple snails. Beissinger (1990) reported the time for a Snail Kite to extract and eat the flesh from Florida apple snails as 95.7 ± 37.3 s (SD), or roughly one third the extraction times we recorded for kites eating the large non-native. Takekawa and Beissinger (1983) provided no indication that kites had trouble foraging on non-native apple snails, but this likely reflects the fact that the kites they observed were eating spike-topped apple snails, which are similar in size to the Florida native (Thompson 1984, Rawlings et al. 2007).

We found no reports of any of the three subspecies of Snail Kites (*R. s. plumbeus*, *R. s. sociabilis*, *R. s. major*) foraging on *P. insularum*, noting that the range of this snail overlaps with *R. s. sociabilis* in South America (Sykes et al. 1995, Rawlings et al. 2007). *R. s. sociabilis* also occurs in wetlands supporting *P. urceus* (Burky et al. 1972, Donnay and Beissinger 1993), another apple snail with shell height >100 cm; again, we found no reports of kites eating these large snails. Although studies have shown that kites select larger snails (i.e., they rarely eat snails <20 mm shell length), the upper limit of what they can handle has never been questioned. In reports of snail sizes consumed by kites (with only four snail species noted, *P. paludosa*, *P. doliodes*, *P. scalaris*, *P. canaliculata*), the largest snail eaten was 86 mm shell length (Tanaka et al. 2006), and they rarely consumed snails > 60 mm (Beissinger 1983, Bourne 1985, Bourne 1993, Tanaka et al. 2006, also see review by Sykes et al. 1995). Snail kites may simply be less proficient at grasping the 95 mm (average) *P. insularum*, noting that kite claw plus toe lengths are 49 to 68 mm (Sykes et al. 1995). The 175 g average weight of *P. insularum* might have been a challenge as well, given that this is approximately 45%, 43% and 37% of the total weight of juvenile, adult male, and adult female kites, respectively (Valentine-Darby et al. 1997). We suspect that the high degree of individual variation in drop rates reflected age and/or inexperience, with juveniles more likely to drop snails compared to adults.

Longer extraction times for *P. insularum* may simply reflect the effort required to extract a larger amount of flesh from the shell, and this could be offset by the caloric gain. However, kites expend more energy in getting an exotic snail to the perch; they dropped 44% of the exotic snails captured. Quantifying this tradeoff in caloric gain relative to the additional effort of capture would require more thorough examination. A simplistic example follows: a juvenile kite that captures and con-

sumes four native snails (35 g each) obtains a 140-g prey item with the cost of carrying 9% of its body mass (on four flights to a perch); it spends 384 s to consume the prey. In comparison, a juvenile kite that captures four exotic snails (174 g each) but drops three, obtains 174 g of snail (24% more than if eating four natives), but carries 45% of its own body mass (on one full flight to a perch and three flights to the point of dropping snails); it takes 333 s to consume the prey. Clearly, the net caloric gain is not directly proportional to the larger size prey, and under some circumstances, depending on the individual drop rate, there could be a net loss when attempting to forage on *P. insularum*. We have particular concern for juveniles that may exhibit high drop rates which may lead to insufficient calorie intake. Newly fledged kites, when capturing *P. paludosa*, were described as 'proficient at capturing snails but unskilled at extraction' (Sykes et al. 1995). Bennetts and Kitchens (1999) identified 30-60 d post fledging as being the period of greatest risk of mortality for Florida snail kites, and alluded to their inexperience in foraging on their own. The large size of *P. insularum* may exacerbate the potential for newly fledged kites to suffer mortality associated with food handling difficulties, and there could be demographic consequences for Snail Kites reflected in lower juvenile survival (e.g., see Dreitz et al. 2004). Other questions, such as the potential for parasites harbored by *P. insularum* to harm kites (Rawlings et al. 2007) and their potential impacts on wetland vegetation (Carlsson et al. 2004), should also be investigated.

ACKNOWLEDGMENTS

This research was conducted while completing a larger, ongoing project funded by the Florida Fish and Wildlife Conservation Commission. Michel Therrien assisted with the field work. We appreciate the comments from Patty Valentine-Darby on drafts of this manuscript.

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NOTES

Florida Field Naturalist 35(3):86-88, 2007.

INTERSPECIFIC FEEDING OF NESTLINGS BY A NORTHERN MOCKINGBIRD

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Birds feed offspring other than their own typically when their nests are parasitized (e.g., by cuckoos or cowbirds) or as conspecific (usually related) helpers at the nest (e.g., as occurs in the Florida Scrub Jay, *Aphelocoma coerulescens*). Much less common is the occurrence of interspecific feeding of offspring in other nests (Shy 1982). We recently observed a brood of Carolina Wrens (*Thryothorus ludovicianus*) being fed not only by both parent birds but also by an adult Northern Mockingbird (*Mimus polyglottos*).

On 8 June 2006 we visited a suburban neighborhood on Old Village Road, Tallahassee, Florida, to investigate a report by Mrs. Fran Buford of a mockingbird feeding wren chicks. We were shown the nest of a Carolina Wren, with four nestlings, in a hanging basket of white begonias (Fig. 1) in a shaded yard within a few m of a house. The chicks were only a few days from fledging. We had watched the nest for only about 10 min when an adult wren approached the nest, fed a chick, removed a fecal pellet, and flew off. Shortly afterwards, when an adult Northern Mockingbird approached the nest carrying food, both parent wrens gave alarm calls. The mockingbird then fed a wren chick (Fig. 2) and removed a fecal pellet. Ten minutes later, an adult wren again fed one of the chicks. Some 30 min later, the mockingbird again fed a wren chick, although this time no alarm calls were heard from the parent wrens. Shortly afterwards, we found an active nest of Northern Mockingbirds in a crape myrtle bush (*Lagerstroemia* sp.) with four small, early stage (ca 5 days old) chicks in the same yard, no more than 10 m away. We presume that this was the nest of the mockingbird seen feeding the wrens, as we observed no territorial disputes with other mockingbirds.

The reasons for a bird to provide interspecific care are difficult to understand, as there is no selective advantage to the caregiver. Such interspecific feeding may provide the helper with experience for future breeding attempts (Trombino 2000), but that explanation seems unlikely in this case, as the helper was already breeding. We think that it is most likely that the proximity of the two nests led to this example; in addition, the interspecific feeder may have been the male of the pair of mockingbirds, feeding the wrens while his mate was brooding his own chicks. If the mockingbird chicks experienced no selective disadvantage as a result, then the trait may persist, but negative selection pressure may explain why such observations are rare.

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Figure 1. Carolina Wren (*Thryothorus ludovicianus*) feeding chicks in a suburban yard in Tallahassee, Florida.

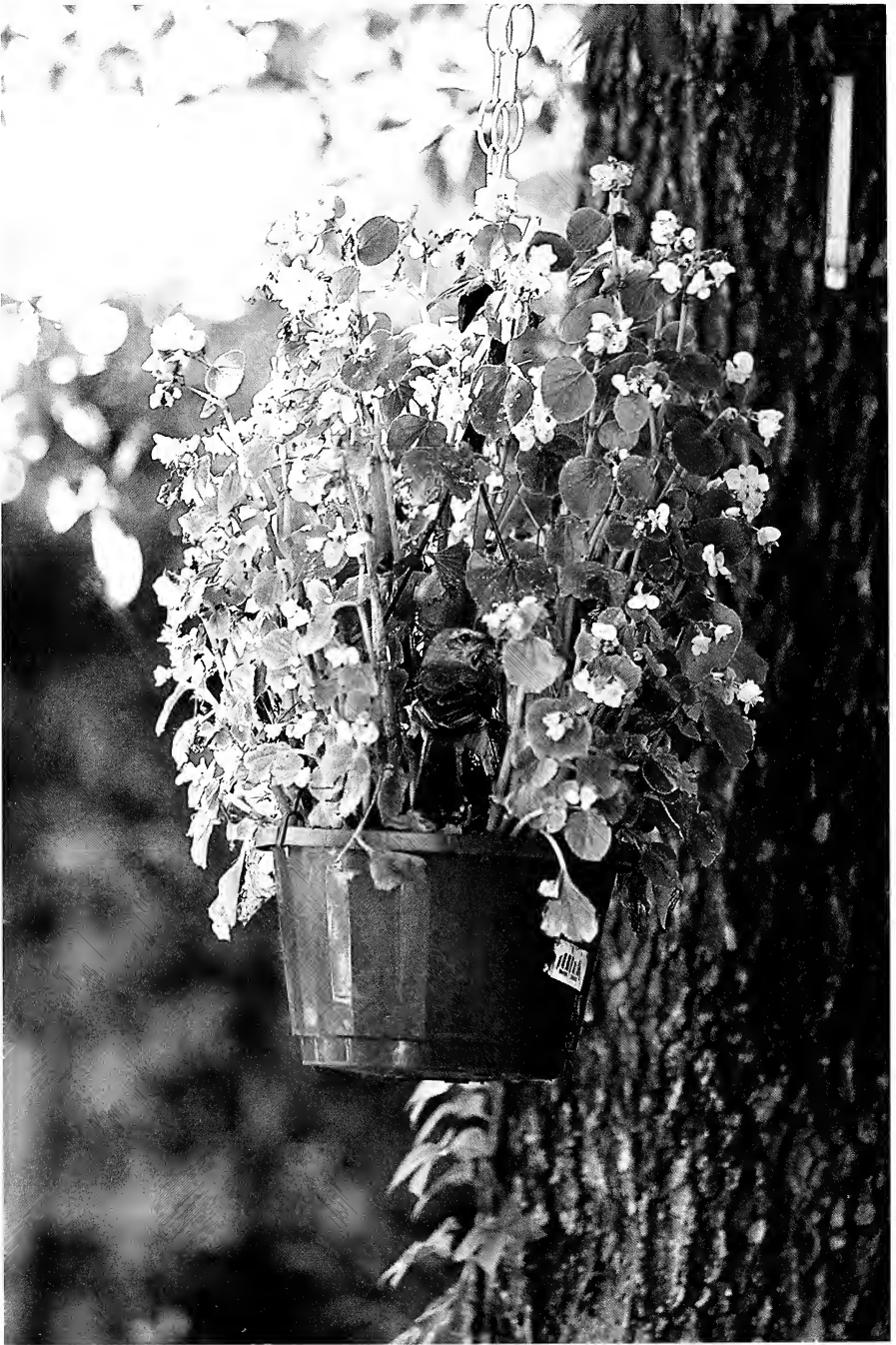


Figure 2. Northern Mockingbird (*Mimus polyglottos*) feeding Carolina Wren chicks in the same nest shown in Figure 1.

FIELD OBSERVATIONS

Winter Report: December 2006-February 2007.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered “reports” while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called “records.” Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32:7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: AFB = Air Force Base, EOS = end of season, NP = national park, NSRA = north shore restoration area, NWR = national wildlife refuge, SP = state park, STA = stormwater treatment area, STF = sewage treatment facility, WEA = wildlife and environmental area, WMA = wildlife management area, and N, S, E, W etc., for compass directions. Bold-faced entries denote birds newly reported or verified in Florida, or record numbers.

SUMMARY OF THE WINTER SEASON

Weather this season was fairly typical. In the western Panhandle, Bob Duncan reported that “there were frequent frontal passages along the northern Gulf Coast bringing rapid weather changes. A light freeze was recorded in Pensacola in December. January was cold and damp. February was cold and dry.” There was much snowfall north of Florida, which may have been at least partially responsible for the great invasion of northern irruptives. Gail Menk reported that, “compared to past years, there were unusually large numbers of White-throated Sparrows, Dark-eyed Juncos, and especially Golden-crowned Kinglets.” The Golden-crowned Kinglet invasion reached the central Peninsula, and Ruby-crowned Kinglets reached the Upper Keys. Many observers noted the abundance of American Robins and Cedar Waxwings.

FOSRC rarities reported this season were two Masked Ducks at Viera, Red-necked Grebe at Destin, White-faced Ibises at St. Marks (two) and Lake Apopka (one), Iceland Gull at Perdido, Thayer’s Gull in Volusia County, Calliope Hummingbirds at Jacksonville and Tallahassee, Hammond’s Flycatcher at Orlando, Tropical Kingbird and Cassin’s Kingbird at Lake Apopka, Western Meadowlark in Escambia County, and Bullock’s Oriole at Tallahassee. A new bird for the state—but under the most dubious of circumstances—was the White-winged Crossbill specimen (!) found at Everglades National Park. Finally, disparate news of three birds in Florida were reported in the media: a Ring-necked Duck shot by a Tallahassee hunter (no location or date given) survived two gunshot wounds and a two-day stint in the hunter’s freezer before the bird was discovered to still be alive; the duck was sent to a rehabilitation center where it was expected to survive (BBC News); 17 of the 18 juvenile Whooping Cranes that followed an ultralight aircraft from Wisconsin were killed in their pen at Chassahowitzka NWR during a storm 3 Feb (widely reported); and a falconer giving a display at Titusville lost a Saker Falcon (*Falco cherrug*), which was equipped with a radio transmitter (with a dead battery) and “bells on its legs attached by leather ‘anklets’” (Floridabirds-L).

SPECIES ACCOUNTS

- BLACK-BELLIED WHISTLING-DUCK: up to 26 at Lake Apopka NSRA (*Orange*) 8 Dec-14 Jan (H. Robinson); 66 at Bushnell (*Sumter*) 12 Dec (M. Freeman); 11 N of Brooksville (*Hernando*) 13 Dec (A. & B. Hansen); 26 at *Polk* phosphate mines 29 Dec (P. Timmer, C. Geanangel); 300+ at Gainesville (*Alachua*) 21 Jan (L. Hensley); 87 at The Villages (*Sumter*) 9 Feb (J. Dinsmore); **1000** NE of Bee Ridge (*Sarasota*) 27 Feb (T. Mossbarger et al.); 400 wintered at T. M. Goodwin Waterfowl Management Area (*Brevard*; *fide* D. Simpson).
- FULVOUS WHISTLING-DUCK: 150 at STA-5 (*Hendry*) 9 Dec, and 75 there 27 Jan (M. England et al.); 25 at Lake Apopka NSRA 15 Jan (H. Robinson); 112 at Goodwin Waterfowl Management Area 17 Jan (D. Simpson); 47 at *Polk* mines 11 Feb (P. Timmer).
- WHITE-FACED WHISTLING-DUCK: 1 at Lakeland (*Polk*) 13 Jan (L. Twining, photo to FOC).
- SNOW GOOSE: up to 4 N of Brooksville 3-5 Dec (A. & B. Hansen et al.); 2 at Lake Apopka NSRA 6-31 Dec (H. Robinson); 1 immature in *Leon* 10 Jan (G. Simmons).
- CANADA GOOSE: 1 along CR-44, Crystal River (*Citrus*) 12 Jan (B. Ahern).
- BRANT: 1 juvenile at Newnans Lake (*Alachua*) 29 Dec (A. Kratter); 1 juvenile at Fort Island Beach (*Citrus*) 2-22 Jan (D. & S. Hans et al., photo to FOC by A. Lippman).
- BLACK SWAN: 1 at Boca Ciega Bay (*Pinellas*) 1-7 Feb (R. Harris, L. Atherton).
- WOOD DUCK: 288 at Lake Apopka NSRA 27 Dec (H. Robinson).
- MANDARIN DUCK: 1 drake at Holiday (*Pasco*) 28 Feb (P. Francois, photo to FOC).
- GADWALL: 19 at Spring Hill (*Hernando*) 26 Dec (A. & B. Hansen); 16 N of Brooksville 11 Jan (M. Gardler); 250 at *Polk* mines 11 Feb (P. Timmer).
- AMERICAN BLACK DUCK: 4 at catfish farms in N *Escambia* 13 Dec (L. Catterton) furnished the first accepted report in the W Panhandle since 1965 (*fide* B. Duncan); 1 at Paynes Prairie Preserve SP (*Alachua*) 4 Feb (S. Flamand).
- MALLARD × MOTTLED DUCK: 1 male at Viera Wetlands (*Brevard*) 1 Dec-10 Feb (D. Freeland et al.); **200** at Timber Pines, Spring Hill 26 Dec (A. & B. Hansen); 1 at Eagle Lakes Park, Naples (*Collier*) 21 Jan (D. Suitor); up to 10 at Rotary Park, Cape Coral (*Lee*) 17 Feb (C. Ewell); up to 7 at Lake Apopka NSRA 19 Dec (B. Anderson).
- BLUE-WINGED TEAL: 5000 at Viera Wetlands 3 Dec (D. Freeland).
- BLUE-WINGED × CINNAMON TEAL: 1 male at Viera Wetlands 1 Dec-24 Jan (C. Goodrich et al., photo to FOC).
- CINNAMON TEAL: 2 (male & female) at Viera Wetlands 1 Dec-15 Jan (D. Freeland et al.).
- NORTHERN PINTAIL: 1 at Eagle Lakes Park 15 Dec (D. Suitor); 6 at Ten Thousand Islands NWR (*Collier*) 4 Jan (T. Doyle, C. Ewell); 64 at *Polk* mines 11 Feb (P. Timmer).
- GREEN-WINGED TEAL: 1000 at Viera Wetlands 28 Jan (D. Freeland et al.).
- CANVASBACK: 11 at Newnans Lake 9 Dec (A. Kratter); up to 9 at *Polk* mines 29 Dec-11 Feb (P. Timmer, C. Geanangel); 2 at Paynes Prairie Preserve SP 11 Feb (C. Burney, J. DeLuca).
- REDHEAD: 1 at a *Polk* mine 7 Jan (P. Timmer).
- RING-NECKED DUCK: 400 at the *Sarasota* celery fields 7 Dec (B. Ahern); 1220 at The Villages (*Sumter*) 8 Jan (J. Dinsmore).
- GREATER SCAUP: 3 at Count Philippe Park, Safety Harbor (*Pinellas*) 28 Dec (C. Gjervold); 1 juvenile female at Eco Pond, Everglades NP (*Monroe*) 30 Dec-13 Jan (J. Boyd et al., photo to FOC by M. Faherty); 1 at Inglis Dam (*Citrus*) 12 Jan (B. Ahern); 1 at Fort Island Beach 19 Feb (M. Gardler).
- COMMON EIDER: 1 female at Fort Clinch SP (*Nassau*) 9 Dec (R. Smith); 1 female at St. Augustine Inlet (*St. Johns*) 16 Dec (B. Richter), and 2 there 3-4 Feb (D. Reed et al.); 1 female flew S past Ormond-by-the-Sea (*Volusia*) 23 Dec (M. Brothers).
- SURF SCOTER: up to 4 at Port Orange (*Volusia*) 6-23 Dec (M. Brothers); 7 at Ormond Beach (*Volusia*) 23 Dec (M. Brothers).
- WHITE-WINGED SCOTER: 11 flying S off Ponce de Leon Inlet (*Volusia*) 1 Dec (M. Brothers); 11 between Alligator Point & Bald Point (*Franklin*) 13 Jan (A. Bankert).

- BLACK SCOTER: 40 at Mud Cove (*Franklin*) 9 Dec (J. Murphy); 3 at Bayport Park (*Hernando*) 26 Dec (B. Pranty, B. Ahern); 1 female at Port Richey (*Pasco*) 2 Jan (B. Ahern, A. Bankert et al.); 1 immature at Santa Rosa Sound (*Santa Rosa*) 5-8 Jan (B. Duncan); 100 at Bald Point 13 Jan (A. Bankert et al.); 34 at Ormond-by-the-Sea 5 Feb (M. Brothers).
- LONG-TAILED DUCK: 1 at Manatee Hammock Park, Titusville (*Brevard*) 13-14 Dec (J. Eager); 1 at St. Augustine Inlet 16 Dec (B. Richter); 1 male along Bottoms Road (*Wakulla*) 14 Jan (M. Hartley, A. Bankert); 3 at St. Augustine Inlet 3-4 Feb (B. Wallace, J. Hintermister).
- BUFFLEHEAD: 3 at Lake Apopka NSRA 19 Dec (B. Anderson); 33 at Fort Island Beach 21 Dec (M. Gardler); 12 off Black Point Park (*Miami-Dade*) 8 Jan (R. Torres); 1 at Lake Sampson, Starke (*Bradford*) 15 Jan (D. Goodwin, E. Haney); 2 at Loxahatchee NWR (*Palm Beach*) 20 Jan (J. Boyd); 1 at Cherry Lake (*Madison*) 16 Feb (R. Smith).
- COMMON GOLDENEYE: 1 juvenile male at Tangerine (*Orange*) 19-22 Dec (B. Anderson et al.); up to 37 at Fort Island Beach 21 Dec-EOS (M. Gardler); 2 at Weekiwachee Preserve (*Hernando*) 3 Jan (D. Simpson); 1 female at Palm Harbor (*Pinellas*) 15 Jan (M. Gardler); 1 at Melrose [county not indicated] 16-21 Feb (B. & J. Bolte et al.).
- RED-BREASTED MERGANSER: 1 at a *Polk* mine 29 Dec (P. Timmer, C. Geanangel); 1 at Hague (*Alachua*) 25 Jan (B. Kramer).
- *MASKED DUCK: at least 1 in female plumage at Viera Wetlands to 29 Dec, and 2 in female plumage there 12-19 Dec (D. Freeland et al., photos to FOC by B. & E. Marr).
- RUDDY DUCK: 8500 at Lake Apopka NSRA 6 Dec, and 8000 there 7 Feb (H. Robinson); 2000 at Newnans Lake 8-10 Feb (B. & J. Bolte et al.).
- RED-THROATED LOON: 1 at S Merritt Island (*Brevard*) 16-17 Dec (C. Goodrich et al.); 1 at Fort Island Beach 21 Dec (M. Gardler); 2 at St. George Island (*Franklin*) 14 Jan (M. Hartley); 1 at Ponce de Leon Inlet 16 Jan (M. Brothers); 8 at Alligator Point 19 Jan (A. Wraithmell); 1 at Titusville 21 Jan (B. Anderson et al.); 1 at Ormond-by-the-Sea 5 Feb (M. Brothers).
- PACIFIC LOON: 1 at S Merritt Island 16-20 Dec (C. Goodrich et al.).
- COMMON LOON: 16 off Boynton Beach Inlet (*Palm Beach*) 9 Dec (M. Berney); 1 at Lake Sampson 15 Jan (D. Goodwin, E. Haney); 3 at Three Rivers SP (*Jackson*) 25 Jan (B. Ahern).
- HORNED GREBE: 1 at Lake Ella (*Leon*) 2-13 Jan (G. Menk).
- *RED-NECKED GREBE: 1 first-winter at Destin (*Okaloosa*) 4 Feb (C. Saleeby, details to FOSRC).
- EARED GREBE: 1 at Bradenton (*Manatee*) 10-24 Dec (J. Palmer, J. Dubi); 2 at Fort Walton Beach STF (*Okaloosa*) to 18 Dec (B. Duncan, D. Ware et al.); 1 at Ormond Beach 25-27 Feb (M. Brothers); 1 juvenile wintered at Green Cay Nature Center (*Palm Beach*; L. McCandless et al.).
- NORTHERN GANNET: 25 off Naples 10 Feb (D. Suitor).
- AMERICAN WHITE PELICAN: 1 at Lake Munson (*Leon*) 2 Dec (L. Most); 1 captured and ate an American Coot at STA-5, 9 Dec (M. England et al.); up to 50 N of St. Leo (*Pasco*) 10 Dec+ (M. White, B. Pranty); 35 at Chokoloskee Bay, Everglades NP (*Collier*) 19 Dec (D. Suitor); 167 at Ten Thousand Islands NWR 4 Jan (T. Doyle, C. Ewell); 75 at Bystre Lake, Brooksville 8 Jan (M. Gardler); 125 in Charlotte Harbor (*Charlotte*) 20 Jan (R. Smith, B. Ahern); 1 at Mayo (*Lafayette*) 11 Feb (R. Rowan et al.).
- BROWN PELICAN: singles at Lake Apopka NSRA 21 Jan & 25 Feb (H. Robinson); 3 at Lake Bonny, Lakeland (*Polk*) 26 Jan (T. Palmer); 1 at Orlando (*Orange*) 31 Jan (A. Boyle); 1 at Maitland (*Orange*) 15 Feb (C. Pierce).
- MAGNIFICENT FRIGATEBIRD: 1 at Steinhatchee (*Dixie & Taylor*) 5 Jan (R. Smith); 28 near Sebastian Inlet SP (*Indian River*) 6 Jan (N. Soucy).
- AMERICAN BITTERN: 32 at Lake Apopka NSRA 13 Dec (H. Robinson).
- GREAT BLUE HERON: 1 independent juvenile at Paynes Prairie Preserve SP 22 Jan (R. Rowan).

- "GREAT WHITE HERON": 1 on a nest just S of Longboat Key (*Sarasota*) 8 Jan (Mark Davis).
- GREAT EGRET: 1950 at Ten Thousand Islands NWR 4 Jan (T. Doyle, C. Ewell).
- REDDISH EGRET: up to 8 (28 Feb) wintered at St. Marks NWR (A. Wraithmell et al.).
- WHITE IBIS: 1130 at Ten Thousand Islands NWR 4 Jan (T. Doyle, C. Ewell).
- GLOSSY IBIS: 1000 at Paynes Prairie Preserve SP 19 Feb (D. & S. Hartman).
- WHITE-FACED IBIS: 2 immatures at St. Marks NWR 11 Jan (A. Wraithmell); 1 at Lake Apopka NSRA 24 Jan (H. Robinson).
- ROSEATE SPOONBILL: 2 at Bystre Lake 2 Dec-2 Jan (A. & B. Hansen); 10 at Lake Apopka NSRA 3 Dec (H. Robinson); 5 at St. Marks NWR 4 Dec (C. Evans); 7 at Kanapaha Prairie (*Alachua*) 11 Dec (M. Spalding); 10 at Paynes Prairie Preserve SP 17 Dec (M. Davidson); up to 5 at *Polk* mines 29 Dec-11 Feb (P. Timmer, C. Geanangel); 6 at N Jacksonville (*Duval*) 4 Jan (K. Dailey); 218 at Ten Thousand Islands NWR 4 Jan (T. Doyle, C. Ewell); 1 at Inverness (*Citrus*) ca. 13-20 Feb (K. Spilios); 1 at Zephyrhills (*Pasco*) 27 Feb (C. Black).
- WOOD STORK: 400 along CR-44, 12 Jan (B. Ahern).
- BLACK VULTURE: 1340 at Lake Apopka NSRA 28 Feb (H. Robinson).
- TURKEY VULTURE: 1250 at Lake Apopka NSRA 1 Dec (H. Robinson).
- SWALLOW-TAILED KITE: 1 at Merritt Island NWR 22 Feb (*fide* T. Dunkerton); 1 at Gainesville 25 Feb (L. Terry); 1 at Anclote River Park (*Pasco*) 27 Feb (K. Tracey).
- WHITE-TAILED KITE: 2 near Loxahatchee Road (*Palm Beach*) 7 Jan (B. Hope, M. Berney et al.); 1 at Mosaic property (*Hardee*) 13 Jan (F. & P. Rice); 1 at Research Road, Everglades NP 13 Jan (J. Boyd); 1 at W Cocoa (*Brevard*) 8-10 Feb (K. Allie); at least 2 wintered at Kissimmee Prairie Preserve SP (*Okeechobee*; P. Miller).
- BALD EAGLE: 45 at the *Volusia* Landfill 18 Jan (B. Ahern); increasing in the W Panhandle, with 14 sub-adults at the *Escambia* catfish ponds 19 Jan, the maximum ever reported in the region (B. & L. Duncan); 16 at the *Collier* Landfill 20 Jan (D. Sutor).
- GREAT BLACK-HAWK: 1 adult of the *urubitinga* race at Key Biscayne (*Miami-Dade*) 7 Dec (R. Diaz).
- NORTHERN HARRIER: 153 at Lake Apopka NSRA 6 Dec (H. Robinson).
- SHORT-TAILED HAWK: 1 light morph near SR-72 (*Sarasota*) 16 Dec (J. Palmer); 1 light morph at Myakka River SP (*Sarasota*) 10 Jan (R. Greenspun); seven or eight sightings total of both morphs at Disney property (*Orange*) 9-11 Feb (W. Russell); 3 nesting territories in the Port Richey-New Port Richey area (*Pasco*) 1 Feb-EOS (K. Tracey); 2 dark morphs carrying nesting material to a cypress at Flint Creek (*Hillsborough*) 11 Feb (M. Peterson); 1 dark morph along SR-60, ~16 km E of Yeehaw Junction (*Indian River*) 18 Feb (P. Miller); J. Boyd summarized all of his Florida observations since Oct 1999: 84 of 156 hawks (54%) were dark morphs.
- SWAINSON'S HAWK: 1 moribund juvenile at Elkton (*St. Johns*) 7 Dec succumbed the next day (specimen to UF; *fide* A. Kratter); 1 at Brandon (*Hillsborough*) 25 Jan (B. Landry); 1 at Coe Visitor Center, Everglades NP (*Miami-Dade*) 27 Jan (J. Boyd).
- RED-TAILED HAWK: 109 at Lake Apopka NSRA 6 Dec (H. Robinson).
- GOLDEN EAGLE: 1 juvenile at Lake Apopka NSRA 10 Jan, and 1 adult there 4 Feb (H. Robinson); 1 adult in *Baker* 10 Feb (R. Smith).
- CRESTED CARACARA: 1 at Lake Apopka NSRA 1 Dec (H. Robinson); 1 at Florida Panther NWR (*Collier*) 19 Dec (D. Sutor); 1 pair observed building a nest and copulating at Chuluota (*Seminole*) 1 Jan (L. Malo, C. Pierce); 1 near Hal Scott Preserve (*Orange*) 22 Feb (B. Ahern).
- PEREGRINE FALCON: 1 at Keaton Beach (*Taylor*) 13 Jan (B. Ahern, R. Smith); 1 in SW *DeSoto* 20 Jan (B. Ahern, R. Smith).
- YELLOW RAIL: 1 at Hole-in-the-Donut, Everglades NP (*Miami-Dade*) 2 Jan (Michelle Davis); 1 at Kissimmee Prairie Preserve SP 20 Feb (D. Simpson).
- PURPLE SWAMPHEN: 50+ at STA-5, 9 & 24 Dec (M. England et al.).

- PURPLE GALLINULE: 1 at Paynes Prairie Preserve SP 18 Dec (S. Hartman); 2 at Orlando Wetlands Park (*Orange*) 22 Feb (B. Ahern).
- LIMPKIN: 1 at the Ernest Hemingway house, Key West (*Monroe*) 11 Feb (D. Sterba, photo to FOC).
- SANDHILL CRANE: 70 at Bald Point 10 Dec (J. Murphy); 18 at Lake Jackson (*Leon*) 23 Dec (G. Menk); 90 headed N over The Villages (*Sumter*) 9 Feb (J. Dinsmore); 200 over Colt Creek SP (*Polk*) 25 Feb (C. Geanangel).
- WHOOPIING CRANE: 1 adult with one Sandhill Crane over Bald Point SP (*Franklin*) 2 Dec (J. Murphy).
- BLACK-BELLIED PLOVER: 175 wintered at Crandon Park Beach (*Miami-Dade*) 10 Dec-EOS (R. Diaz).
- AMERICAN GOLDEN-PLOVER: 1 E of Brooksville 16 Dec-8 Jan (M. Gardler et al., photos to FOC); singles at Lake Apopka NSRA 17-29 Dec & 28 Feb (H. Robinson).
- SNOWY PLOVER: 1 male at Huguenot Memorial Park (*Duval*) 17 Dec (K. Dailey); 10 at Fort Pickens (*Escambia*) 18 Jan (B. Duncan).
- WILSON'S PLOVER: 30 in a flock at Weekiwachee Preserve 14 Jan (B. Pranty, M. Petru); 12 wintered at Crandon Park Beach 10 Dec-EOS (R. Diaz).
- SEMIPALMATED PLOVER: 11 at *Polk* mines 7 Jan (P. Timmer).
- PIPING PLOVER: 42 wintered at Crandon Park Beach 10 Dec-EOS (R. Diaz).
- BLACK-NECKED STILT: up to 24 (29 Dec) at *Polk* mines 29 Dec-11 Feb (P. Timmer, C. Geanangel); 1 at Lake Jessup Conservation Area (*Seminole*) 2 Jan (E. Rocco).
- AMERICAN AVOCET: 2 at St. Marks NWR to 16 Dec (A. Wraithmell); up to 206 at *Polk* mines 29 Dec-11 Feb (P. Timmer, C. Geanangel); 123 at Cedar Key (*Levy*) 14 Feb (D. Henderson).
- SOLITARY SANDPIPER: 1 at Zephyrhills 30 Dec (K. Tracey); 1 at Lettuce Lake Park (*Hillsborough*) 14 Dec (B. Ahern); 1 at Tallahassee (*Leon*) 27 Feb (G. Menk).
- WILLET: 1 at Viera Wetlands 28 Jan (M. O'Brien, *vide* D. Freeland).
- LONG-BILLED CURLEW: 1 in *Franklin* 28 Dec-14 Jan (J. Murphy); 1 at Joe Overstreet Road, Lake Kissimmee (*Osceola*) 24 Jan furnished the first inland wintering record (T. Donovan, photos to FOC); 2 off Cedar Key 13 Feb (D. Henderson et al.).
- WESTERN SANDPIPER: 1220 at *Polk* mines 11 Feb (P. Timmer).
- PURPLE SANDPIPER: 2 at Smyrna Dunes Park, Ponce de Leon Inlet 5 Dec, and 1 at Lighthouse Point Park 1 Jan+ (M. Brothers); 1 at Garden Key, Dry Tortugas NP (*Monroe*) 17 Dec (C. Skelton, photos to FOC); singles at Huguenot Memorial Park 19 Dec (B. Richter) & 30 Dec (P. Powell); 1 at Anna Maria Island (*Manatee*) 22 Jan (G. Spooner); 1 at Jetty Park, Port Canaveral (*Brevard*) 26 Feb (D. Freeland).
- DUNLIN: 13 at *Polk* mines 29 Dec (P. Timmer, C. Geanangel).
- STILT SANDPIPER: 1 at Lake Jackson 22 Dec (J. Cavanagh); 1 N of Brooksville 11 Jan (M. Gardler).
- LONG-BILLED DOWITCHER: 18 at Springhill Road STF (*Leon*) 18 Dec (G. Menk); 16 at Lake Jackson 22 Dec (J. Cavanagh); 37 at Bystre Lake 8 Jan (M. Gardler); 3 E of Arcadia (*DeSoto*) 27 Jan (R. Smith).
- AMERICAN WOODCOCK: up to 8 displayed at Weekiwachee Preserve 24 Dec-3 Feb (A. & B. Hansen et al.); up to 5 at Research Road, Everglades NP 29 Dec-27 Jan (J. Boyd, R. Diaz); 1 at Florida Panther NWR 27 Jan (D. Suitor et al.).
- RED PHALAROPE: 10 birds 64 km off Ponce de Leon Inlet 29 Jan (M. Brothers).
- POMARINE JAEGER: 7 off *Volusia* 30 Jan (M. Gardler); 1 off Naples 10 Feb (D. Suitor).
- PARASITIC JAEGER: 1 light-morph adult pursued a Royal Tern at Honeymoon Island SP (*Pinellas*) 13 Jan (B. Pranty, M. Petru); 2 off *Volusia* 30 Jan (M. Gardler); 1 light-morph sub-adult harassed Royal Terns at Sandy Key, Everglades NP (*Monroe*) 1 Feb (B. Mulrooney); 1 first-winter at Talbot Islands SP (*Duval*) 7 Feb (P. Leary).
- LAUGHING GULL: 1 at Newnans Lake 8 Dec-6 Jan (R. Rowan, A. Kratter).
- FRANKLIN'S GULL: 1 at Newnans Lake 17-19 Dec (A. Kratter et al.); 1 at Black Point Park 4 Jan (A. Bankert et al.); 1 at Cutler Ridge (*Miami-Dade*) 20 Jan (R. Torres).

- BONAPARTE'S GULL: 5 at Green Key Road, New Port Richey 2 Feb (K. Tracey).
- RING-BILLED GULL: 4000 at Cherry Lake 16 Feb (R. Smith).
- HERRING × GLAUCCOUS GULL: up to 3 at the *Volusia* Landfill 13 Jan+ (M. Brothers, B. Anderson et al.).
- *ICELAND GULL: 1 first-winter at Perdido Landfill (*Escambia*) 13 Jan-17 Feb (L. Catterton, accepted by FOSRC).
- LESSER BLACK-BACKED GULL: 11 (4 adults) at Crandon Park Beach 10 Dec-EOS (R. Diaz); 1 adult at Tiger Point (*Santa Rosa*) 16 Dec (B. Bremser); 2 at the *Collier* Landfill 20 Jan (D. Suitor); 20 at Stock Island (*Monroe*) 3 Jan (C. Goodrich); 80+ at Pompano Landfill (*Broward*) 13 Jan (M. Berney); 1 at Pine Island (*Hernando*) 3 Feb (C. Black et al.).
- GLAUCCOUS GULL: 1 juvenile at Huguenot Memorial Park 25 Dec-28 Jan (B. Richter); 1 first-basic at the *Volusia* Landfill 13 Jan+ (M. Brothers et al.); 1 second-winter at Fort Walton Beach and Destin 5-14 Feb (C. & J. Grossa et al.); 1 at Fort Pierce Inlet SP (*St. Lucie*) 5 Feb (J. Brooks).
- GREAT BLACK-BACKED GULL: 4 (1 adult) at Crandon Park Beach 10 Dec-EOS (R. Diaz).
- BLACK-LEGGED KITTIWAKE: 1 immature 64 km off Ponce de Leon Inlet 29 Jan (M. Brothers).
- GULL-BILLED TERN: 1 at Hernando Beach (*Hernando*) 26 Dec (B. Pranty et al.); 2 at Hudson Beach, Hudson (*Pasco*) 26 Dec (K. Tracey); 5 at Talbot Islands SP 30 Dec (R. Wears); 1 along the St. Johns River (*Seminole* & *Volusia*) 31 Dec (D. Simpson); 4 at Orlando Wetlands Park 1 Feb (B. Anderson et al.).
- ROYAL TERN: 1 at Bystre Lake 2-16 Dec (C. Black et al., photos to FOC); 4 at Lake Hancock, Lakeland 16 Dec (T. Palmer); 5 at *Polk* mines 29 Dec (P. Timmer, C. Geanangel); 2 N of St. Leo 30 Dec (B. Pranty, M. White, photos to FOC); 1 at Lake Apopka NSRA 9 Feb (H. Robinson).
- SANDWICH TERN: 4 at *Polk* mines 29 Dec (P. Timmer, C. Geanangel).
- FORSTER'S TERN: 454 at Lake Apopka NSRA 8 Dec (H. Robinson); 31 at Springhill Road STF 18 Dec (G. Menk).
- BLACK SKIMMER: 32 Lake Mirror, Lakeland 19 Feb (T. Palmer).
- DOVEKIE: 1 flew S past Canaveral National Seashore (*Brevard*) 18 Dec (C. Goodrich et al., details to FOC).
- WHITE-WINGED DOVE: 2 at Alligator Point 2 Dec (J. Murphy); 1 at St. Marks NWR 4 Dec (C. Evans); 1 at N Jacksonville 30 Dec (A. Turner); 1 at Sanibel Lighthouse (*Lee*) 27 Jan (D. & L. Stokes).
- BLACK-HOODED PARAKEET: 37 along Dunedin Causeway (*Pinellas*) 15 Jan (M. Gardler).
- MONK PARAKEET: 7 at Oviedo (*Seminole*) 31 Dec (R. Brown).
- LILAC-CROWNED PARROT: 3 at Matheson Hammock County Park (*Miami-Dade*) in Feb (B. Mumford, photos to FOC).
- RED-LORED PARROT: 1 with an orange cheek patch at Bradenton (*Manatee*) 2 Jan (W. Stinehelfer, photos to FOC).
- SMOOTH-BILLED ANI: 1 at Pahokee (*Palm Beach*) 8 Feb (P. Gray).
- BARN OWL: 25 at Lake Apopka NSRA 22 Dec (H. Robinson); 1 near the former Toytown Dump, St. Petersburg (*Pinellas*) 24 Dec-31 Jan (R. Smith); 1 pair initiated nesting at Kissimmee Prairie Preserve SP in late Feb (P. Miller).
- BARRED OWL: 10 near Withlacoochee River Park (*Pasco*) 30 Dec (B. Ahern et al.).
- SHORT-EARED OWL: up to 9 (29 Dec) wintered at Lake Apopka NSRA (H. Robinson); 1 at Blue Heron STF (*Brevard*) 2 Dec (R. Halpin); 1 at Flamingo, Everglades NP (*Monroe*) 5 Jan (A. Bankert et al.); 1 at Panacea (*Wakulla*) 19-20 Jan (A. Wraithmell, J. Murphy); 1 of the Caribbean race at Key West (*Monroe*) 4 Feb (C. Goodrich).
- LESSER NIGHTHAWK: 1 at Alligator Point 4 Dec (J. Murphy); 1 at Research Road, Everglades NP 18 Dec & 16 Jan (R. Diaz); 1 at Lake Apopka NSRA 12 Jan (H. Robinson); 5 at Eco Pond, Everglades NP 14 Jan (M. Berney).
- COMMON NIGHTHAWK: 1 at Bald Point SP (*Franklin*) 2 Dec had "sharply pointed wings" and a "white bar high on wing" (J. Murphy); 1 at Lake Apopka NSRA 3 Dec (H. Robin-

- son); 1, possibly 2, at Gainesville 19-22 Dec (E. Scales, R. Rowan et al., audio recording to FOC); 2 at Research Road, Everglades NP 6 Jan (A. Bankert, M. Berney et al.).
- CHUCK-WILL'S-WIDOW: 1 in *DeSoto* 27 Jan (R. Smith); 1 heard singing at Sarasota 26 Feb (J. Palmer).
- WHIP-POOR-WILL: 1 in *DeSoto* 27 Jan (R. Smith); at least 2 heard singing at Kissimmee Prairie Preserve SP 23 Feb (P. Miller); 1 heard singing at Sarasota 26 Feb (L. Jakubowicz).
- HUMMINGBIRDS: 11 individuals of 5 species banded in *Escambia*, *Okaloosa*, *Santa Rosa*, and *Walton* variously 8 Nov-17 Dec: 4 Ruby-throated; 10 Rufous; 3 Black-chinned; 3 Buff-bellied; and 2 *Calliope (F. Bassett); 21 banded at Tallahassee: 3 Ruby-throated; 2 Black-chinned; 2 Calliope; and 14 Rufous; returning hummingbirds included 1 Buff-bellied banded in 2006, 2 Rufous banded in 2003, and one Rufous banded in 2006 (F. Bassett).
- BUFF-BELLIED HUMMINGBIRD: 1 female at The Conservancy of Southwest Florida, Naples (*Collier*) 18 Nov-12 Dec (S. Carbol et al., photo to FOC by R. Greenspun).
- RUBY-THROATED HUMMINGBIRD: 1 at Ormond Beach 7 Dec-9 Mar (M. Wilson); up to 9 wintered at Valrico (*Hillsborough*) (S. Backes).
- ARCHILOCHUS SPECIES: 1 at Jacksonville 30 Dec-EOS (L. Royce).
- *CALLIOPE HUMMINGBIRD: 1 first-year male at Jacksonville 9 Jan-EOS (P. Powell, F. Bassett, photos to FOC by R. Clark).
- RUFOS HUMMINGBIRD: 2 wintered at Valrico (S. Backes).
- SELASPHORUS SPECIES: 1 female at Cedar Key 2 Dec-EOS (D. Henderson).
- RED-HEADED WOODPECKER: 6 at Naples 30 Dec (D. Sutor); 1 at Terra Verde (*Pinellas*) 19 Jan (S. Patterson).
- RED-BELLIED WOODPECKER: 1 female at EPCOT (*Orange*) 19 Feb had an extreme "sickle-bill" deformity of its upper mandible (D. Sterba, photo to FOC).
- DOWNY WOODPECKER: 1 at Indigenous Park, Key West 10 Jan (B. Mulrooney).
- HAIRY WOODPECKER: 2 at Paynes Prairie Preserve SP 17 Dec (G. Morgan); 2 at Eglin AFB (*Okaloosa*) 18 Dec (D. Ware); 3 along the Escambia River (*Escambia*) 27 Dec (B. & L. Duncan et al.); 1 at Naples 30 Dec (D. Sutor); 2 at Wekiva River Buffers Conservation Area (*Seminole*) 10 Feb (B. Wheeler).
- *HAMMOND'S FLYCATCHER: 1 at Hal Scott Preserve 28 Jan-2 Mar (J. Gordon et al., photos to FOSRC).
- LEAST FLYCATCHER: up to 10 (6 Dec) wintered at Lake Apopka NSRA (H. Robinson); 1 at Merritt Island NWR 14 Dec (D. Freeland); 1 at Southern Glades WEA (*Miami-Dade*) 16 & 27 Jan (R. Diaz); 1 at Flamingo, Everglades NP 30 Dec-20 Jan (J. Boyd et al.).
- VERMILION FLYCATCHER: 1 at Flamingo, Everglades NP 5 Jan-7 Feb (A. Bankert et al.); 1 at Research Road, Everglades NP 15-16 Jan (R. Diaz et al.); 3 wintered at Paynes Prairie Preserve SP (J. DeLuca et al.); 1 adult male wintered at Lake Jessup Conservation Area, Sanford (R. Halpin et al., photos to FOC).
- ASH-THROATED FLYCATCHER: 1 at Bald Point SP 16 Dec (J. Murphy, details to FOC); 1 at Lake Apopka NSRA 17 Dec-31 Jan (H. Robinson).
- BROWN-CRESTED FLYCATCHER: 1 at Lake Apopka NSRA 10 Dec-11 Feb (H. Robinson); 1 at Flamingo, Everglades NP 13 Jan-7 Feb (J. Boyd, R. Diaz); 1 at Research Road, Everglades NP 15-16 Jan (R. Diaz et al.).
- *TROPICAL KINGBIRD: 1 at Lake Apopka NSRA 13 Dec (H. Robinson).
- *CASSIN'S KINGBIRD: 1 wintered at Lake Apopka to 14 Feb (H. Robinson).
- WESTERN KINGBIRD: 1 at St. Vincent NWR (*Franklin*) 1 Dec (P. Flynn); a total of 9 in *Escambia*, *Okaloosa*, and *Santa Rosa* variously 3-18 Dec (*vide* B. Duncan); 3 at Lecanto (*Citrus*) 26-28 Dec (A. Lippman); 1 at Fort De Soto Park (*Pinellas*) 21 Dec-12 Jan (L. Atherton et al., photo to FOC); up to 17 (11 Jan) at Cedar Key airport 28 Dec-21 Feb fed mostly on *Sabal* fruit (D. Henderson); 10 SE of Lake Istokpoga (*Highlands*) 28 Dec (F. Lohrer et al.); 3 at Fort Island Beach 29 Dec-mid Jan (D. Smyth et al.); 1 N of

- Hudson 1 Jan (K. Tracey); 1 at Merritt Island NWR 8 Jan (T. Dunkerton); 1 at St. George Island 14 Jan (M. Hartley); 1 at Alligator Point 15 Jan (J. Murphy), and 2 there 19 Jan (A. Wraithmell); 13 near Bartow (*Polk*) 17 Jan (T. Palmer); 1 at Tallahassee 21-24 Jan (F. Dietrich); 6 near Balm (*Hillsborough*) 27 Jan (C. Rasmussen); 1 in *DeSoto* 27 Jan (R. Smith); 7 in a "pretty tight flock" at J.N. "Ding" Darling NWR (*Lee*) 6 Feb (W. Russell); up to 43 wintered at The Villages (*Marion*; J. Dinsmore); up to 40 (22 Dec) wintered at Lake Apopka NSRA (H. Robinson).
- SCISSOR-TAILED FLYCATCHER: 1 at the Sarasota celery fields 1 Dec (J. Palmer); 3 at The Villages (*Marion*) 2 Dec+ (J. Dinsmore); 1 at W Cocoa 11 Dec-10 Feb (*vide* D. Freeland); 7 at Lake Apopka NSRA 19 Dec, and 2 there to 9 Feb (B. Anderson, H. Robinson); 1 at Avon Park (*Polk*) 25 Dec (D. Simpson); 10 SE of Lake Istokpoga 28 Dec (F. Lohrer et al.); 6 at Cockroach Bay Road, Ruskin (*Hillsborough*) 13 Jan (T. Arcos); 2 at Longboat Key 9 Jan (J. Ginaven); 2 near Bartow 17 Jan (T. Palmer).
- YELLOW-THROATED VIREO: 1 at Lake Apopka NSRA 10 Jan (H. Robinson).
- BELL'S VIREO: 1 at Southern Glades WEA 2 Dec-EOS (B. Rapoza et al.); 1 at Bradenton 30 Dec-3 Jan (J. Dubi et al., photo to FOC by R. Greenspun).
- YELLOW-THROATED VIREO: 1 at Royal Palm, Everglades NP 18 Dec (R. Diaz); 1 at Research Road, Everglades NP 16 Jan (R. Diaz); 1 at Gainesville 25 Feb (G. Kiltie); 1 wintered at W Kendall (*Miami-Dade*; J. Boyd).
- BLUE-HEADED VIREO: 14 near Withlacoochee River Park 30 Dec (B. Ahern et al.).
- HORNED LARK: up to 7 (31 Jan) at Bascom (*Jackson*) 14-31 Jan (A. Bankert, M. Berney et al.).
- PURPLE MARTIN: 1 at Sarasota 7 Jan (*vide* T. Mossbarger); 2 males at Tallahassee 25 Jan (K. MacVicar); 1 at Lake Apopka NSRA 26 Jan, and 5 there 27 Jan (H. Robinson); 4 at Circle B Bar Reserve (*Polk*) 26 Jan (T. Palmer); 3 at St. Petersburg 31 Jan (R. Smith); 2 at Naples 31 Jan (K. Williams); 1 at Talbot Islands SP 7 Feb (P. Leary).
- TREE SWALLOW: 100,000 near Kissimmee Prairie Preserve SP 14 Jan (T. Rodriguez).
- NORTHERN ROUGH-WINGED SWALLOW: 300+ at STA-5, 9 Dec & 27 Jan (M. England); 1 at Viera Wetlands 15 Jan (D. Freeland); 1 at Newnans Lake 11 Feb (C. Burney, J. DeLuca).
- CAVE SWALLOW: 15 of the *fulva* race at Homestead 14 Jan (J. Boyd); 2 at Merritt Island NWR 21 Feb (D. Freeland et al.).
- BARN SWALLOW: 1 at Goodwin Waterfowl Management Area 17 Jan (D. Simpson); 1 at Tomoka SP (*Volusia*) 27 Feb (M. Wilson).
- CAROLINA CHICKADEE: 1 at Mead Garden, Winter Park (*Orange*) to 14 Jan (B. Orr).
- WHITE-BREASTED NUTHATCH: 2 at Osceola National Forest (*Baker*) 6 Dec (B. Richter); 1 at Gainesville 27 Jan (B. Holt).
- BROWN CREEPER: 1 at Gainesville to 2 Dec (R. Norton); singles at Tallahassee 4 Dec (G. Menk), 19 Dec-4 Jan (M. Collins), and 30 Dec (J. Cavanagh); 1 at Florida Caverns SP 9 Dec (A. Bankert); 1 at Paynes Prairie Preserve SP 10 Dec (E. Scales); 1 at Fort George Island (*Duval*) 8 Jan (R. Clark); 1 at Fort Walton Beach STF 10 Jan (B. Duncan); 1 in *W Washington* 14 Jan (A. Bankert); 1 at Three Rivers SP 25 Jan (B. Ahern); 1 at St. Marks NWR 29 Jan (M. Berney); 1 at Gulf Breeze (*Santa Rosa*) 11 Feb (J. French); 1 at Newberry (*Alachua*) 11 Feb (H. Warren et al.).
- CAROLINA WREN: a clutch of 5 eggs completed at Gainesville 22 Feb (B. Snelson).
- WINTER WREN: 1 at Lake Jackson 9 Dec (M. Collins); 1 at Gulf Breeze 13 Dec (J. French); 1 at Paynes Prairie Preserve SP 17 Dec (M. Manetz); 4 along the Escambia River (*Escambia & Santa Rosa*) 27 Dec (B. & L. Duncan et al.); 1 at Leon Sinks (*Leon*) 6 Jan (M. Hartley); 1 at Florida Caverns SP 25 Jan (B. Ahern); 1 at Ponce de Leon Springs SP (*Holmes*) 26 Jan (B. Ahern); 1 at Torreya SP (*Liberty*) 26 Jan (B. Ahern); 1 at Peacock Springs SP (*Suwannee*) 11 Feb (R. Rowan et al.); 1 at Bayard Conservation Area (*Clay*) 26 Feb (L. McCullagh).
- GOLDEN-CROWNED KINGLET: 16 at Newnans Lake 2 Dec (A. Kratter); 1 at Boyd Hill Preserve, St. Petersburg 2 Dec (R. Smith); 2 at Lake Apopka NSRA 6 Dec-10 Jan (H. Robinson); 1 at Morris Bridge, Wilderness Park (*Hillsborough*) 9 Dec (K. Allen); 3 at

- Lettuce Lake Park 14 Dec (B. Ahern); widespread in *Seminole* 16 Dec-22 Feb (L. Malo, P. Hueber); 1 at Bullfrog Creek Preserve (*Hillsborough*) 17 Dec (M. Keith); 2 at Key Vista Nature Park, Anclote (*Pasco*) 24 Dec (K. Tracey); up to 5 at Starkey Park 2-20 Jan (K. Tracey et al., photos to FOC); 2 wintered at Fort De Soto Park (L. Atherton et al.).
- RUBY-CROWNED KINGLET: 6 at five sites in *Miami-Dade* variously 10 Dec-10 Feb (J. Boyd); 1 at Clive Key, Everglades NP (*Monroe*) 8 Jan (B. Mulrooney).
- EASTERN BLUEBIRD: 2 at Boyd Hill Preserve 16 Dec-12 Jan (A. & R. Smith).
- SWAINSON'S THRUSH: 1 at Sandy Key, Everglades NP 30 Dec (R. Galvez, drawings to FOC).
- HERMIT THRUSH: **100** total feeding in small groups in open areas along roads near Shell Mound, Lower Suwannee NWR (*Levy*) 19 Feb (J. Krummrich).
- AMERICAN ROBIN: 4 at North Park Key (*Monroe*) 27 Dec (B. Mulrooney); 240,000 at Lake Apopka NSRA 29 Dec (H. Robinson); "surely ... millions" in the Panhandle late Jan-19 Feb (B. & L. Duncan); 2 at Key Largo (*Monroe*) 6 Feb (B. Mulrooney).
- NORTHERN MOCKINGBIRD: 1 at Sanibel Island in Feb "regularly included Tropical Kingbird calls in its repertoire" (W. Russell).
- COMMON MYNA: 2 at S Fort Myers (*Lee*) 6 Dec (A. Lindstrom), and 2 there one mile north 25 Feb (S. Hodgson).
- SPRAGUE'S PIPIT: 1 at Eglin AFB site B-70, 3 Dec (L. Fenimore).
- CEDAR WAXWING: 1 bird 40 km off *Volusia* 30 Jan (M. Gardler).
- NASHVILLE WARBLER: 1 at Ingraham Highway, Everglades NP (*Miami-Dade*) 18 Dec (R. Diaz); 1 at A.D. Barnes Park (*Miami-Dade*) 23 Dec (R. Diaz); 1 at Spring Hill 6 Dec-27 Feb (D. Gagne); 1 at Hudson 2 Jan (D. Simpson); 1 at Gainesville 3 Jan (B. Christensen); 1 at Southern Glades WEA 10 Feb (J. Boyd); 1 at Mead Garden 12-21 Feb (B. Anderson et al.).
- NORTHERN PARULA: 4 males at Bill Baggs Cape Florida SP 26 Jan were the first migrants of the year (R. Diaz); 1 at Tallahassee 7 Feb (K. MacVicar); 1 at Lake Apopka NSRA 23 Feb, and 7 there 28 Feb (H. Robinson); 1 at St. Augustine (*St. Johns*) 25 Feb (J. Kern).
- YELLOW WARBLER: 1 at Gainesville 8 Dec-EOS (J. Powell et al., photo to FOC); 1 juvenile male at Oviedo 31 Dec (B. Anderson); 1 at Goodwin Waterfowl Management Area 24 Jan (A. Bankert et al.).
- BLACK-THROATED BLUE WARBLER: 1 at Orlando 6 Dec (A. Boyle); 1 male at S Merritt Island 10-21 Feb (D. Freeland).
- YELLOW-RUMPED WARBLER: 10,000 flew over the Sanibel Lighthouse toward the mainland 28 Jan (D. & L. Stokes); 10,200 at Lake Apopka NSRA 23 Feb (H. Robinson).
- BLACK-THROATED GREEN WARBLER: 1 at St. Sebastian River Preserve SP (*Brevard*) 30 Dec (L. Malo); 1 at Mead Garden 29 Jan (B. Orr).
- PRAIRIE WARBLER: 1 at Fort Walton Beach STF 3 Jan (B. Duncan).
- PALM WARBLER: 1 of the eastern race wintered at Fort Zachary Taylor SP, Key West (*Monroe*) 30 Dec (B. Mulrooney et al., photo to FOC).
- AMERICAN REDSTART: 1 at Altamonte Springs 2 Dec-EOS (P. Hueber); 1 at Lake Lindsey (*Hernando*) 16 Dec (R. Grant); 1 at Gainesville 17 Dec (S. Robinson); 1 at Hal Scott Preserve 26 Jan (J. Gordon); 1 male at Oakland Nature Preserve (*Orange*) 30 Jan (T. Rodriguez); 1 female at Fort Cooper SP (*Citrus*) 1 Feb (B. Ahern); 1 male near Inverness 17 Feb (P. Pilny).
- SWAINSON'S WARBLER: 1 banded at Cape Florida SP 9 Sep and recaptured five times 1 Oct-3 Nov and again 12 Mar; probably wintered (R. Diaz).
- OVENBIRD: 1 at Eglin AFB 18 Dec (J. Kowalski); 1 at Apalachicola (*Franklin*) 3 Feb (J. Murphy).
- NORTHERN WATERTHRUSH: 3 at Paynes Prairie Preserve SP 16 Dec (J. Hintermister et al.); 1 at Newnans Lake 17 Dec (A. Kratter); 1 at St. Marks 1 Jan-26 Feb (A. Wraithmell et al.); up to 20 (28 Feb) wintered at Lake Apopka NSRA (H. Robinson).

- LOUISIANA WATERTHRUSH: 1 at Greynolds Park 16 Dec (J. Boyd et al.); 1 at Newnans Lake 17 Dec (M. Manetz); 1 at Royal Palm, Everglades NP 18 Dec (R. Diaz) & 5 Jan (A. Bankert et al.); 2 at Lake Apopka NSRA 25 Feb (H. Robinson).
- HOODED WARBLER: 1 male at John Chesnut Park (*Pinellas*) 8-14 Jan (T. Arcos); 1 male at Big Cypress Bend, Big Cypress National Preserve (*Collier*) 4 Feb (A. Murray).
- WILSON'S WARBLER: 1 at Hague 2 Dec (M. Manetz); 1 at Lake Seminole Park (*Pinellas*) 5 Dec-25 Jan (C. Gjervold); 3 at Paynes Prairie Preserve SP 16-17 Dec (J. Hintermister, M. Manetz et al.); 1 at Fort Walton Beach STF 18 Dec (S. Lefstad); 1 at Lake Apopka NSRA 22 Dec-7 Jan (H. Robinson); 1 at Frog Pond WMA (*Miami-Dade*) 5 Jan (A. Bankert et al.); 1 at Buschman Park (*Volusia*) 7 Feb (B. Orr).
- YELLOW-BREASTED CHAT: 1 at Paynes Prairie Preserve SP 9-17 Dec (M. Manetz); 1 at Alligator Point 10 Dec (J. Murphy); 1 at Gainesville 17 Dec (P. Colverson); 1 at Lake Apopka NSRA 7 Jan (H. Robinson); 1 at Cape Florida SP 8 Jan (R. Diaz); 1 at Flamingo 14 Jan (B. Mulrooney); 1 at Frog Pond WMA 16 Jan (R. Diaz); 1 at Lake Seminole Park 28 Feb (*vide* J. Fisher).
- BANANAQUIT: 1 at Big Pine Key (*Monroe*) 14 Dec (J. Hobbs, details to FOC).
- SUMMER TANAGER: 1 at Gainesville 17 Dec-9 Feb (I. Scales); 1 on the Choctawhatchee CBC (*Okaloosa*) 18 Dec (G. Estes); 1 banded male at Tallahassee 30 Dec for its 5th winter (P. Homann); 1 at Vero Beach (*Indian River*) 13 Jan (B. Wagner); 1 in *Wakulla* 19 Jan-16 Feb (L. Reynolds); 1 female at Tallahassee 28 Jan (F. Rutkovsky); presumably the same 1 wintered at Melrose for the fifth consecutive winter (J. Geisel).
- WESTERN TANAGER: 1 at Paynes Prairie Preserve SP 2 Dec (B. Roberts et al.); 1 at Gainesville 3 Dec (R. Roberson); 4 singles at Tallahassee: 1 male 19 Dec-EOS (G. Menk, F. Rutkovsky et al.) and 1 female at the same yard 28 Jan-EOS (F. Rutkovsky et al.), 1 female 23-26 Feb (J. Cavanagh), and 1 male 25 Feb (F. Dietrich); 1 adult male at Niceville (*Okaloosa*) 31 Dec (R. & T. Stiles); 1 male at Pensacola 18 Jan (P. Palmer); 1 female at Golden Gate Estates (*Collier*) 12-21 Feb (B. Womble, photos to FOC).
- WESTERN SPINDALIS: 1 black-backed male at Cape Florida SP 12 Dec and 9 & 14 Feb perhaps wintered (R. Diaz); 1 green-backed male at Evergreen Cemetery (*Broward*) 19 Jan-11 Feb (B. Roberts, J. Schwartz et al., photos to FOC).
- BACHMAN'S SPARROW: 1 near Brooker (*Bradford*) 15 Jan (D. Goodwin, E. Haney); 1 heard singing at Kissimmee Prairie Preserve SP 20 Feb (P. Miller), and 51 banded there during winter (M. Korosy).
- CHIPPING SPARROW: 50 near Brooker 15 Jan (D. Goodwin, E. Haney); 1 at Coastal Prairie Trail, Everglades NP (*Monroe*) 7 Feb (R. Diaz).
- CLAY-COLORED SPARROW: up to 4 (15 Dec) wintered at Lake Apopka NSRA (H. Roberson); 1 at the Sarasota celery fields 2 Jan-12 Feb (L. Atherton, J. Dubi); 1 at Frog Pond WMA 6 Jan (M. Berney et al.); 1 at Valrico 10 Jan-EOS (S. Backes, photo to FOC); up to 6 at Coastal Prairie Trail, Everglades NP 14 Jan-11 Feb (B. Roberts et al.); 1 at Cockroach Bay Preserve (*Hillsborough*) 4-7 Feb (T. Arcos).
- FIELD SPARROW: 4 in N *Madison* 4 Jan (R. Smith); 1 near Brooker 15 Jan (D. Goodwin, E. Haney); 10 at Lake Apopka NSRA 26 Jan (H. Roberson).
- VESPER SPARROW: 1 at Coastal Prairie Trail, Everglades NP 29 Dec (J. Boyd); 10 near Brooker 15 Jan (D. Goodwin, E. Haney).
- LARK SPARROW: 1 near Myakka State Forest (*Sarasota*) 15 Dec (J. Dubi); 1 at Bradenton 30 Dec-3 Jan (J. Dubi et al.); 1 at Lemon Bay Preserve (*Sarasota*) 8-14 Jan (M. Dunsen); 1 at Lake Jackson 28 Jan (G. Menk, J. Cavanagh); 1 at Cockroach Bay Preserve 4-7 Feb (T. Arcos).
- SAVANNAH SPARROW: 8 near Brooker 15 Jan (D. Goodwin, E. Haney).
- HENSLOW'S SPARROW: 1 at Disney conservation land (*Orange*) 15 Nov-13 Dec (C. Newton); 2 at Lake Jessup Conservation Area 5 Dec-20 Feb (R. Halpin et al.); 1 at Brooker Creek Preserve (*Pinellas*) 17 Dec (A. & R. Smith); 1 E of Brooksville 19 Dec (M. Gardler); 1 at Withlacoochee River Park 30 Dec (B. Ahern et al.); 1 at Colt Creek SP

- 28 Feb (C. Geanangel); 33 banded during the season at Kissimmee Prairie Preserve SP (M. Korosy).
- LE CONTE'S SPARROW: up to 4 at Paynes Prairie Preserve SP 5 Dec-EOS (J. Hintermister et al.); up to 5 at Lake Jessup Conservation Area 5 Dec-20 Feb (K. Schmidt et al., photos to FOC); 1 at Lake Jackson 20 Dec-22 Jan (G. Menk, F. Davis); 1 at Little-Big Econ State Forest (*Seminole*) 31 Dec (L. Malo); up to 3 at Weekiwachee Preserve 4 Jan-20 Feb (D. Simpson et al.); 4 at Bald Point SP 15 Jan (J. Murphy); 1 at Alligator Point 15 Jan (J. Murphy); 1 at St. Marks NWR 15 Jan (A. Wraithmell); 1 at East Everglades (*Miami-Dade*) 15 Jan (L. Manfredi, photos to FOC).
- NELSON'S SHARP-TAILED SPARROW: 1 at Eco Pond 30 Dec-15 Jan (J. Boyd et al.); 5 at Ten Thousand Islands NWR 4 Jan (T. Doyle, C. Ewell); 14 at Shired Island, Lower Suwannee NWR (*Dixie*) 13 Jan (R. Smith, B. Ahern).
- SALTMARSH SHARP-TAILED SPARROW: 1 at Fort Island Beach 9 Dec (R. Smith, B. Ahern); 1 at Sandy Key, Everglades NP (*Monroe*) 13 Dec (B. Mulrooney).
- SEASIDE SPARROW: 9 heard singing at Werner-Boyce Salt Springs (*Pasco*) SP 21 Feb (K. Tracey).
- FOX SPARROW: singles at Tallahassee 3 Dec (R. Lengacher) and 10 Dec (D. & S. Jue); 2 at Tall Timbers Research Station (*Leon*) 12 Dec (A. Wraithmell); 1 in *Gadsden* 16 Dec (D. Simpson); 2 at Paynes Prairie Preserve SP to 19 Dec (R. Rowan, M. Manetz); 1 at San Felasco Hammock Preserve SP (*Alachua*) 18 Dec-11 Jan (R. Rowan et al.); 2 NW of Monticello (*Jefferson*) 5 Jan (R. Smith); 1 in W *Washington* 14 Jan (A. Bankert); 1 near Joe Budd WMA (*Gadsden*) 16 Jan (D. Simpson); 1 at Ponce de Leon Springs SP 26 Jan (B. Ahern); 1 in *Santa Rosa* 3 Feb (R. Smith).
- SONG SPARROW: 4 near Brooker 15 Jan (D. Goodwin, E. Haney); 1 at Tierra Verde 25 Feb (C. Gjervold).
- LINCOLN'S SPARROW: 1 at Paynes Prairie Preserve SP 11 Dec (C. Burney, J. DeLuca); 1 in S *Manatee* 16 Dec (C. Gjervold); 1 at Hague 29 Dec (M. Manetz); 1 at Bradenton 30 Dec (J. Dubi et al.); 1 at Frog Pond WMA 5 Jan (A. Bankert et al.); 1 at Gainesville 4 Feb (B. & J. Bolte); up to 2 wintered at Lake Apopka NSRA (H. Robinson).
- SWAMP SPARROW: 1 at Coastal Prairie Trail, Everglades NP 29 Dec-20 Jan (J. Boyd, B. Mulrooney); 8 near Brooker 15 Jan (D. Goodwin, E. Haney); 1 at Eco Pond 30 Jan (J. Boyd).
- WHITE-THROATED SPARROW: 1 at Boyd Hill Preserve 16 Dec (A. & R. Smith); 2 at Salt Springs SP 22 Dec (K. Tracey et al., photos to FOC); 1 at Clive Key, Everglades NP 8 Jan (B. Mulrooney); 2 at Fort De Soto Park 10-16 Jan (L. Atherton); 8 near Brooker 15 Jan (D. Goodwin, E. Haney); 1 at the Sarasota celery fields 31 Jan (K. Young); 1 at Brooker Creek Preserve 15 Jan (R. Smith, B. Ahern); 1 at Port Charlotte (*Charlotte*) 20 Jan (R. Smith, B. Ahern); 1 at Lake Region Village (*Polk*) 17 Feb (B. & L. Cooper); 6 at Lake Apopka NSRA 23 Feb (H. Robinson).
- WHITE-CROWNED SPARROW: 1 at Boyd Hill Preserve 16 Dec (A. & R. Smith); up to 4 (1 adult) at Coastal Prairie Trail, Everglades NP 14 Jan-11 Feb (B. Roberts et al.); 1 near Brooker 15 Jan (D. Goodwin, E. Haney); 1 at Holiday Recreation Center (*Pasco*) 7 Feb (K. Tracey).
- DARK-EYED JUNCO: 1 at Tallahassee 5 Dec (A. Wraithmell), and 4 others there 30 Dec (J. Cox, K. NeSmith); 1 in N *Baker* 15 Dec (B. Richter); 7 at Lafayette Park (*Leon*) 30 Dec (A. Wraithmell); 1 at Fort De Soto Park 1-5 Jan (A. Bankert, L. Atherton et al.); 2 in *Wakulla* 12 Jan (S. McCool); 20 at Florida Caverns SP 25 Jan (B. Ahern); 4 at Torreya SP 26 Jan (B. Ahern); 8 at Joe Budd WMA (*Gadsden*) 27 Jan (B. Ahern); 20 in *Santa Rosa* 3 Feb (H. Moore, B. Francisco); 13 in *Gadsden* 1 Feb (E. White); up to 12 at Ponce de Leon Springs SP (*Holmes*) 26 Jan-4 Feb (B. Ahern, R. Smith).
- ROSE-BREASTED GROSBEAK: 1 at Lake Apopka NSRA 16 Jan (H. Robinson, B. Anderson); 1 immature male at Tallahassee 21 Feb (C. Clarke).
- BLUE GROSBEAK: 1 near Balm-Boyette (*Hillsborough*) 17 Dec (B. Ahern); 1 in female plumage at Lake Apopka NSRA to 4 Feb (H. Robinson, photo to FOC by D. Goodwin, 22 Dec).

- INDIGO BUNTING: 1 at Gainesville 17 Dec (T. Webber); 1 at Alligator Point 23 Feb (E. Orf).
- PAINTED BUNTING: 5 in *Alachua* 2 Dec-EOS (B. Roberts et al.); 2 females at Cedar Key 2 Dec-EOS (D. Henderson); 3 at Bradenton 30 Dec-3 Jan (J. Dubi et al.); 1 at the Sarasota celery fields 14 Jan (J. Dubi); 1 male near Platt (*DeSoto*) 20 Jan (B. Ahern, R. Smith); 2 in *Hernando* 27 Jan-26 Feb (B. Cox, L. Vanderveen); up to 4 (31 Jan) wintered at Lake Apopka NSRA (H. Robinson); 7 (4 males, 3 females) wintered at Oakland Nature Preserve (T. Rodriguez).
- DICKCISSEL: 1 at the Sarasota celery fields 2 Dec-24 Jan (E. Miller, J. Carlock); 1 adult and 2 immatures at Coastal Prairie Trail, Everglades NP 14 Jan-11 Feb (B. Roberts et al.).
- *WESTERN MEADOWLARK: up to 2 heard singing at N *Escambia* catfish farms 19 Jan-21 Feb (B. & L. Duncan et al., photos by B. Wallace, accepted by FOSRC) furnished the first regional report since 1967.
- YELLOW-HEADED BLACKBIRD: 1 adult male at Lake Apopka NSRA 3-6 Dec (H. Robinson); 1 male at Hernando Beach 22-26 Dec (B. Ahern, B. Pranty et al.); 1 adult male at The Villages (*Lake*) 22 Feb (G. Babic).
- RUSTY BLACKBIRD: 60 at Crawfordville (*Wakulla*) 3 Dec (S. McCool); 10 at St. Marks NWR 9 Dec-16 Jan (A. Bankert, A. Wraithmell); 1 male heard singing at Sawgrass Lake Park, St. Petersburg 16 Dec (B. Ahern et al., B. Pranty photos to FOC); up to 27 at Paynes Prairie Preserve SP 17 Dec-EOS (C. Burney, R. Rowan et al.); up to 50 in N *Escambia* 19 Jan-16 Feb (B. & L. Duncan et al.); 100 in *Leon* 17-19 Feb (A. Wraithmell).
- BREWER'S BLACKBIRD: 3 at Fort Walton Beach STF 3 Jan (B. Duncan); up to 122 in a flock in N *Escambia* 19 Jan-16 Feb (B. & L. Duncan et al.).
- SHINY COWBIRD: 1 male at Holiday Recreation Center 16 Dec (K. Tracey).
- BRONZED COWBIRD: 2 at Riverview (*Hillsborough*) 17 Dec (D. Bowman et al.); 1 at Flamingo 30 Dec-13 Jan (J. Boyd); 2 at Naples 5 Jan (A. Murray).
- ORCHARD ORIOLE: 1 juvenile male at Flamingo 30 Dec (J. Boyd), and 1 female with Baltimore Orioles there 30 Dec-27 Jan (J. Boyd, B. Mulrooney); 1 at Gainesville 14 Feb (G. Kiltie).
- *BULLOCK'S ORIOLE: 1 female at Tallahassee 30 Dec-EOS (F. Rutkovsky, photo to FOC by D. Jue).
- BALTIMORE ORIOLE: 1 male at Lee (*Madison*) 4 Jan (R. Smith).
- PURPLE FINCH: 5 in *Leon* 12 Dec (A. Wraithmell); 7 at Lake Jackson 29 Jan (G. Menk); 1 at Gainesville 12 Feb-EOS (R. Robinson).
- HOUSE FINCH: singles at Lake Apopka NSRA 1 Dec & 4 Feb (H. Robinson); 8, including 2 singing males, at Brandon 26 Feb (R. Milburn); 3 near Fort Island Beach 9 Dec (B. Ahern, R. Smith); 1 female and 2 males at Jacksonville 15 Feb-EOS (J. Ross).
- *WHITE-WINGED CROSSBILL: 1 desiccated carcass of an immature male of the nominate subspecies found in the parking lot at Long Pine Key, Everglades NP 11 Jan (B. Rapoza et al., to Florida Museum of Natural History, University of Florida, # UF 45638) presumably was transported to the area on the grille of a vehicle from Canada or the extreme N U.S.!
- PINE SISKIN: 2 at Pensacola 3 Feb (R. Smith); 1 at Lake Apopka NSRA 11 Feb (H. Robinson).
- AMERICAN GOLDFINCH: up to 5 at Flamingo 30 Dec-20 Jan (J. Boyd, B. Mulrooney); 1 at Wakodahatchee Wetlands (*Palm Beach*) 12 Jan (B. Mulrooney); 1 at Royal Palm, Everglades NP 14 Jan (J. Boyd).
- BISHOP SPECIES: 1 in female plumage at Fort De Soto Park 8-21 Dec represented the fifth "female-plumaged" bishop found in the park in the past five years (L. Atherton, photos to FOC).

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Summer 2006 report not published previously: American Bittern: 1 at St. Vincent NWR (*Franklin*) 5 Jul (Thom Lewis).

Fall 2006 reports not published previously: Masked Booby: 1 at Eglin AFB (*Okealoosa*) 14 Nov (Joe Kern); Roseate Spoonbill: 1 at St. Vincent NWR (*Franklin*) 23 Aug (Thom Lewis); Sandhill Crane: 3 at Pace (*Santa Rosa*) 23 Nov (Anna Stalcup); Black Tern: 1000 at Flag Island (*Franklin*) 21 Aug (T. Lewis).

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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- (2) include the scientific name at the first mention of each species;
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- (4) include metric units for all measurements;
- (5) use the form "7 June 2003" for all dates;
- (6) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
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- (8) preferentially use active voice.

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 3

SEPTEMBER 2007

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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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The *Florida Field Naturalist* is published quarterly (February, May, September, and November) by the Florida Ornithological Society. It is printed by E.O. Painter Printing Co., P.O. Box 877, DeLeon Springs, FL 32130. The permanent address of the Florida Ornithological Society is Division of Birds, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at www.fosbirds.org

Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 4

NOVEMBER 2007

PAGES 105-138

Florida Field Naturalist 35(4):105-113, 2007.

SHOREBIRD OCCURRENCE AT THREE SITES IN FRANKLIN COUNTY, FLORIDA: 1994-2005

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Abstract.—Between March 1994 and February 2005, I surveyed shorebirds at Bald Point, Carrabelle Beach, and Yent Bayou in Franklin County of the Florida panhandle. A total of 96,259 individuals of 23 shorebird species were counted, with Dunlins (*Calidris alpina*) accounting for 28% of the individuals, followed by Sanderlings (*C. alba*) at 17%. Each site had a distinct seasonal pattern, with Carrabelle Beach and Yent Bayou being most heavily used in winter, Bald Point most used in spring, and all sites used least in summer.

Florida is home to 22 wintering shorebird species (Sprandel et al. 2000) and seven breeding species (FWC 2003). Although migrant shorebirds use coastal Florida in both spring and fall, periods of occurrence and abundance are not well documented. Following a statewide winter shorebird survey in 1993 (Sprandel et al. 1997), I continued surveying three Franklin county sites on the Gulf Coast, to look at seasonal occurrence and abundance.

STUDY SITES AND METHODS

Study sites.—Three sites in Franklin County were surveyed for shorebirds: Bald Point (29°56.8'N, 84°20.5'W), Carrabelle Beach (29°50.0'N, 84°40.5'W), and Yent Bayou (29°47.4'N, 84°45.5'W), (Fig. 1). All sites were tidal with mixed sand and mud flats, and had an incoming stream nearby. At all sites shorebird usage was concentrated in a ~200-m stretch of beach. Bald Point had a prominent mollusk reef at low- to medium tide and Carrabelle Beach had exposed mollusk reefs at very low tide. Bald Point was a county park at the start of the survey, but in 1996 it passed into private ownership. It was purchased by the state with the Conservation and Recreation Land funds in 2001

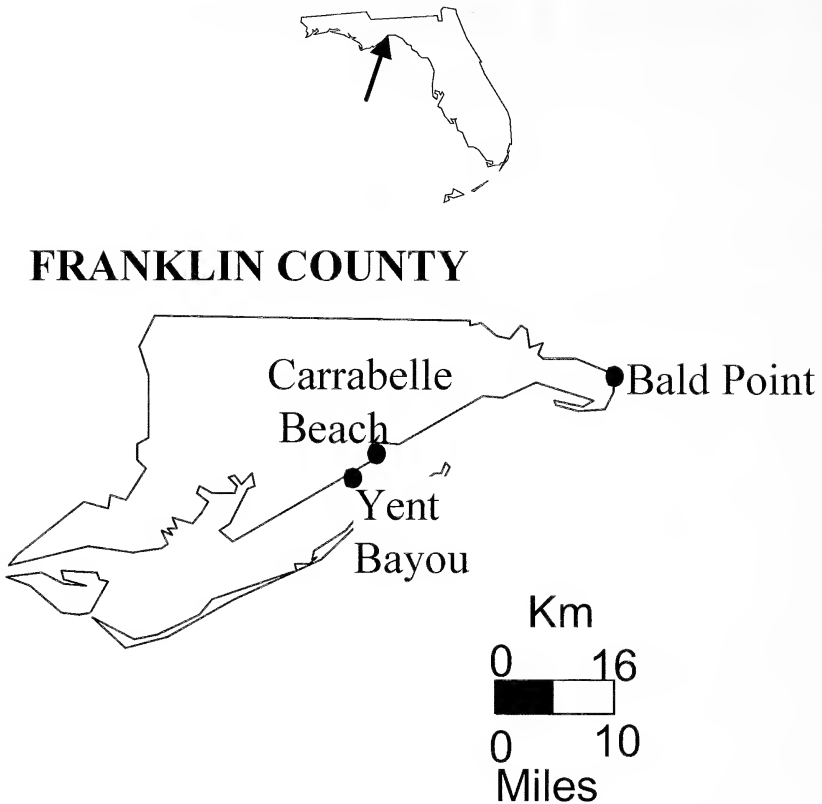


Figure 1. Shorebird survey sites in Franklin County, Florida, 1994-2005.

and became Bald Point State Park. Carrabelle Beach is a county park. Yent Bayou is private property, and in 1997 houses began to be developed in the area.

Count methods.—I visited all sites every 3 weeks from 2 March 1994 through 28 February 2005. Visits occurred during daylight hours and lasted ≥ 30 min even if few birds were present. Generally, all three sites were visited on the same day. The count included any arriving birds and continued until numbers stabilized. Based on analysis of counts from Sprandel et al. (1997), visits were conducted when highest shorebird usage occurred: Carrabelle Beach and Yent Bayou at low tide and Bald Point between low and high tide. I identified birds to species and counted individuals (See Table 1 for English and scientific names). Western Sandpiper and Semipalmated Sandpiper were grouped together (Veit and Jonsson 1984) and all dowitchers were counted as dowitcher spp.

I plotted total shorebird occurrence by month, and summarized species occurrences by site and season (winter: December-February, spring: March-May, summer: June-August, and fall: September-November).

RESULTS

A total of 96,259 individuals of 23 different shorebird species were counted in 674 visits to the 3 shorebird sites. An average of 37 min was

Table 1. Average number of shorebirds, standard deviation, and number of visits by month at Bald Point, Carrabelle Beach, and Yent Bayou, Franklin County, Florida from 1994-2005.

| Month/Site | Bald Point | Carrabelle Beach | Yent Bayou |
|------------|----------------|------------------|----------------|
| January | 94 ± 64 (23) | 267 ± 97 (23) | 176 ± 59 (23) |
| February | 111 ± 81 (14) | 282 ± 102 (15) | 188 ± 68 (15) |
| March | 134 ± 107 (23) | 262 ± 114 (24) | 246 ± 91 (23) |
| April | 267 ± 215 (17) | 234 ± 228 (17) | 264 ± 152 (17) |
| May | 127 ± 101 (21) | 142 ± 99 (21) | 161 ± 149 (20) |
| June | 37 ± 32 (17) | 30 ± 26 (14) | 17 ± 19 (14) |
| July | 30 ± 13 (21) | 72 ± 42 (20) | 35 ± 31 (21) |
| August | 35 ± 23 (15) | 97 ± 46 (15) | 80 ± 36 (14) |
| September | 44 ± 25 (21) | 120 ± 47 (20) | 114 ± 48 (20) |
| October | 56 ± 36 (24) | 156 ± 85 (19) | 157 ± 59 (19) |
| November | 85 ± 67 (20) | 200 ± 89 (20) | 266 ± 59 (20) |
| December | 73 ± 45 (16) | 310 ± 150 (14) | 177 ± 93 (14) |

spent on each visit to a site, with a maximum of 142 min. All sites were least used in summer (Fig. 2), with Bald Point and Carrabelle Beach averaging 30 shorebirds in June and Yent Bayou only 17 (Table 1). Bald Point was most heavily used in spring migration, with an average of 267 shorebirds in April. Carrabelle Beach and Yent Bayou were most heavily used in winter, with Carrabelle averaging 310 in December, and Yent Bayou 266 in November.

Overall, Dunlins were the most common shorebird, accounting for 28% of the individuals, followed by Sanderlings (17%), Willets (14%), dowitcher spp. and Red Knots at 9%. Maximum counts for each species varied greatly from average seasonal counts at each site (Table 2). Dunlins had the highest average count for all sites during winter and were the most common species in spring at Carrabelle Beach and Yent Bayou. At Bald Point in spring, Sanderlings were most common. In summer, Willets were the most common species at all sites, probably reflecting the local breeding in nearby marshes (FWC 2003). During fall, Sanderlings were the most common species at Bald Point and Yent Bayou, whereas at Carrabelle Beach, the Red Knot was the most common species.

I saw Ospreys (*Pandion haliaetus*) on 116 visits but never observed them disturbing shorebirds. Other raptors were seen on 94 visits (14% of visits) and often caused either departure or flushing of shorebirds. Bald Eagles (*Haliaeetus leucocephalus*) were seen on 70 visits, but disturbed only those shorebirds directly below them. Peregrine Falcons (*Falco peregrinus*) or Merlins (*F. columbarius*) were seen on 16 visits, and flushed most of the shorebirds present. Bald Point in fall had the most raptors, and is a known raptor migration area (FWC, unpublished data).

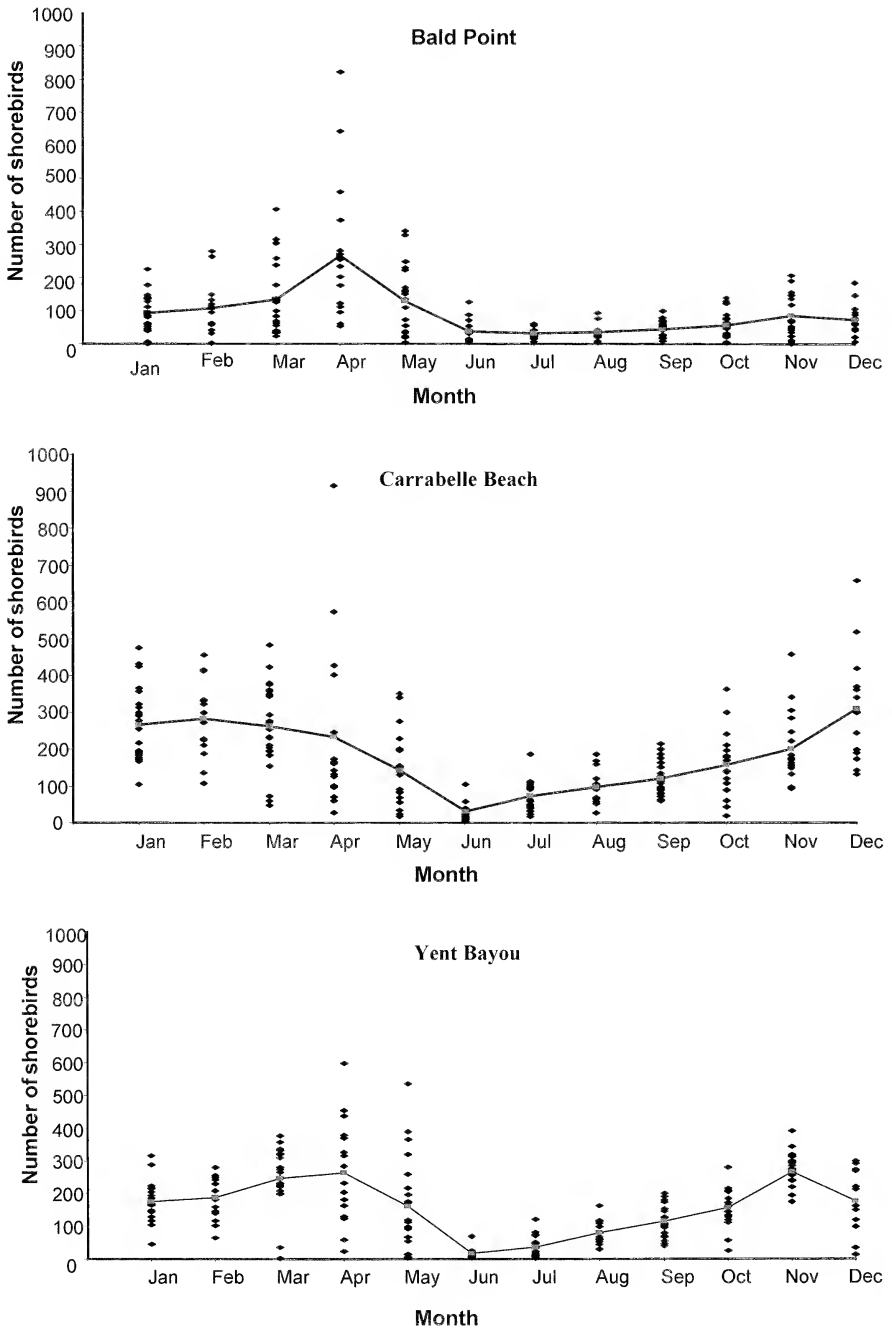


Figure 2. Number of shorebirds counted and 11-year mean by month at Bald Point, Carrabelle Beach, and Yent Bayou in Franklin County, Florida from 1994-2005.

Table 2. Highest and average seasonal shorebird counts at Bald Point, Carrabelle Beach, and Yent Bayou, Franklin County, Florida from 1994-2005. “—” indicates that the species was not seen in that season. Winter is December-February; Spring, March-May; Summer, June-August; and Fall, September-November.

| Species | Site | High count | Date | Winter | Spring | Summer | Fall |
|--|------------------|------------|-------------------------|--------|--------|--------|------|
| <i>Black-bellied Plover Pluvialis squatarola</i> | | | | | | | |
| | Bald Point | 20 | 2/18/1996 ^a | 4.4 | 4.8 | 1.7 | 4.4 |
| | Carrabelle Beach | 14 | 1/22/2000 | 4.7 | 4.1 | 2.0 | 3.7 |
| | Yent Bayou | 12 | 1/21/2001 | 4.6 | 4.1 | 2.0 | 4.6 |
| <i>Snowy Plover Charadrius alexandrinus</i> | | | | | | | |
| | Bald Point | 2 | 12/6/2003 | 0.0 | — | — | 0.0 |
| | Carrabelle Beach | 7 | 11/6/1994 | 0.6 | 0.1 | 0.1 | 0.5 |
| | Yent Bayou | 24 | 1/25/2003 | 7.4 | 0.8 | — | 2.7 |
| <i>Wilson's Plover Charadrius wilsonia</i> | | | | | | | |
| | Bald Point | 2 | 7/26/1997 | 0.0 | — | 0.1 | — |
| | Carrabelle Beach | 4 | 6/21/2003 | 0.0 | 0.3 | 0.5 | 0.0 |
| | Yent Bayou | 1 | 8/18/2001 | — | — | 0.0 | — |
| <i>Semipalmated Plover Charadrius semipalmatus</i> | | | | | | | |
| | Bald Point | 29 | 1/22/2000 ^b | 3.1 | 2.3 | 1.3 | 4.8 |
| | Carrabelle Beach | 33 | 3/5/2000 | 3.5 | 3.8 | 1.8 | 3.7 |
| | Yent Bayou | 34 | 11/27/1998 | 9.5 | 7.6 | 2.8 | 10.8 |
| <i>Piping Plover Charadrius melodus</i> | | | | | | | |
| | Bald Point | 5 | 12/12/2004 ^c | 0.6 | 0.0 | 0.1 | 0.2 |
| | Carrabelle Beach | 4 | 11/6/1994 ^c | 0.6 | 0.2 | 0.0 | 0.5 |
| | Yent Bayou | 14 | 1/11/1997 | 3.9 | 1.3 | — | 2.1 |
| <i>Killdeer Charadrius vociferous</i> | | | | | | | |
| | Bald Point | 12 | 11/27/1999 | 0.9 | 0.0 | — | 0.3 |
| | Carrabelle Beach | 114 | 12/10/1995 | 2.8 | 0.0 | — | 0.4 |
| | Yent Bayou | 25 | 12/10/1995 | 1.8 | 0.0 | — | 0.4 |
| <i>American Oystercatcher Haematopus palliatus</i> | | | | | | | |
| | Bald Point | 28 | 12/18/1999 | 2.3 | 3.2 | 5.7 | 1.0 |
| | Carrabelle Beach | 13 | 7/13/1994 ^d | 2.5 | 1.8 | 2.8 | 2.4 |
| | Yent Bayou | 1 | 7/18/1998 ^e | 0.0 | — | 0.0 | — |
| <i>Black-necked Stilt Himantopus mexicanus</i> | | | | | | | |
| | Yent Bayou | 1 | 5/21/1994 | — | 0.0 | — | — |
| <i>American Avocet Recurvirostra americana</i> | | | | | | | |
| | Bald Point | 6 | 5/3/1996 | — | 0.2 | — | — |
| | Carrabelle Beach | 2 | 12/9/2001 | 0.1 | — | — | — |
| | Yent Bayou | 1 | 11/24/2001 | — | — | — | 0.0 |
| <i>Greater Yellowlegs Tringa melanoleuca</i> | | | | | | | |
| | Bald Point | 4 | 3/29/1997 | 0.1 | 0.1 | — | 0.0 |

^a20 also 3/29/2003.

^b29 also 10/14/2000.

^cThis number was also observed on other dates.

^d13 also 10/4/2003.

^e14 also 1/29/2000.

Table 2. (Continued) Highest and average seasonal shorebird counts at Bald Point, Carrabelle Beach, and Yent Bayou, Franklin County, Florida from 1994-2005. “—” indicates that the species was not seen in that season. Winter is December-February; Spring, March-May; Summer, June-August; and Fall, September-November.

| Species | Site | High count | Date | Winter | Spring | Summer | Fall |
|---|------------------|------------|-------------------------|--------|--------|--------|------|
| | Carrabelle Beach | 24 | 11/24/2002 | 2.8 | 1.4 | 0.1 | 1.3 |
| | Yent Bayou | 4 | 2/28/1998 ^c | 0.8 | 0.2 | 0.1 | 0.6 |
| Lesser Yellowlegs <i>Tringa flavipes</i> | | | | | | | |
| | Bald Point | 1 | 12/11/1994 ^c | 0.1 | — | — | 0.0 |
| | Carrabelle Beach | 63 | 2/19/2000 | 8.1 | 1.4 | 0.1 | 0.6 |
| | Yent Bayou | 3 | 11/27/1999 ^c | 0.2 | 0.1 | 0.1 | 0.3 |
| Solitary Sandpiper <i>Tringa solitaria</i> | | | | | | | |
| | Bald Point | 1 | 5/1/2004 | — | 0.0 | — | — |
| | Carrabelle Beach | 10 | 8/3/1996 | — | — | 0.2 | 0.0 |
| | Yent Bayou | 2 | 8/11/2003 | — | — | 0.1 | 0.1 |
| Willet <i>Tringa semipalmata</i> | | | | | | | |
| | Bald Point | 112 | 4/19/2003 | 6.4 | 16.8 | 8.8 | 8.8 |
| | Carrabelle Beach | 231 | 3/5/1994 | 40.0 | 25.4 | 19.3 | 39.8 |
| | Yent Bayou | 86 | 4/22/1995 | 10.7 | 13.4 | 18.2 | 29.3 |
| Spotted Sandpiper <i>Actitis macularius</i> | | | | | | | |
| | Bald Point | 1 | 8/13/1994 ^c | — | — | 0.1 | — |
| | Carrabelle Beach | 2 | 7/30/1994 ^c | — | 0.0 | 0.1 | — |
| | Yent Bayou | 2 | 8/27/1994 | — | 0.0 | 0.1 | — |
| Whimbrel <i>Numenius phaeopus</i> | | | | | | | |
| | Carrabelle Beach | 1 | 8/17/1996 | — | — | 0.0 | — |
| Marbled Godwit <i>Limosa fedoa</i> | | | | | | | |
| | Bald Point | 6 | 3/20/1999 | 0.0 | 0.4 | 0.3 | 0.0 |
| | Carrabelle Beach | 50 | 3/5/2000 | 10.1 | 5.3 | 5.1 | 4.0 |
| | Yent Bayou | 5 | 8/31/2003 | 0.1 | 0.1 | 0.2 | 0.2 |
| Ruddy Turnstone <i>Arenaria interpres</i> | | | | | | | |
| | Bald Point | 110 | 5/12/2002 | 7.3 | 16.4 | 4.2 | 4.3 |
| | Carrabelle Beach | 14 | 10/15/1995 ^c | 1.8 | 1.4 | 1.0 | 1.0 |
| | Yent Bayou | 20 | 4/2/1994 | 1.8 | 2.1 | 0.5 | 1.6 |
| Red knot <i>Calidris canutus</i> | | | | | | | |
| | Bald Point | 210 | 4/3/1999 | 0.2 | 9.8 | 4.0 | 0.3 |
| | Carrabelle Beach | 239 | 4/20/1997 | 22.0 | 29.2 | 8.1 | 21.8 |
| | Yent Bayou | 167 | 4/20/1997 | 19.0 | 22.4 | 0.2 | 8.7 |
| Sanderling <i>Calidris alba</i> | | | | | | | |
| | Bald Point | 372 | 4/19/2003 | 14.8 | 46.2 | 2.9 | 17.0 |
| | Carrabelle Beach | 106 | 12/6/2003 | 23.8 | 22.4 | 8.2 | 20.4 |
| | Yent Bayou | 179 | 3/10/1996 | 33.2 | 24.3 | 6.9 | 60.2 |

^a20 also 3/29/2003.

^b29 also 10/14/200.

^cThis number was also observed on other dates.

^d13 also 10/4/2003.

^e14 also 1/29/2000.

Table 2. (Continued) Highest and average seasonal shorebird counts at Bald Point, Carrabelle Beach, and Yent Bayou, Franklin County, Florida from 1994-2005. “—” indicates that the species was not seen in that season. Winter is December-February; Spring, March-May; Summer, June-August; and Fall, September-November.

| Species | Site | High count | Date | Winter | Spring | Summer | Fall |
|--|------------------|------------|-----------|--------|--------|--------|------|
| Western Sandpiper <i>Calidris mauri</i> ; | | | | | | | |
| Semipalmated Sandpiper <i>Calidris pusilla</i> | | | | | | | |
| | Bald Point | 20 | 5/13/1995 | 0.4 | 2.3 | 0.4 | 0.4 |
| | Carrabelle Beach | 17 | 5/10/1997 | 1.4 | 2.3 | 1.0 | 0.9 |
| | Yent Bayou | 12 | 5/10/1997 | 0.6 | 1.5 | 0.6 | 1.1 |
| Least Sandpiper <i>Calidris minutilla</i> | | | | | | | |
| | Bald Point | 12 | 5/6/2000 | 0.3 | 0.6 | 0.1 | 0.4 |
| | Carrabelle Beach | 70 | 5/7/1994 | 0.5 | 1.9 | 0.2 | 0.2 |
| | Yent Bayou | 10 | 5/7/1994 | 0.2 | 0.3 | 0.2 | 0.1 |
| Dunlin <i>Calidris alpina</i> | | | | | | | |
| | Bald Point | 182 | 2/28/2003 | 43.6 | 29.5 | 0.1 | 14.8 |
| | Carrabelle Beach | 287 | 12/6/2003 | 91.0 | 59.7 | 0.2 | 20.7 |
| | Yent Bayou | 244 | 1/25/2004 | 80.3 | 92.5 | 0.3 | 42.5 |
| Short-billed Dowitcher <i>Limnodromus griseus</i> ; | | | | | | | |
| Long-billed Dowitcher <i>Limnodromus scolopaceus</i> | | | | | | | |
| | Bald Point | 86 | 4/20/1997 | 0.0 | 16.2 | 1.5 | 0.2 |
| | Carrabelle Beach | 331 | 4/20/1997 | 17.0 | 37.6 | 14.9 | 17.0 |
| | Yent Bayou | 156 | 5/3/1996 | 0.7 | 26.1 | 6.7 | 8.5 |

^a20 also 3/29/2003.

^b29 also 10/14/200.

^cThis number was also observed on other dates.

^d13 also 10/4/2003.

^e14 also 1/29/2000.

I observed four banded birds. Three Piping Plovers banded in Saskatchewan in 2002 or 2003 were observed: at Carrabelle Beach on 25 January 2003, on 4 October 2003 at Carrabelle Beach and at Bald Point on 6 November 2003. On 16 November 2003 at Yent Bayou a Red Knot banded as a juvenile on 11 September 2001 at the mouth of the Altamaha River in Georgia was observed, and may reflect part of a Florida wintering population (Harrington et al. 1988).

DISCUSSION

Although the sites were surveyed by the same observer under similar tidal conditions within each season, counts for a species at the same site within a season varied greatly, and the average coefficient of variation (Snedecor and Cochran 1967) was 57% of the mean count. This high variability means that it would be difficult to detect multi-year population

trends (Cobb et al. 1996). The sites may not be strictly independent, and Gabbard et al. (2001) documented movements of 17 km of Willets in Franklin County, large enough to allow some movement between these sites.

Yent Bayou was a site important to the listed Piping Plover and Snowy Plover (FWC 2006) in both fall and winter, a reflection of the importance of the Gulf Coast to these wintering plovers (Sprandel et al. 2000). Piping Plovers seen in June or July could be north- or south-bound migrants (Haig 1992). American Oystercatchers use of Bald Point in summer probably reflects the availability of mollusk reefs to oystercatchers breeding in the area (FWC, unpublished data). For other species, non-breeding birds observed in the summer may be non-migratory, non-breeding juveniles. The high usage of Bald Point in spring by Sanderlings and Ruddy Turnstones, seemed dependent upon plentiful horseshoe crab (*Limulus polyphemus*) eggs that were observed on 20 spring visits (see also Rudloe 1980).

Few year-round studies have looked at shorebird usage at sites in Florida (the first being Longstreet 1934). Stolen (1999) surveyed a broad stretch of Atlantic beach and found the most common species to be the Sanderling (79%), followed by the Ruddy Turnstone; few Dunlins were observed. The lack of Dunlins on the Atlantic beach may reflect the species' preference for mud flats; there is high usage of Dunlins at nearby Merritt Island impoundments (Sprandel et al. 1997). Stolen (1999) reported highest shorebird usage in fall, a sharp contrast to my study in which there was a more prominent spring peak. For Sanderlings, my study showed both a peak in spring and fall, whereas Stolen (1999), had a more prominent peak in fall. This difference may reflect a different migration pattern between the Gulf and Atlantic Coast (Myers et al. 1990). Analysis of International Shorebird Survey data (Howe et al. 1989, Harrington 1999) provides a source for some regional comparison of timing of peak abundance. For the southeast shorebird region, for "oceanfront" and for "mud-marine" sites they report a peak in mid-March and decline in the summer as I found, but do not show wintering numbers.

Knowledge and conservation of migratory shorebirds is a high priority in Florida (Millsap et al. 1990) but we are a long way from the goal of statistically monitoring populations (Brown et al. 2001). With the lack of comprehensive studies of shorebird migration in Florida and the potential importance of Florida sites to transient shorebirds (Myers 1983), I recommend that others publish results of year-round studies (e.g., Below 1983) and contribute data to the International Shorebird Survey (Howe et al. 1989).

ACKNOWLEDGMENTS

Dr. Wendy Brill assisted on some surveys and provided logistic support. Dr. Jeff Gore reviewed early drafts of this manuscript.

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FIRST RECORD OF THE GREATER FLAMINGO FOR NORTHEASTERN FLORIDA

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The status of the Greater Flamingo (*Phoenicopterus ruber*) in Florida has changed considerably over the past 100+ years. As recently as 1902, it was a regular and at times abundant non-breeding resident of the southern Gulf coast and Florida Bay, presumably from the colony at Andros Island, Bahamas (Howell 1932, Stevenson and Anderson 1994). But the Andros colony disappeared by 1904 as result of human disturbance, leaving Great Inagua Island and nearby keys as the sole source of breeding flamingos in the Bahamas (McNair and Gore 1998, Raffaele et al. 1998, Hallett 2006). With the loss of the Andros colony, the frequency of flamingo occurrence in Florida declined to almost zero. During the 1930s, a flock of captive Greater Flamingos was established at Hialeah Racetrack, Miami-Dade County. By the 1950s, small numbers of Greater Flamingos could be found virtually year-round in the vicinity of Snake Bight, Everglades National Park, Monroe County (Stevenson and Anderson 1994). The provenance of the Snake Bight flock, as well as flamingos observed periodically elsewhere in Florida, was for years considered conjectural. Stevenson and Anderson (1994: 92) summed up the situation by stating that, "Probably the great majority are escapes, but occasional emigrants from the Bahamas or Cuba would not be surprising." Hialeah Racetrack closed in 2001 but its flock of as many as 440 flamingos (L. Manfredi, pers. comm.) remains, and juveniles that are produced are neither pinioned nor color-banded (B. Showler in litt.).

The provenance of at least one Greater Flamingo in Florida was proven when an individual color-banded as a nestling at Ría Lagartos Biosphere Reserve, Yucatán Peninsula, Mexico in 2000 was photographed at Snake Bight on 24 October 2002 (Pranty 2003). McNair and Gore (1998:43) suggested that tropical storms that passed over Cuba or the Yucatán Peninsula prior to making landfall along the northern Gulf of Mexico were "almost certainly" responsible for four of the eight reports of flamingos (three of these certain Greater Flamingos) from along the Florida Panhandle coast. The Panhandle reports occurred during two periods: early June-early July and late September-late October, which fall within the 1 June-1 December hurricane season. Here,

we report on a presumed vagrant Greater Flamingo that was observed at Matanzas Inlet, St. Johns County, Florida during September 2004, in the midst of an active hurricane season.

OBSERVATIONS

On 18 September 2004, Stephen and Alicia Steinmetz (pers. comm.) observed a juvenile flamingo at the southeastern side of Matanzas Inlet. GDB photographed the bird on 21 September (Fig. 1), and it was seen last on 23 September, when BP and James Tucker videotaped it (Pranty 2005). On the basis of its large size, pale pinkish-gray body with dusky head and upper neck, dull bluish-gray lores, black-tipped bill, black primaries and secondaries, pale wing coverts with bold black streaking, long tarsi, and dull pink legs and feet (Fig. 1), the Matanzas Inlet flamingo is clearly a hatch-year Greater Flamingo. It often roosted with a large flock of larids along the beach, and occasionally flew short distances (<150 m) in response to disturbance by the few beach-goers present. The flamingo was not banded and showed no damage to, or active molt of, its flight feathers.

DISCUSSION

According to the International Species Inventory System website (ISIS 2004), there were at least 447 Greater Flamingos (comprising both Old World and New World subspecies) in captivity at 11 animal exhibits in Florida during the latter half of 2004 (this figure excludes the flamingos at the former Hialeah Racetrack). We contacted the curators of the three exhibits closest to Matanzas Inlet—Marineland, the Jacksonville Zoological Gardens, and the Brevard Zoo—and were informed that none of their flamingos were missing. These curators also confirmed that all captive flamingos should be pinioned and color-banded (A. Rost in litt., M. Smurl in litt.).

The 2004 Atlantic Basin hurricane season was an active one, with 15 tropical storms and nine hurricanes, including six major hurricanes. The 2004 season was one of the costliest on record, with the storms causing a total of \$42 billion in the United States alone (NCDC 2004). Three hurricanes and one tropical storm during 2004 struck Florida prior to 18 September, and any of these could have transported the Greater Flamingo to Matanzas Inlet. The history of each of these storms is briefly summarized below.

Tropical Storm *Bonnie* formed north of the Yucatán Peninsula on 9 August and struck Florida's Panhandle coast on 12 August with maximum sustained winds of 43 knots. Hurricane *Charley* began as a tropical depression off Trinidad and Tobago on 9 August. It slammed into Fort Myers as a Category 4 hurricane on 13 August and exited the state near



Figure 1. Juvenile Greater Flamingo at Matanzas Inlet, St. Johns County, Florida 21 September 2004. Because this flamingo was unbanded and lacked damage to its flight feathers, we suggest that it was a natural vagrant, probably from Cuba, that was brought to the area by one of the hurricanes that struck Florida during August or September 2004. However, we cannot rule out the possibility that this flamingo came from the flock resident at the former Hialeah Racetrack in Miami-Dade County, 450 km distant. Photograph by Gian Basili.

Daytona Beach later the same day, after causing more than \$10 billion in damages. Hurricane *Frances* developed as a tropical depression in the eastern Atlantic on 24 August and struck the Bahamas as a Category 4 hurricane on 2-3 September. Hurricane *Frances* then struck Florida as a Category 2 storm in the vicinity of Port St. Lucie on 5 September, headed

northwest across the peninsula, and exited the state around Tampa. *Frances* reentered Florida as a tropical storm at St. Marks on 6 September. Hurricane *Ivan* formed in the eastern Atlantic on 2 September and entered the Caribbean Sea as a Category 4 hurricane on 7 September. *Ivan* made landfall just west of Florida at Gulf Shores, Alabama as a Category 3 hurricane on 16 September (NCDC 2004).

Although flamingos are widely kept in captivity, McNair and Gore (1998) believed that at least some of the Greater Flamingo records from the Florida Panhandle coast represented natural vagrants from the colony at Ría Lagartos, Mexico, about 1000 km to the south or south-southwest. They considered as a natural vagrant to Florida any Greater Flamingo found within 500 km of the track of a tropical storm, and within 20 days of the storm's landfall (McNair and Gore 1998). The Greater Flamingo photographed at Matanzas Inlet in mid-September 2004 meets these distance and temporal criteria for Hurricane *Frances*, and the distance criterion for Hurricane *Charley*, and would be considered by McNair and Gore (1998) to be a storm-driven vagrant.

We had presumed that the Matanzas Inlet flamingo was likely a vagrant from the colony at Great Inagua Island, Bahamas. However, we learned that the colony at Great Inagua did not reproduce during 2001-2005 because of low water levels (T. White in litt.). If the Matanzas Inlet Greater Flamingo was a natural vagrant, then it must have originated from the colonies in northern Cuba, which were also affected by Hurricane *Frances*, although not as severely as were the Bahamas (NCDC 2004). In addition to the timing of the flamingo's appearance in the midst of a very active tropical storm season, we considered the flamingo's age, its lack of color bands, its undamaged flight feathers, and the fact that the three facilities with captive flamingos closest to Matanzas Inlet had not lost any of their birds. It may be relevant to note that two Greater Flamingos were found at Boca Chica Key, Monroe County on 1 October 2004 (Pranty 2005), two weeks after the appearance of the Matanzas Inlet flamingo; these too may have been storm-driven vagrants.

We still think it likely that the Matanzas Inlet Greater Flamingo was a natural vagrant, but we cannot rule out the possibility that the flamingo could have been a storm-displaced individual from the flock at the former Hialeah Racetrack, about 300 km closer to Matanzas Inlet than the northern coast of Cuba. Little is known about the movements of flamingos from the Hialeah flock, but the several flamingo sightings each year in Miami-Dade County (e.g., the Miami Bird Board web site; see Literature Cited) suggest that at least some of these birds move around periodically—at least for relatively short (30-40 km) distances. Indeed, the presence of this breeding flock creates the possibility that Hialeah Racetrack may be the source of any flamingo observed in Florida, whether or not its timing is related to storm activity.

Regardless of its provenance, the Matanzas Inlet flamingo represents the first verifiable record of a Greater Flamingo from the northern Atlantic coast of Florida. The only previous report from the region was one flamingo at Mayport, Jacksonville, Duval County during 23 May-22 June 1964 (Cunningham 1964, Stevenson and Anderson 1994). McNair and Gore (1998) point out that vagrant flamingos are much more likely to appear along the Gulf of Mexico rather than along the Atlantic coast, due to the tracks of most tropical storms. Since the 1930s, only seven tropical storms that struck the Atlantic coast of the southern United States passed near or over Great Inagua Island, whereas at least 35 storms that struck the United States passed near or over the Yucatan Peninsula (McNair and Gore 1998).

ACKNOWLEDGMENTS

We thank Stephen and Alicia Steinmetz for alerting us to the Matanzas Inlet flamingo, and Michelle Smurl and Alan Rost for providing information on the flamingos under their care at the Brevard Zoo and Jacksonville Zoological Gardens, respectively. Larry Manfredi and Bob Showler provided information about the flamingos at the former Hialeah Racetrack, Tony White alerted us to the status of the Great Inagua Island flamingo colony during 2004, and Bruce Anderson, Chris Borg, and Brennan Mulrooney provided other assistance. Andrew Kratter improved a draft of this paper.

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FIRST RECORD OF THE WHITE WAGTAIL IN FLORIDA

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At 1400 hours DST on 18 March 2007, three birders from St. Louis discovered and photographed a White Wagtail (*Motacilla alba*; Figs. 1, 2) at Moon Lake Park, western Pasco County, Florida (28E 17°15.8 N, 82E 36°27.4 W). The bird flew into the park and was observed for 20 minutes before the birders left to contact others. When they and others returned within the hour, the wagtail was gone and it did not reappear. The bird was relocated at 1210 on 19 March and remained until 1325, when it again departed. The wagtail was next (and last) observed from 0930-1000 on 22 March. It was not seen despite all-day searches during 20 and 24-26 March, and less-intensive searches during 21 and 23 March. The next four paragraphs are based on 30 minutes of observation by BP on 19 March, supplemented by observations and photographs of others.

OBSERVATIONS

The White Wagtail frequented the 80-m “artificial” (i.e., trucked-in) sand beach at Moon Lake Park, a 2.7-ha recreational park east of Port Richey. The remainder of the park, which was not seen to be used by the wagtail, was composed of a playground, several shelters and small buildings, a boat ramp, a paved parking area, and mowed grassy areas with dozens of 12-15-m tall cypresses (*Taxodium* spp.). The wagtail foraged actively along the beach, walking or running back and forth and often changing course as it pursued prey. It captured several large dragonflies, a fly, and numerous unidentified prey. The foraging maneuvers used included running down or picking up prey from the surface of the sand, plucking dragonflies out of the air as they flew past, and upward sallies to capture other aerial prey. Prey, including the wings of the dragonflies, was swallowed whole. The wagtail bobbed its entire hind end frequently, in the manner of a waterthrush (*Seiurus* spp.), and, when walking, also bobbed its head back and forth.

The wagtail appeared to ignore the birders, sun-bathers, and others present on or near the beach, and occasionally approached observers to within 6-7 m. It often uttered a two-note call, accented on the second syllable, that was reminiscent of an American Pipit (*Anthus rubescens*). Other behaviors observed included preening, scratching its



Figures 1 and 2. White Wagtail, *Motacilla alba*, at Moon Lake Park, Pasco County, Florida, 18-22 March 2007. The wagtail is a male, mostly in first-alternate plumage. It belongs to the western form of the subspecies *M. a. alba*, which breeds in southern Greenland, Iceland, and across continental Europe, and winters from continental Europe to northern Africa. Note that the outermost tertial (T1) is missing from each wing, exposing the worn retained juvenal primaries. This individual furnished the first report and record of any wagtail for Florida, and marked the 500th bird species verifiably recorded in the state. Its presence 12 km inland from the Gulf of Mexico during its northbound migration is difficult to explain. Photographs by David Faintich, 18 March 2007.

head, resting, defecating, and frequently scanning the sky, presumably for aerial predators. The wagtail sought the shade created by a sign on the beach; afternoon temperatures during 19 March were in the high 70's F with little cloud cover. After foraging actively for 85 minutes on 19 March, the wagtail flew up and over the cypresses toward the north-northeast. It clearly foraged and roosted elsewhere, but birders did not locate these sites.

While under observation, the wagtail did not interact with any other birds at Moon Lake Park; the only other species seen on the beach were several medium-sized wading birds, one Killdeer (*Charadrius vociferus*), three American Crows (*Corvus brachyrhynchos*), and one Eastern Bluebird (*Sialia sialis*). Three raptors that prey on landbirds were observed over the park during times when the wagtail was absent: one Sharp-shinned Hawk (*Accipiter striatus*), one Cooper's Hawk (*A. cooperii*), and one Short-tailed Hawk (*Buteo brachyurus*).

Description—The White Wagtail was a slim terrestrial landbird with a long, slender tail (perhaps 40% of its body length) and pied plumage. The head was white with a black hindcrown, nape, and throat that extended downward to encompass the entire breast (Figs. 1, 2). The black throat and nape were narrowly separated by a variably-shaped white "wedge" that extended down onto the lower neck. The underparts were white with a small blackish area on the belly that appeared to be absent or molting feathers. The uppertail coverts, rump, and mantle were medium-gray and contrasted sharply with the black nape. The carpal areas were grayish-brown, the median coverts blackish, and the primaries and secondaries brown. A rather bold, white upper wingbar was present on each wing but each lower bar had mostly worn away. Two generations of median and greater coverts were clearly visible, with the outer coverts extensively brown-centered and with their whitish tips almost worn away. The tertials were brownish with black centers and bold white edges. The outermost tertial (T1) on each wing was absent, exposing the primaries. The brownish-black inner and white outer rectrices were abraded. The eyes, bill, legs, and feet were black; the legs were unbanded. The large eyes were conspicuous against the white face.

Taxonomy—The White Wagtail is a polytypic species comprised of two groups that until recently were considered separate species. The White Wagtail was composed of six subspecies (*alba* [including "*dukhunensis*"], *baicalensis*, *ocularis*, *personata*, *subpersonata*, and *yarrellii*), while the Black-backed Wagtail (*Motacilla lugens*) was composed of three subspecies (*alboides*, *leucopsis*, and *lugens*). With the recent (re)-merger of the two groups into a single species (Banks et al. 2005), the White Wagtail is comprised of nine subspecies (Alström and Mild 2003).

With its wholly black chin, throat, and breast, the Moon Lake Park wagtail was mostly in alternate plumage. The sharp contrast between the black nape and the medium-gray mantle sexed the bird as a male, and its worn, retained juvenal remiges and rectrices aged it to 8-10 months old. Its plumage was therefore categorized as First-Alternate or First-Summer (Alström and Mild 2003). Since it was mostly in alternate plumage, the Moon Lake Park White Wagtail could be identified to subspecies. Its medium-gray mantle immediately ruled out the four black-backed races (*alboides*, *leucopsis*, *lugens*, and *yarrellii*). Four of the five gray-backed subspecies could also be eliminated: *baicalensis*, which has a white chin, throat, and wing-panels; *ocularis*, which has a black eye-line and white wing-panels; *personata*, which has a dark-gray mantle and largely black head; and *subpersonata*, which has a largely black head and white wing-panels (Alström and Mild 2003). The eastern form of *alba* (“*dukhunensis*,” often considered a separate subspecies) was ruled out because it has broader white wing-bars that sometimes form a wing-panel (Alström and Mild 2003). Thus, the Moon Lake Park White Wagtail was of the western form of *alba*, which breeds in southern Greenland, Iceland, and across continental Europe, and winters from continental Europe to northern Africa (Alström and Mild 2003).

DISCUSSION

The Moon Lake Park White Wagtail furnished the first report and record for Florida, being accepted by the Florida Ornithological Society Records Committee (#07-634) as species #500 for Florida (A.W. Kratter in litt.). There are four other observations of the White Wagtail in the Southeast: an adult *lugens* at Cedar Island, North Carolina on 15 May 1982 (LeGrand 1982); an adult *ocularis* at Johnson’s Bayou, Louisiana on 12 October 1996 (Jackson 1997); an alternate-plumaged male *ocularis* at Huntington Beach State Park, South Carolina during 16-21 April 1998 (Behrens 1998, Bearden et al. 2004); and a juvenile—probably *alba*—at Sandling Beach State Recreation Area, North Carolina on 22 October 2002 (Bearden et al. 2004). Additionally, a Citrine Wagtail (*Motacilla citreola*) was photographed at Starkville, Mississippi during 31 January-1 February 1992 (DeBenedictis 1995), and a “Yellow” Wagtail, tentatively identified as an Eastern Yellow Wagtail (*M. tschutschensis*) was observed at Fort Morgan, Alabama on 29 September 2003 (Banks et al. 2004, Duncan and Duncan 2004).

It is difficult to explain the presence of a western *alba* White Wagtail 12 km inland from the central Gulf coast of Florida during the latter half of March. Florida is within the latitudes in which White Wagtails winter (Alström and Mild 2003), so the wagtail may have wintered locally. (Moon Lake Park is an unremarkable spot that seldom is

birded.) Alternatively, the wagtail could have been northbound from a wintering site farther south. Or the wagtail may have flown west across the Atlantic Ocean from its African wintering grounds and arrived in Florida, although its appearance near the Gulf coast makes this scenario seem unlikely. Perhaps the Moon Lake Park White Wagtail simply was “lost;” other wagtails in the Southeast have been observed during unseasonable periods and always for very brief periods (see above).

ACKNOWLEDGMENTS

I thank David Faintich, Dency Kahn, and Dave Pierce for discovering and documenting the wagtail and for contacting local birders so quickly; Wes Biggs for calling me about the wagtail on 19 March (“Bill, you dumb ass, where are you?”); David Faintich, Arnette Sherman, Paul Sykes, and Ken Tracey for sharing their photographs or observations; Bob Duncan for other information; and Mark Berney, David Faintich, and Andy Kratter for improving drafts of this paper.

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FIELD OBSERVATIONS

Spring Report: March-May 2007.—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Submissions to the FOC should be in the following format: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance. Seasons are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit observations to regional compilers within two weeks after the close of each season, or to the state compiler within one month. Addresses of the compilers are found at the end of this report. We greatly prefer observations sent via e-mail.

Sight-only observations are considered "reports" while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called "records." Species for which documentation is required by the FOS Records Committee (FOSRC; Bowman 2004, *Fla. Field Nat.* 32: 7-33) are marked here with an asterisk (*). A county designation (in italics) accompanies the first-time listing of each site in this report. Abbreviations in this report are: CWA = critical wildlife area, EOS = end of season, NP = national park, NSRA = north shore restoration area, NWR = national wildlife refuge, SP = state park, STA = stormwater treatment area, STF = sewage treatment facility, and N, S, E, W etc., for compass directions. Bold-faced entries denote birds newly reported or verified in Florida, or record numbers.

SUMMARY OF THE SPRING SEASON

It was a heady spring, with three "first" records (two found and photographed by Carl Goodrich), plus two additional potential first records (one of these also by Goodrich!), which pushed the Florida list to more than 500 species. Winds during April and May were variable, at times from the east, bringing pelagics to the Atlantic coast and Caribbean-wintering or -migrating species to the "Green Key Migrant Funnel," and at other times from the west, grounding uncountable numbers of trans-Gulf migrants, including what must have been thousands of Rose-breasted Grosbeaks. The best fallout days were 19-23 April and 15 May; Dale Henderson observed 19 species of wood-warblers in three hours at Cedar Key 21 April. FOSRC rarities reported this spring (those accepted are marked here with a "+" symbol) were the Trumpeter Swan (of unknown provenance), +Neotropic Cormorant (first Florida record), Yellow-legged Gull, +Iceland Gull, +Loggerhead Kingbird (first Florida and continental record), Caribbean Martin, +White Wagtail (first Florida record, #500), +Kirtland's Warbler, +Spotted Towhee, +Lazuli Bunting, and +Bullock's Oriole. Two Superb Starlings photographed in *Broward* furnished the first record of this exotic.

SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: **510** at Gainesville 13 Mar (B. & J. Bolte); 141 at Lake Apopka NSRA 1 Apr, and 88 there 1 May (H. Robinson); 50 at The Villages (*Sumter*) 24 Apr, and 20 at The Villages (*Marion*) 19 May (J. Dinsmore); 3 adults at Tallahassee (*Leon*) 29 Apr-2 May (E. Woodruff, G. Menk); 94 at Viera Wetlands (*Brevard*) 4 May (D. Freeland); 7 at Mirror Lake, St. Petersburg (*Pinellas*) 7 May (*vide* M. Peterson); up to 11 at Lake Townsen Regional Park (*Hernando*) 24 May (A. & B. Hansen); 8 at Cutler Ridge (*Miami-Dade*) 31 May (R. Torres).

Table 1. "Migrant Funnel" stationary count, Green Key, New Port Richey (Pasco). These results are a compilation of 44 daily counts, 0630-0900 hours, 31 Mar-31 May; counts with few migrants were often ended early. On two days (28 Apr & 8 May), no migrants were observed (K. Tracey et al.). Species listed below numbered 100 or more individuals each.

| Species | Total | High Count | Date |
|-----------------------------|-------|------------|--------|
| Blackpoll Warbler | 940 | 370 | 15 May |
| Palm Warbler | 519 | 87 | 23 Apr |
| American Redstart | 417 | 150 | 15 May |
| Black-throated Blue Warbler | 203 | 88 | 15 May |
| Common Yellowthroat | 158 | 30 | 15 May |
| Cape May Warbler | 139 | 57 | 23 Apr |
| Prairie Warbler | 128 | 18 | 22 Apr |
| Identified warblers | 2433 | 707 | 15 May |
| Unidentified warblers | 5775 | 1275 | 23 Apr |
| Bobolink | 373 | 62 | 15 May |
| Gray Catbird | 198 | 33 | 17 Apr |
| Indigo Bunting | 192 | 163 | 19 Apr |
| Barn Swallow | 184 | 34 | 12 Apr |

FULVOUS WHISTLING-DUCK: 140 at T. M. Goodwin Waterfowl Management Area (*Brevard*) 29 Mar (D. Freeland); 8 at Lake Apopka NSRA 27 Apr (H. Robinson); 10 at *Polk* phosphate mines 5 May (P. Fellers).

WHITE-FACED WHISTLING-DUCK: 1 at Walsingham Park (*Pinellas*) 23 Mar (I. Hernandez, photo to FOC); 1 with Black-bellied Whistling-Ducks at Circle B Bar Preserve, *Lakeland* (*Polk*) 29 Apr & in May (H. Moulden, J. Callaghan, photo to FOC).

CANADA GOOSE: 2 at St. Vincent NWR (*Franklin*) 20 May (B. Stedman).

MUTE SWAN: 1 at a Jacksonville (*Duval*) borrow pit 15 Mar (R. Clark).

TRUMPETER SWAN: 1 juvenile in a canal (!) near Kissimmee Prairie Preserve SP (*Okeechobee*) 27 Apr-2 May (P. & L. Gray, P. Miller et al., photos to FOC by L. Cooper) furnished the second Florida record.

MANDARIN DUCK: 1 male at Holiday (*Pasco*) 1 Mar (P. Francois, photo to FOC); 1 male at *Madison* (*Madison*) 2 Mar (D. Freeman).

RING-NECKED DUCK: 2 at Viera Wetlands 31 May (A. Bankert).

GREATER SCAUP: 1 capable of flight at Cedar Key 22 May (R. Rowan).

LESSER SCAUP: 1 at Lake Maggiore, St. Petersburg 29 May (D. Goodwin).

COMMON EIDER: 2 at St. Augustine Inlet (*St. Johns*) to 1 Apr (D. Reed); 2 juveniles at Fort Clinch SP (*Nassau*) 2 Apr (P. Leary).

WHITE-WINGED SCOTER: 1 at Tomoka SP, Ormond Beach (*Volusia*) 1 Mar (M. Brothers).

BUFFLEHEAD: 1 at Lake Santa Fe (*Alachua*) 31 Mar (B. & J. Bolte).

HOODED MERGANSER: 6 chicks fledged from a Wood Duck box at downtown Tallahassee 9 Apr (J. Stevenson).

RED-BREASTED MERGANSER: 15 off Ponce de Leon Inlet (*Volusia*) 3 Apr (R. Wallace et al.); 1 at Garden Key, Dry Tortugas NP 4 May (B. Mulrooney); 1 female at Old Ingraham Highway, Everglades NP (*Miami-Dade*) 12 May (B. Rapoza); 1 in female-plumage at Green Key, New Port Richey (*Pasco*) 31 May (B. Pranty).

RED-THROATED LOON: 1 at Ulumay Sanctuary, Merritt Island (*Brevard*) 3 Mar (D. Freeland); 1 at Gulf Breeze (*Santa Rosa*) 8 Mar (J. French).

PACIFIC LOON: 1 in alternate plumage at Fort Pickens (*Escambia*) 12 Apr (B. & L. Duncan).

Table 2. Migrants at Dry Tortugas National Park (*Monroe*), 19 Apr (M. Gardler). Of the 90 species observed, 25 were wood-warblers.

| Species | Totals |
|------------------------------|--------|
| Yellow-billed Cuckoo | 150 |
| Ruby-throated Hummingbird | 150 |
| Eastern Kingbird | 100 |
| Swainson's Thrush | 25 |
| Gray Catbird | 300 |
| Tennessee Warbler | 20 |
| Chestnut-sided Warbler | 4 |
| Magnolia Warbler | 8 |
| Black-throated Green Warbler | 5 |
| American Redstart | 20 |
| Worm-eating Warbler | 8 |
| Northern Waterthrush | 20 |
| Kentucky Warbler | 16 |
| Hooded Warbler | 45 |
| Summer Tanager | 10 |
| Scarlet Tanager | 18 |
| Rose-breasted Grosbeak | 7 |
| Indigo Bunting | 65 |
| Orchard Oriole | 85 |
| Baltimore Oriole | 15 |

HORNED GREBE: 1 in alternate plumage at St. Marks NWR (*Wakulla*) 15 Apr (A. Wraith-mell); 1 molting into alternate plumage at Hudson (*Pasco*) 18 Apr (L. Rothstein); 2 in alternate plumage at Cedar Key 22 May (R. Rowan).

EARED GREBE: 1 at Ormond Beach to 5 Mar (M. Brothers et al.).

BLACK-CAPPED PETREL: trios off Ponce de Leon Inlet 3 Apr & 3 May (B. Wallace et al., photos to FOC).

CORY'S SHEARWATER: 1 off Ponce de Leon Inlet 3 May (B. Anderson et al.).

SOOTY SHEARWATER: 1 off Ponce de Leon Inlet 3 May (B. Anderson et al., photo to FOC by B. Wallace).

AUDUBON'S SHEARWATER: 60 off Miami (*Miami-Dade*) 27 Apr (R. Torres, T. Mitchell); 3 off Ponce de Leon Inlet 3 May (B. Wallace et al.); 10 between Key West and Dry Tortugas NP 3 May (B. Mulrooney).

WILSON'S STORM-PETREL: at least 10 off Ponce de Leon Inlet 3 May (B. Anderson, B. Wallace et al.); at least 10 at Canaveral National Seashore (*Brevard*) 25 May (T. Dunkerton); 2 at Ponce de Leon Inlet 29 May, and 1 there 31 May (M. Brothers); 2 at Sebastian Inlet SP (*Brevard*) 29 May (A. Bankert).

LEACH'S STORM-PETREL: 5 off Ponce de Leon Inlet 3 May (B. Wallace et al.); 1 grounded in a yard at Jacksonville 16 km from the ocean 20 May (*vide* P. Powell, specimen to UF); 1 at Fort George Inlet (*Duval*) 27 May (R. Clark); 2 at New Smyrna Beach (*Volusia*) 27 May (B. Wallace); 4 at Ponce de Leon Inlet 29 May, and 2 there 30 May (M. Brothers); 4 at Sebastian Inlet SP 29 May, and 2 there 30 May (A. Bankert); 1 at Boynton Inlet (*Palm Beach*) 31 May (M. Berney).

BAND-RUMPED STORM-PETREL: 2 off Ponce de Leon Inlet 3 Apr, and 2 there 3 May (B. Wallace et al.).

MASKED BOOBY: 67 (64 adults) at Dry Tortugas NP 18 Apr (M. Gardler).

- BROWN BOOBY: 27 at Dry Tortugas NP 18 Apr (M. Gardler); 1 juvenile rescued at New Smyrna Beach 8 May (M. Brothers); 1 sub-adult on the *Okaloosa/Walton* line 20 May (D. Ware).
- RED-FOOTED BOOBY: 1 juvenile dark morph off Ponce de Leon Inlet 3 Apr (M. Brothers, B. Wallace, photo to FOC).
- NORTHERN GANNET: 121 emaciated birds, mostly yearlings, brought to Marine Science Center, Ponce de Leon Inlet 21 Apr-17 May (M. Brothers); 1 over Winter Park (*Orange*) 17 May (B. Anderson)!
- AMERICAN WHITE PELICAN: 5400 at *Polk* mines 15 Mar, and 1100 there 19 May (P. Fellers et al.); 1 at Key West (*Monroe*) 27 Apr (C. Goodrich); 280 at Paynes Prairie Preserve SP 30 Apr (R. Rowan).
- BROWN PELICAN: 1 at Port Mayacca, Lake Okeechobee (*Martin*) 19 Apr (D. Simpson); 1 immature at Monteverde (*Lake*) 30 Apr (T. Rodriguez); 1 near St. Cloud (*Osceola*) 15 May (B. & L. Cooper).
- *NEOTROPIC CORMORANT (*Phalacrocorax brasilianus*): 1 at Boca Chica Key (*Monroe*) 13 Apr (C. Goodrich, accepted by FOSRC).
- GREAT CORMORANT: 1 at John U. Lloyd SP (*Broward*) 27 Mar-1 Apr (B. Roberts et al., photo to FOC by L. Manfredi).
- ANHINGA: 1 at Rockland Key (*Monroe*) 12 Mar (B. Mulrooney).
- AMERICAN BITTERN: 1 at Alturas (*Polk*) 30 May (C. Geanangel).
- "GREAT WHITE HERON:" 1 at Tomoka Landfill (*Volusia*) 1 Mar (D. Freeland); 1 at Ormond Beach 24 Mar-10 Jun (M. Brothers); 1 at Upthegrove Beach (*Okeechobee*) 19 Apr (D. Simpson); 1 at Dry Tortugas NP 27 Apr (M. Gardler).
- "WURDEMANN'S HERON:" 1 at a *Polk* mine 19 May (P. Fellers).
- REDDISH EGRET: up to 7 sub-adults at St. Marks NWR 15-26 Mar (J. Cooke et al.); 5 at St. Vincent NWR 22 May (B. Stedman).
- GLOSSY IBIS: 1 at Key West 6-7 Apr (C. Goodrich).
- WHITE-FACED IBIS: 1 at Fort Walton Beach STF (*Okaloosa*) 18 Apr-22 May (D. Ware); 1 immature at Sanibel Island (*Lee*) 28 Apr-EOS (C. Ewell et al., photo to FOC.); 4 at St. Marks NWR 6 May (A. Bankert).
- ROSEATE SPOONBILL: 1 at Paynes Prairie Preserve SP 29 Apr-EOS (B. Mollison); 1 pair bred at Gatorland (*Polk*) 16 May (L. Rosen); 23 at Lake Apopka NSRA 30 May (H. Robinson).
- BLACK VULTURE: 1 at Seven Springs (*Pasco*) 12 May (K. Tracey) had been color-tagged at Avon Park 10 Jan 2006 (J. Humphrey).
- OSPREY: 151 at Lake Apopka NSRA 21 Apr (H. Robinson).
- SWALLOW-TAILED KITE: 25 at a roost in *Walton* 12 May (J. Walton); 1 at St. Vincent NWR 18 May (B. Stedman).
- WHITE-TAILED KITE: 3 pairs nested at Kissimmee Prairie Preserve SP during the season; at least one pair fledged 2 young (P. Miller).
- SNAIL KITE: 3 along the Withlacoochee River 6 km E of Floral City (*Citrus*) 30 Mar (T. Ritchie); 1 E of Hudson 15 Apr at the same site as Jul 2006 (B. Skiba).
- MISSISSIPPI KITE: 2 at Gainesville 12 Mar (T. Webber); 2 flying N in W *Indian River* 9 Apr (D. Freeman); 1 at Key Largo (*Monroe*) 5 May (J. Boyd et al.); 1 at Colt Creek SP 11-15 May (C. Geanangel, B. & L. Cooper); 1 at Largo (*Pinellas*) 16 May (I. Hernandez); 1 at Cockroach Bay Aquatic Preserve (*Hillsborough*) 19 May (R. Greenspun, J. Dubi); 1 at Boulogne (*Nassau*) 21 May (D. Freeland); 1 at Weekiwachee Preserve 23 May (A. & B. Hansen).
- BALD EAGLE: 1 pair bred at the mouth of East River (*Santa Rosa*) 3 Apr (B. Bremser), and other pairs in the W Panhandle fledged one young at Milton (*Santa Rosa*) and two young at W Pensacola (*vide* B. Duncan); 46 at Paynes Prairie Preserve SP 14 Apr (S. Rayer).
- SHARP-SHINNED HAWK: 1 at Lake Apopka NSRA 27 May (H. Robinson).

- COOPER'S HAWK: 1 female on a nest in a cypress at Wilton Manor (*Broward*) 17 Apr (B. Anderson).
- SHORT-TAILED HAWK: 9 reports of 10 individuals (7 dark, 2 light, 1 unspecified) between Cedar Key (*Levy*) and Corkscrew Swamp Sanctuary (*Collier*) variously this spring included 1 pair that bred at Sawgrass Lake Park, St. Petersburg (R. Smith, S. Patterson et al.); as many as 6 pairs in *W Pasco* this spring (K. Tracey).
- SWAINSON'S HAWK: 1 at Key West 9 Mar (C. Goodrich); 1 at Lake Apopka NSRA 30 Mar (H. Robinson).
- CRESTED CARACARA: 6 at Viera Wetlands 6 Mar (D. Freeland); 1 at Chuluota (*Seminole*), 2 at Orlando Wetlands Park (*Orange*), and 1 at Seminole Ranch Conservation Area (*Orange*) all 12 May (L. Malo).
- MERLIN: 2 at Ponce de Leon Inlet 10 May (M. Brothers).
- PEREGRINE FALCON: 1 at Jupiter Inlet Colony (*Palm Beach*) 12 May (J. & L. Hailman).
- YELLOW RAIL: 1 at Garcon Point (*Santa Rosa*) 1 Mar (D. Simpson).
- BLACK RAIL: 2 at St. Vincent NWR 21 May (B. Stedman).
- SORA: up to 59 at St. Marks NWR 9-30 Apr (A. Wraithmell et al.).
- PURPLE GALLINULE: 2 N of Carrabelle (*Franklin*) 22 Apr (J. Murphy).
- LIMPKIN: 1 at Key West 21 Mar & 29 Apr (C. Goodrich); 1 along the Choctawhatchee River (*Walton*) 17-20 May (J. Stahl, photo to FOC); 34 at Lake Townsen Regional Park 25 May (A. & B. Hansen); 35 at Lake Apopka NSRA 30 May (H. Robinson).
- BLACK-BELLIED PLOVER: 265 at Lake Okeechobee (*Okeechobee*) 8 May (B. Pranty, P. Gray et al.); 1 at Lake Sampson (*Bradford*) 25 May (R. Rowan).
- AMERICAN GOLDEN-PLOVER: 1 at Ohio Key (*Monroe*) 25 Mar (A. Bankert); 1 at Merritt Island NWR 28 Mar (D. Freeland); 1 in basic plumage at Ponce de Leon Inlet 12 May (M. Brothers); 2 at Myakka River SP (*Sarasota*) 26 May (R. Smith).
- SNOWY PLOVER: 1 at Ponce de Leon Inlet to 6 Apr (M. Brothers).
- WILSON'S PLOVER: 37 at Little Estero Island CWA (*Lee*) 12 May (C. Ewell); 1 at St. Vincent NWR 21-22 May (B. Stedman).
- SEMPALMATED PLOVER: 251 at Lake Okeechobee 8 May (B. Pranty, P. Gray et al.); 28 at *Polk* mines 13 May (P. Timmer, C. Geanangel); 1 at The Villages (*Lake*) 16 May (J. Dinsmore); 4 at Lake Sampson 25 May (R. Rowan).
- PIPING PLOVER: 3 at Fred Howard Park (*Pinellas*) 23 Mar (M. Gardler); 24 at Talbot Islands SP 25-27 Mar (P. Leary); 1 at Jupiter Inlet Colony 27 Mar (J. & L. Hailman); 2 at Anclote Key (*Pasco*) 2 May (K. Tracey).
- AMERICAN OYSTERCATCHER: 2 at Pensacola 15 Mar-8 Apr (A. & D. Forster); 3 at Pensacola Beach (*Escambia*) 14 May (B. Duncan); 26 at Little Estero Island CWA 22 May included individuals banded in North Carolina (1), New Jersey (1), and Virginia (3; C. Ewell).
- BLACK-NECKED STILT: 2 at Inverness (*Citrus*) 28 Apr, and 4 there 30 Apr (K. Spilios); 406 at Lake Okeechobee (*Glades* and *Okeechobee*) 8 May (P. Gray, B. Pranty et al.).
- AMERICAN AVOCET: 1 at St. Vincent NWR 9 Mar (T. Lewis); 251 at *Polk* mines 1 Apr, and 49 there to 13 May (P. Timmer, C. Geanangel); 4 at Honeymoon Island SP (*Pinellas*) 3 Apr (W. Yusek); 34 in alternate plumage at Eco Pond, Everglades NP (*Monroe*) 12 May (B. Rapoza).
- SPOTTED SANDPIPER: 25 at Buschman City Park, Port Orange (*Volusia*) 25 Apr (B. Orr); 18 at Lake Okeechobee 8 May (B. Pranty, P. Gray et al.); 3 at Lake Townsen Regional Park 24-25 May (A. & B. Hansen); 1 at Lake Sampson 25 May (R. Rowan).
- SOLITARY SANDPIPER: 1 at Hague 10 Mar (P. Laipis), and 20 there 22 Apr (M. Manetz); singles in *W Pasco* at New Port Richey 21 Mar & Seven Springs 23 Mar (K. Tracey); 1 at Hardee Lakes Park (*Hardee*) 7 Apr (B. Ahern); 29 at Fort De Soto Park (*Pinellas*) 10 Apr (R. Smith); 2 at Inverness 11-17 Apr (K. Spilios); 5 at Orlando 19 Apr (A. Boyle); 52 at Lake Apopka NSRA 21 Apr (H. Robinson); 4 off Ponce de Leon Inlet 3 May (B. Wallace, B. Anderson et al.); 1 at St. Vincent NWR 18 May (B. Stedman).

- WILLET: 1 in basic plumage at Lake Okeechobee 13 Apr (B. Pranty, P. Gray et al.); 1 in basic plumage at Marathon Airport (*Monroe*) 30 May (B. Mulrooney).
- LESSER YELLOWLEGS: 200+ at Springhill Road STF, Tallahassee 5 Apr (G. Menk); 630 at Lake Okeechobee 13 Apr (B. Pranty, P. Gray et al.).
- UPLAND SANDPIPER: 1 at Key West 19-22 Apr (M. Gardler, C. Goodrich).
- WHIMBREL: 6 at Coconut Point (*Brevard*) 7 May (A. Bankert); 7 at Ponce de Leon Inlet 12 May (M. Brothers); 3 at Little Estero Island CWA 12 May (C. Ewell).
- HUDSONIAN GODWIT: 1 in basic plumage at Alafia Bank (*Hillsborough*) 19-29 May (C. Casels, photos to FOC); 1 in basic plumage at St. Vincent Island 19-22 May (B. Stedman).
- RUDDY TURNSTONE: 10 at Lake Okeechobee (*Glades*) 8 May (B. Pranty, P. Gray et al.).
- RED KNOT: singles at Lake Okeechobee 13 Apr (*Okeechobee*) & 8 May (*Glades*); B. Pranty, P. Gray); 2 at Lake Apopka NSRA 27 Apr, and 1 there 4 May (H. Robinson); 1000 at Fort George Inlet 9 May included color-marked birds banded in Argentina, Brazil, and Chile (P. Leary); 800 at Nassau Sound (*Duval*) 20 May (P. Leary).
- SANDERLING: 1 at Lake Apopka NSRA 4 May (H. Robinson); 2 in basic plumage at Lake Okeechobee 8 May (B. Pranty, G. Schrott et al.).
- SEMIPALMATED SANDPIPER: 3700 at *Polk* mines 19 May (P. Fellers); 500 at Huguenot Memorial Park (*Duval*) 27 May (R. Clark).
- LEAST SANDPIPER: 10,500 at *Polk* mines 13 May (P. Timmer, C. Geanangel).
- PEEP SPECIES: 16,000 at Lake Okeechobee 13 Apr, and 6650 there 8 May (B. Pranty, P. Gray et al.).
- WHITE-RUMPED SANDPIPER: 1 at Eagle Lakes Park (*Collier*) 18 Apr (D. Suito); 1 at St. Marks NWR 27 Apr (B. Anderson et al.); 5 at Merritt Island NWR 1 May (D. Freeland); 3 at Lake Okeechobee 8 May (B. Pranty, G. Schrott); 1 at Hague 11-12 May (P. Burns, B. Carroll); 45 at Cutler Ridge 12 May (R. Torres); 12 at Eco Pond, Everglades NP 12 May (B. Rapoza); 20 at Blue Cypress Lake (*Indian River*) 17 May (A. Bankert); 1 at Fort De Soto Park 18 May (L. Atherton); 8 at *Polk* mines 19 May (P. Fellers); 2 at Cedar Key 23 May (R. Rowan); 23 at Lake Apopka NSRA 25 May (H. Robinson); 1 at Viera Wetlands 26 May (T. Dunkerton).
- PECTORAL SANDPIPER: 1 at Paynes Prairie Preserve SP 18 Mar (P. Laipis); 29 at Lake Apopka NSRA 11 Apr (H. Robinson); 1 at Lake Okeechobee 13 Apr (B. Pranty, P. Gray et al.); 1 at Eco Pond, Everglades NP 22 Apr (J. Boyd); 1 at St. Marks NWR 6 May (A. Bankert); 1 at Tallahassee 7 May (R. Lengacher); up to 4 at St. Vincent NWR 18-22 May (B. Stedman).
- DUNLIN: 1 aberrant bird (white around the bill and eyes, white nape, orange bill and legs) at Shiloh Marsh, Merritt Island NWR (*Brevard*) 24 Mar (S. Winston, photo to FOC); 21 at Lake Okeechobee 13 Apr (B. Pranty, P. Gray et al.); 27 at *Polk* mines 13 May (P. Timmer, C. Geanangel).
- CURLEW SANDPIPER: presumably the same 1 at Huguenot Memorial Park 30 Mar (B. Richter), and in alternate plumage at Nassau Sound 20 May (P. Leary, photos to FOC).
- STILT SANDPIPER: 2 at Springhill Road STF 15 Mar (G. Menk); 1 N of Brooksville 25 Mar (M. Gardler); 455 at Lake Okeechobee 13 Apr (B. Pranty, P. Gray et al.); 273 at *Polk* mines 28 Apr (P. Fellers); 290 at Lake Apopka NSRA 11 May (H. Robinson); 1 at St. Vincent NWR 19-22 May (B. Stedman).
- BUFF-BREASTED SANDPIPER: 6 at Lake Okeechobee 13 Apr included 1 in courtship display (B. Pranty et al., photo to FOC); 1 at King Ranch, Everglades Agricultural Area (*Palm Beach*) 22 Apr (M. Berney); 1 at Ponce de Leon Inlet 30 Apr (M. Brothers).
- LONG-BILLED DOWITCHER: 390 at *Polk* mines 15 Mar (P. Fellers et al.); 7 N of Brooksville 25 Mar (M. Gardler); 35 at Springhill Road STF 5 Apr (G. Menk); 10 at Hardee Lakes Park 7 Apr (B. Ahern); 1180 in alternate plumage at Lake Okeechobee 13 Apr (B. Pranty et al.); 77 at Lake Apopka NSRA 1 May (H. Robinson).
- WILSON'S SNIBE: 1 at Paynes Prairie Preserve SP 26 May-EOS (S. Flamand).

- AMERICAN WOODCOCK: 3 newly hatched chicks at Osteen (*Volusia*) 9 Mar were killed by a cat (*vide* A. Vinokur; specimens to UCF).
- WILSON'S PHALAROPE: 2 at Lake Apopka NSRA 16 Apr (H. Robinson); 1 at St. Marks NWR 29 Apr-7 May (J. Murphy, J. Cavanagh et al.); 1 at Flamingo, Everglades NP (*Monroe*) 19 May (J. & G. Robinson).
- RED-NECKED PHALAROPE: 2 off Miami 27 Apr (R. Torres, T. Mitchell); 7 between Key West and Dry Tortugas NP 3 May (B. Mulrooney); 1 female in alternate plumage at Lake Okeechobee 8 May (B. Pranty, G. Schrott); 1 female at Merritt Island NWR 20-31 May (T. Dunkerton, A. Bankert et al.); 1 at Emerald Marsh Conservation Area (*Lake*) 26-27 May (A. Luzader).
- *YELLOW-LEGGED GULL (*Larus michahellis*): 1 putative juvenile at Tomoka Landfill 5 Mar (B. Wallace, under review by FOSRC).
- *ICELAND GULL: 1 second-year at Ponce de Leon Inlet 4-5 Apr (M. Brothers, B. Wallace, accepted by FOSRC).
- GLAUCOUS GULL: 1 at Milton 30 Mar (H. Moore); 1 second-winter at Destin (*Okaloosa*) 7 Apr (S. Barlow).
- LESSER BLACK-BACKED GULL: 25, including 9 "intermedius-types" at Crandon Beach 4 Mar, and 46 there 16 Apr (R. Diaz); 1 in alternate plumage at Dunedin Causeway 12 Mar (M. Gardler); 2 (adult and third-year) at Lake Okeechobee 13 Apr (B. Pranty et al., photos to FOC).
- BLACK-LEGGED KITTIWAKE: 1 resting on the beach at Guana Reserve (*St. Johns*) 29 March (L. Melch, photos to FOC).
- BROWN NODDY: 1 at Sebastian Inlet SP 31 May (A. Bankert et al.).
- BLACK NODDY: 1 immature at Dry Tortugas NP 19 Apr-5 May (B. Mulrooney, photos to FOC).
- SOOTY TERN: 500+ off Ponce de Leon Inlet 3 Apr, and 200+ there 3 May (B. Wallace et al.).
- BRIDLED TERN: 1 at Lake Apopka NSRA 16 Mar (H. Robinson); 50+ between Key West and Dry Tortugas NP 3 May (B. Mulrooney).
- LEAST TERN: 2 at Lake Apopka NSRA 18 Mar, and 77 there 15 Apr (H. Robinson); 23 at Honeymoon Island SP 26 Mar (W. Yusek); 34 at Ponce de Leon Inlet 27 Mar (M. Brothers); 150 nests at Little Estero Island CWA 12 May were later lost to Tropical Storm *Barry's* storm tide (C. Ewell).
- GULL-BILLED TERN: 1 at Green Key 3 Mar (K. Tracey); 3 at Shell Mound, Lower Suwannee NWR (*Levy*) 8 Mar (B. Ahern); 2 at St. George Island (*Franklin*) 29 Apr (J. Murphy et al.); 1 at Key West 1 May (C. Goodrich); 58, including 13 nests, at *Polk* mines 13 May (C. Geanangel, P. Timmer); 70, including 31 nests, at Four-Corners Mine (*Hillsborough*) 19 May; all nests failed by 9 Jun due to rising water levels (P. Fellers).
- CASPIAN TERN: 2 in alternate plumage at Green Key 28 May (B. Pranty).
- BLACK TERN: singles at Lake Apopka NSRA 15 Apr & 27 May (H. Robinson).
- ROSEATE TERN: 30 at Dry Tortugas NP 28 Apr (C. Goodrich); 10 at Key West 30 Apr (C. Goodrich).
- COMMON TERN: up to 6 at Lake Apopka NSRA 25 May-EOS (H. Robinson); 3 at Viera Wetlands 26 May (T. Dunkerton); 15 at Ponce de Leon Inlet 29 May-2 Jun (M. Brothers); 2 adults at Boynton Inlet 31 May (M. Berney).
- ARCTIC TERN: 1 at Lake Apopka NSRA 25 May-EOS (H. Robinson); 1 at Viera Wetlands 26 May (T. Dunkerton); 1 first-summer at Biscayne NP (*Miami-Dade*) 27 May (E. Alvear et al., photos to FOC); up to 6 (4 adults) at Ponce de Leon Inlet and 1 at New Smyrna Beach 28 May-2 Jun (M. Brothers, B. Wallace et al.); up to 5 at Sebastian Inlet SP 29 May-EOS (A. Bankert et al.); 1 adult at Fort Pierce Inlet (*St. Lucie*) 30 May (D. Simpson); 1 first-summer at Boynton Inlet 30 May (B. Hope); 1 at Jetty Park, Port Canaveral (*Brevard*) 31 May (K. LaBorde).
- FORSTER'S TERN: 201 at Lake Apopka NSRA 21 Mar (H. Robinson); 349 at *Polk* mines 19 May (P. Fellers).

- ROYAL TERN: 1 bird 5 km inland at W Cocoa (*Brevard*) 23 Mar (D. Freeland); 1 at Lake Santa Fe 31 Mar (B. & J. Bolte); 3 at *Polk* mines 1 Apr (P. Timmer, C. Geanangel); 1 at Lake Apopka NSRA 13 May (H. Robinson).
- SANDWICH TERN: 4 at Lake Apopka NSRA 7 May (H. Robinson).
- BLACK SKIMMER: 1000 at Lake Okeechobee (*Okeechobee*) 13 Apr (P. Gray et al.); 410 at *Polk* mines 13 May (P. Timmer, C. Geanangel); 89 at Lake Apopka NSRA 27 May (H. Robinson).
- AFRICAN COLLARED-DOVE: 1 in song at Leisure Beach, Hudson 23-24 May (B. Pranty, K. Tracey, photos to FOC).
- WHITE-WINGED DOVE: 2 in *Wakulla* 6 Mar (J. Cooke); 9 at Cedar Key 6 Mar (D. Henderson); 1 at Alligator Point 9 Apr (J. LaVia); 1 on state land at Key Largo 9 Apr (J. Duquesnel); 2 at Kissimmee Prairie Preserve 29 May (M. Korosy); up to 4 The Villages (*Marion*) most of the season (J. Dinsmore).
- BUDGERIGAR: the *Pasco* population may be limited to 3 birds at Hudson (K. Tracey, B. Pranty), while the *Hernando* population seems composed of 8 pairs breeding in one yard at Hernando Beach (B. Pranty).
- BLACK-HOODED PARAKEET: 1 at Spring Hill 9 Mar provided the first for *Hernando* (D. Knodle).
- BLACK-BILLED CUCKOO: 1 at St. George Island 15 Apr (D. & S. Jue, J. Cavanagh); singles at Key West 18, 21, and 23 Apr (C. Goodrich); 4 at Dry Tortugas NP 19 Apr (M. Gardler); 1 at Gainesville 29 Apr (P. Laipis); 1 near Lake Pierce (*Polk*) 5 May (J. Du Bois); 1 at Cedar Key 26 May (D. Henderson).
- CAVITY-NESTING SPECIES: cavities in 1 palm at Matheson Hammock Park (*Miami-Dade*) 27 Mar simultaneously supported apparent nests of Red-crowned Parrot and Eastern Screech-Owl, while a Red-bellied Woodpecker excavated a new cavity (B. Aikins).
- YELLOW-BILLED CUCKOO: 100 at Key West 11 Apr (C. Goodrich); 13 at Weekiwachee Preserve 22 Apr (A. & B. Hansen).
- BARN OWL: 1 at Dry Tortugas NP 18 Apr (M. Gardler).
- BURROWING OWL: 2 at River Lakes Conservation Area (*Brevard*) 18 Mar (D. Freeland).
- SHORT-EARED OWL: 1 at Lake Apopka NSRA 8 & 13 Apr (H. Robinson).
- LESSER NIGHTHAWK: 2 at Flamingo, Everglades NP 25-26 March (A. Bankert et al.).
- CHUCK-WILL'S-WIDOW: 10 flew in from the Gulf during mid-morning and immediately roosted in vegetation, on the ground, or in car ports at Little Estero Lagoon 31 Mar (C. Ewell et al.); 1 flying N 61 nautical mi off Ponce de Leon Inlet 3 Apr (M. Brothers, B. Wallace).
- CHIMNEY SWIFT: 2 at Wekiwa Springs SP (*Orange*) 21 Mar (D. Simpson).
- RUBY-THROATED HUMMINGBIRD: 1 female on a nest at Colt Creek SP 11 May-EOS (C. Geanangel, P. Fellers).
- CALLOPE HUMMINGBIRD: 1 male at Jacksonville remained to 19 Mar (P. Powell).
- BELTED KINGFISHER: 1 off Ponce de Leon Inlet 3 May (B. Wallace, B. Anderson et al.); 1 at Everglades and Francis S. Taylor WMA (*Miami-Dade*) 12 May (S. Schneider); 1 female at Grassy Key (*Monroe*) 12 May (J. Boyd, N. Freedman); 1 at Viera Wetlands 21 May (T. Dunkerton).
- RED-HEADED WOODPECKER: 1 at Elliot Key, Biscayne NP (*Miami-Dade*) 9-11 Apr (J. Valadez); 1 at Honeymoon Island SP 24 Apr (W. Yusek); 1 at St. Vincent NWR 18-22 May (B. Stedman).
- DOWNY WOODPECKER: 49 at Lake Apopka NSRA 28 Mar (H. Robinson).
- HAIRY WOODPECKER: 1 at the Baird tract, Withlacoochee State Forest (*Sumter*) 1 Mar (B. Ahern); 1 pair attended nestlings along the Choctawhatchee River (*Walton*) 29 Mar (L. Duncan et al.); 1 at DuPuis WMA (*Martin*) 19 Apr (D. Simpson).
- ACADIAN FLYCATCHER: 2 at Dry Tortugas NP 19 Apr (M. Gardler, B. Mulrooney); singles at Key West 20, 21, and 28 Apr (C. Goodrich).
- VERMILION FLYCATCHER: 1 at Paynes Prairie Preserve SP to 2 Mar (R. Rowan et al.).

- ASH-THROATED FLYCATCHER: 1 at Lake Apopka NSRA 28 Mar (H. Robinson).
- GREAT CRESTED FLYCATCHER: 1 at S Merritt Island (*Brevard*) 5 Mar (D. Freeland); 45 at Lake Apopka NSRA 16 May (H. Robinson).
- BROWN-CRESTED FLYCATCHER: 1 at Flamingo, Everglades NP 26 Mar (A. Bankert et al.); 1 at St. George Island SP 15 Apr (J. Cavanagh, D. & S. Jue, details to FOC).
- WESTERN KINGBIRD: 4 at Holiday Recreation Center, Holiday (*Pasco*) 2 Mar (K. Tracey); 54 at Lake Apopka NSRA 23 Mar (H. Robinson); 60 at The Villages (*Marion*) 31 Mar, with 5 to 7 May (J. Dinsmore); 1 at Marco Island (*Collier*) 18 Apr (D. Suitor); 1 at Fort De Soto Park 28 Apr (B. Orr); 1 at St. Marks NWR 30 Apr (A. Wraithmell); 1 at Bald Point (*Franklin*) 12 May (J. Murphy); 1 at Gulf Breeze 13-18 May (B. Duncan).
- EASTERN KINGBIRD: 1 at Gainesville 15 Mar (S. Hofstetter); 50 at Key West 17 Apr (C. Goodrich).
- GRAY KINGBIRD: 1 at Key West 28 Mar (C. Goodrich).
- *LOGGERHEAD KINGBIRD (*Tyrannus caudifasciatus*): 1 at Fort Zachary Taylor SP, Key West 8-27 Mar (C. Goodrich et al., photos to FOC) furnished the first record for Florida and North America.
- SCISSOR-TAILED FLYCATCHER: 7 at Driggers Road (*Highlands*) 9 Mar (M. McMillian); 3 at The Villages through Mar, with 1 to 25 Apr (J. Dinsmore); 30 at Stock Island (*Monroe*) 28 Apr (D. Freeland et al.); 1 at Astatula (*Lake*) 21 May (G. Quigley).
- YELLOW-THROATED VIREO: 1 in song near Alderman's Ford Park (*Hillsborough*) 28 May (K. Tracey).
- WARBLING VIREO: 1 at Fort De Soto Park 16-18 Apr (L. Atherton et al.).
- PHILADELPHIA VIREO: 2 at Key West 7 Apr (C. Goodrich).
- RED-EYED VIREO: 1 at Lake Apopka NSRA 9 Mar (H. Robinson).
- BLACK-WHISKERED VIREO: 1 at Key West 9 Mar ff, and 8 there 11 Apr (C. Goodrich et al.); 13 banded at Bill Baggs Cape Florida SP (*Miami-Dade*) 3 Mar-7 May (R. Diaz); 1 at Southern Glades Wildlife and Environmental Area (*Miami-Dade*) 12 Apr (B. Rapoza); 1 at Captain Forster's Hammock (*Indian River*) 12 May (R. Smith, B. Ahern).
- *CARIBBEAN MARTIN (*Progne dominicensis*): 1 putative male at Key West 28 Mar (C. Goodrich, under review by FOSRC) would furnish the first for Florida and North America if accepted, but identification of *Progne* species from photographs is problematic at best.
- TREE SWALLOW: 8 at *Polk* mines 19 May (P. Fellers); 1 at Newnans Lake 24 May-EOS (R. Rowan).
- NORTHERN ROUGH-WINGED SWALLOW: 6 at Jacksonville 8 Mar (J. Cocke); several along the Peace River (*Hardee*) 7 Apr examined cavities in the riverbank (P. Miller).
- BANK SWALLOW: 1 at Viera Wetlands 4 Mar (D. Freeland); 4 at Cape Canaveral 16 Apr (T. Dunkerton); 1 at Upthegrove Beach 19 Apr (D. Simpson); 1 at St. George Island 29 Apr (J. Murphy, J. Cavanagh); 2 at *Polk* mines 19 May (P. Fellers); 1 in *Leon* 27 May (S. McCool); 1 at Lake Apopka NSRA 30 May (H. Robinson).
- CLIFF SWALLOW: singles at Lake Apopka NSRA 25 Mar & 24 Apr (H. Robinson); 1 at Fort De Soto Park 6 Apr (S. Patterson); 1 at Boyd Hill Nature Park, St. Petersburg 7 Apr (R. Smith); 1 at Bald Point 15 Apr (J. Murphy); 2 at St. George Island 15 Apr (A. Wraithmell); 3 at Cape Canaveral 16 Apr (T. Dunkerton); 1 at Key West 28 Apr (C. Goodrich).
- CAVE SWALLOW: 2 at Key West 26 Mar (C. Goodrich); 2 of the Mexican race at Fort Pickens 12 Apr (B. & L. Duncan); 3 of the Mexican race at Bald Point 15 Apr (J. Murphy); 15 at Cape Canaveral 16 Apr (T. Dunkerton).
- BARN SWALLOW: 1 at W Cocoa 6 Mar (D. Freeland); 250 at Lake Apopka NSRA 16 Apr, and 200 there 7 May (H. Robinson); 300 at Upthegrove Beach 19 Apr (D. Simpson).
- BROWN CREEPER: 1 along the Choctawhatchee River (*Holmes*) 20 Apr (J. Stahl).
- HOUSE WREN: 1 at Key West 7 Apr (C. Goodrich); 1 at Lake Apopka NSRA 1 May (H. Robinson).

- GOLDEN-CROWNED KINGLET: 3 at Goethe State Forest (*Levy*) 8 Mar (B. Ahern); 1 at Gainesville 27 Mar (E. Scales).
- RUBY-CROWNED KINGLET: 1 at Winter Park 19 Apr (B. Anderson); 1 at Dry Tortugas NP 3 May (B. Mulrooney).
- EASTERN BLUEBIRD: 1 migrant banded at Wekiwa Springs SP 25 Mar (A. Boyle); 6 migrants at Lake Apopka NSRA 23 Mar (B. Anderson, A. Vinokur).
- VEERY: 1 at Lori Wilson Park, Cocoa Beach (*Brevard*) 21 May (D. Richardson, B. Anderson).
- *BICKNELL'S THRUSH: 2 banded at Cape Florida SP 12 May (M. Davis, R. Diaz, accepted by FOSRC).
- HERMIT THRUSH: 1 at Gainesville to 1 May (S. Flamand); 1 at Garden Key, Dry Tortugas NP 4 May (B. Mulrooney, photos to FOC).
- WOOD THRUSH: 1 at Key West 16-21 Apr (C. Goodrich); 7 at Green Key 17 Apr (K. Tracey, B. Pranty); 3 at Dry Tortugas NP 19 Apr (M. Gardler); 1 at St. Sebastian River Preserve SP (*Brevard*) 21 Apr (D. Simpson); 3 at Fort De Soto Park 23 Apr (B. Ahern et al.).
- GRAY CATBIRD: 60 at Cape Florida SP 8 Apr (R. Diaz); 60 at Key West 11 Apr (C. Goodrich).
- NORTHERN MOCKINGBIRD: 1 at Dry Tortugas NP 28 Apr-4 May (B. Mulrooney et al.).
- BAHAMA MOCKINGBIRD: 1 at Evergreen Cemetery, Fort Lauderdale (*Broward*) 7-8 Apr (M. Stickel et al.); 1 at Dry Tortugas NP 4-5 May (B. Mulrooney, photos to FOC); 1 at Cape Florida SP 9 May (J. Boyd et al.).
- BROWN THRASHER: 1 at Dry Tortugas NP 20-23 Apr (M. Gardler).
- SUPERB STARLING (*Lamprolornis superbus*):** 2 (1 banded) thought to be nesting in a coconut palm at Hallandale Beach (*Broward*) in May (L. Manfredi et al., photo to FOC) furnished the first record for Florida.
- COMMON MYNA: 1 pair at Flamingo, Everglades NP 27 May (M. Berney); 1 pair bred at Punta Gorda (*Charlotte*) 18 May-EOS (T. Zinneman et al.); 1 pair bred at Fort Myers 6 May (C. Ewell).
- *WHITE WAGTAIL (*Motacilla alba*): 1 first-year male *M. a. alba* at Moon Lake Park, Port Richey 18-22 Mar (D. Faintich et al., accepted by FOSRC) furnished the first record for Florida.
- CEDAR WAXWING: 500 at Florida International University (*Miami-Dade*) 21 Mar (J. Boyd); 2240 at Lake Apopka NSRA 8 Apr (H. Robinson); 400 at West Kendall (*Miami-Dade*) 12 Apr (J. Boyd); 200 at Emerald Marsh Conservation Area 11 May (J. Dinsmore); 2 at Hilliard (*Nassau*) 21 May (D. Freeland); 6 at Winter Park 22 May (B. Anderson).
- BLUE-WINGED WARBLER: 14 reports of 22 individuals variously 4-24 Apr, with 1 at Sparr (*Marion*) 4-14 Apr (C. Retey); 4 at Fort De Soto Park 11 Apr (B. Ahern, J. Gaetzi), and 2 there 21 Apr (P. Fellers et al.); 3 at Cedar Key 17 Apr (M. Jones); 2 at St. George Island 19 Apr (J. Cavanagh); and 2 at Dry Tortugas NP 19 Apr (M. Gardler, B. Mulrooney).
- GOLDEN-WINGED WARBLER: 1 at St. Marks NWR 28 Apr (D. Houle); 1 at Viera Wetlands 12 May (D. Freeland et al.).
- "BREWSTER'S WARBLER." 1 female at Key West 11 Apr (C. Goodrich).
- NASHVILLE WARBLER: 1 at Lake Munson (*Leon*) 3 Mar (E. Woodruff); singles at A. D. Barnes Park (*Miami-Dade*) 4 Mar (B. Rapoza) & 15 Mar (R. Diaz); 1 at Lake Woodruff NWR (*Volusia*) 5 Mar (B. Orr); 1 male at Lutz (*Pasco*) 13 Mar (D. Bowman); 1 at Plantation Key (*Monroe*) 3 Apr (B. Mulrooney); 1 male at Captiva Island (*Lee*) 28 Apr (V. McGrath); 1 at Fort De Soto Park 23 May (T. Dunkerton).
- YELLOW-RUMPED WARBLER: 3130 at Lake Apopka NSRA 4 Mar (H. Robinson); 1 at Newnans Lake 13 May (J. Bryan); 1 at Gainesville 15 May (R. Robinson).
- *KIRTLAND'S WARBLER: 1 female at Sebastian Inlet SP 10-12 May (D. Simpson et al., photos to FOC by R. Smith).
- PRAIRIE WARBLER: 152 at Cape Florida SP 8 Apr (R. Diaz).

- PALM WARBLER: 375 at Lake Apopka NSRA 4 Mar (H. Robinson); 100 at Key West 6 Apr (C. Goodrich); 115 of the W race at Cape Florida SP 8 Apr (R. Diaz); 1 at Coconut Point 7 May (A. Bankert).
- BLACKPOLL WARBLER: 40 at Key West 29-30 Apr (C. Goodrich); 17 at Lake Apopka NSRA 11 May (H. Robinson); 55 at Birch SP 12 May (M. Berney et al.); 120 at Cape Florida SP 12 May (R. Diaz); 1 female S of Monroe Station (*Collier*) 27 May (T. Doyle).
- CERULEAN WARBLER: single males at Cedar Key 16 & 23 Apr (D. Henderson); 1 at Dry Tortugas NP 19 Apr (M. Gardler, B. Mulrooney); 1 male at Suncoast Seabird Sanctuary (*Pinellas*) 20 Apr (S. Patterson); 2 at Fort De Soto Park 21 Apr (P. Fellers); 1 male at Captiva Island 28 Apr (V. McGrath).
- BLACK-AND-WHITE WARBLER: 50 at Key West 23 Apr (C. Goodrich).
- AMERICAN REDSTART: 134 (54 banded) at Cape Florida SP 11 May, and 450 (28 banded) there 12 May (R. Diaz).
- PROTHONOTARY WARBLER: 10 at Key West 11 Apr (C. Goodrich).
- WORM-EATING WARBLER: 1 at Alachua 30 Mar (B. Wallace); 8 at Key West 11 Apr (C. Goodrich); 5 at Fort De Soto Park 23 Apr (B. Ahern et al.); 1 at Boulogne 21 May (D. Freeland).
- SWAINSON'S WARBLER: 1 at Key West 23 Mar, and 10 there 11 Apr (C. Goodrich); 1 at Tallahassee 1 Apr (B. Phelan); singles at Evergreen Cemetery 7-8 Apr & 20 Apr (M. Berney et al.); 2 at Cedar Key 9 Apr and 1 there 21 Apr (D. Henderson); 7 at Fort De Soto Park 11 Apr (J. Gaetzi, B. Ahern et al.); 1 at Dry Tortugas NP 19 Apr (M. Gardler, B. Mulrooney).
- OVENBIRD: 1 at Leon Sinks (*Leon*) 25 Mar (M. Collins); 50 at Key West 11 Apr (C. Goodrich); 27 banded at Cape Florida SP 28 Apr, and 100 (27 banded) there 9 May (R. Diaz).
- NORTHERN WATERTHRUSH: 1 at Paynes Prairie Preserve SP 10 Mar (R. Rowan); 1 at Dunedin Hammock 23 Mar (M. Gardler); 1 at Tallahassee 24 Mar (P. Homann); 50+ at Cape Florida SP 9 May (R. Diaz); 3 at Lake Apopka NSRA 20 May (H. Robinson); 1 at Newnans Lake 24 May (R. Rowan).
- LOUISIANA WATERTHRUSH: 1 at Bonner Park, Largo (*Pinellas*) 16 Mar (I. Hernandez); 10 at Lake Apopka NSRA 19 Apr (H. Robinson).
- CONNECTICUT WARBLER: 15 (3 females, 12 males) banded at Cape Florida SP variously 8-12 May (R. Diaz), and 1 there 22 May (A. Bankert); 2 at Birch SP 9 May (M. Berney et al.); 2 at A. D. Barnes Park 9 May (B. Rapoza); 1 at Bill Sadowski Park (*Miami-Dade*) 9-14 May (R. Torres); 1 at Pinecraft Park (*Sarasota*) 10 May (E. Miller, J. Carlock); 1 at Buschman Park, Port Orange 11 May (M. Brothers); 1 at Mead Garden, Winter Park 14 May (B. Anderson); singles at Green Key 14 & 15 May, and 2 there 22 May (K. Tracey, J. McKay et al.); 1 at Lori Wilson Park, Cocoa Beach 20 May (D. Richardson); 1 at Marathon (*Monroe*) 22 May (A. Bankert; specimen to UCF); 3 at Fort De Soto Park 23 May (T. Dunkerton); 3 at Plantation Key 8 May (B. Mulrooney).
- MOURNING WARBLER: 1 male at Cape Florida SP 8 May (R. Diaz).
- COMMON YELLOWTHROAT: 100 at Key West 23 Apr (C. Goodrich); 200+ (31 banded) at Cape Florida SP 10 May, 225+ (87 banded) there 11 May, and 420 (55 banded) there 12 May (R. Diaz).
- HOODED WARBLER: 50 at Fort De Soto Park 11 Apr (J. Gaetzi et al.).
- WILSON'S WARBLER: 1 at Alachua 16 Mar (B. Wallace); 1 at Sarasota (*Sarasota*) 8 Apr (A. Bishop); 1 at Gainesville 18 Apr (G. Parks).
- YELLOW-BREASTED CHAT: 12 at Lake Apopka NSRA 27 May (H. Robinson).
- SUMMER Tanager: 15 at Fort De Soto Park 21 Apr (P. Fellers et al.).
- SCARLET Tanager: 8 at Key West 11 Apr (C. Goodrich); 4 at A. D. Barnes Park 18 Apr (J. Boyd); 9 at Fort De Soto Park 21 Apr (P. Fellers et al.).
- WESTERN Tanager: the wintering female and male at Tallahassee were last seen 19 Apr (F. Rutkovsky).
- WESTERN SPINDALIS: 1 olive-backed male at Evergreen Cemetery to 28 Apr was "quite territorial . . . chasing other species, especially [European] Starlings" (M. Berney et

- al.); 1 female at Oleta River SP (*Miami-Dade*) 27 Apr (V. Rothman, details to FOC); 1 female at Gumbo Limbo Nature Center, Boca Raton (*Palm Beach*) 28-29 Apr (P. Cohen, B. Hope et al.).
- *SPOTTED TOWHEE: 1 at Alligator Point 10 Mar-24 Apr (J. Murphy et al., accepted by FOSRC) furnished the second Florida record.
- CHIPPING SPARROW: 1 at Gainesville 28 May (L. Keen).
- LARK SPARROW: 1 heard singing at Bradenton (*Manatee*) 4 Mar (J. Dubi).
- SAVANNAH SPARROW: 1 at Lake Apopka NSRA 13 May (H. Robinson); 1 at a *Polk* mine 13 May (P. Timmer, C. Geanangel).
- GRASSHOPPER SPARROW: 1 at Fort De Soto Park 26 Apr (L. Atherton et al.).
- LE CONTE'S SPARROW: 2 at Paynes Prairie Preserve SP 6 Mar (R. Rowan et al.); 3 banded at Kissimmee Prairie Preserve SP 10 Mar (M. Korosy); 1 at Lake Jackson 9-13 Apr (J. Cavanagh).
- NELSON'S SHARP-TAILED SPARROW: 2 in *W Pasco* 1 May (K. Tracey).
- SEASIDE SPARROW: 1 at Pensacola (*Escambia*) 1 Apr (A. & D. Forster).
- SONG SPARROW: 1 in *Walton* 12 May (J. Walton).
- LINCOLN'S SPARROW: 1 near Falling Waters SP (*Washington*) 27 Mar (B. Ahern); 1 at Long Key SP (*Monroe*) 8 Apr (B. Mulrooney); 1 at Key West 10 Apr (C. Goodrich); 1 at Dry Tortugas NP 19 Apr (B. Mulrooney).
- SWAMP SPARROW: 1 at Coconut Point 29 Apr (A. Bankert); 1 at Lake Apopka NSRA to 9 May (H. Robinson).
- WHITE-THROATED SPARROW: 7 at Lake Lotus Park, Altamonte Springs 10 Mar, and 2 there to 14 Apr (P. Hueber); 1 adult white-striped morph at Dry Tortugas NP 3 May (B. Mulrooney).
- WHITE-CROWNED SPARROW: 14 at Lake Apopka NSRA 16 Mar (H. Robinson).
- DARK-EYED JUNCO: 1 at Gainesville 18 Mar (R. Robinson).
- ROSE-BREASTED GROSBEAK: 58+ variously in *Alachua* 14-24 Apr (L. Hensley, M. Jones et al.); "dozens" at Dunedin 22 Apr (S. Robinson); 15 at Fort De Soto Park 23 Apr (B. Ahern et al.); almost every feeder at Jacksonville reported one or more during late April-early May (*vide* P. Powell).
- BLUE GROSBEAK: 1 at Key West 10 Mar (C. Goodrich); 12 at Fort De Soto Park 23 Apr (J. Gaetzi et al.); "too many [reports in NE Florida] to list" (*vide* P. Powell).
- *LAZULI BUNTING: 1 second-year male at Oviedo 4-6 Apr (M. Acken et al., accepted by FOSRC).
- INDIGO BUNTING: 100 over Palm Harbor (*Pinellas*) in 1.5 hours 19 Apr (M. Korosy); 250 at Fort De Soto Park 19 Apr (L. Atherton, J. Gaetzi et al.); 80 at Key West 19 Apr (C. Goodrich); "the most migrants in years" in NE Florida! Many feeders reported around 20 at a time, one row of feeders near Palatka (*Putnam*) had 100 at once (*vide* P. Powell); one pair bred near Orangedale (*St. Johns*), the first nesting there by this species in several years (P. Powell).
- PAINTED BUNTING: 9 in *Alachua* variously 1 Mar-29 Apr (M. Manetz et al.); up to 4 at Cedar Key 1 Mar-23 Apr (D. Henderson); 4 at Key West 21 Mar (C. Goodrich); 2 at Dunedin Hammock 23 Apr (I. Hernandez); 1 at Fort De Soto Park 26 Apr (L. Atherton et al.); 5 at Lake Apopka NSRA 1 May (H. Robinson); 1 female at New Port Richey 31 May (E. DuPuis).
- DICKCISSEL: 1 near Flamingo, Everglades NP 3 Mar (J. Boyd et al.); 1 at Cedar Key 19 Mar-20 Apr (D. Henderson); singles at Fort De Soto Park 15, 26, and 28 Apr (L. Atherton, A. Bankert et al.); 1 at Key West 16 Apr (C. Goodrich); 1 at Dry Tortugas NP 19 Apr (B. Mulrooney, M. Gardler); 1 at Lake Apopka NSRA 27 Apr & 27 May, and 2 there 29 Apr (H. Robinson).
- BOBOLINK: 30+ at Kissimmee Prairie Preserve SP 1 Apr (P. Miller); 595 at Lake Apopka NSRA 29 Apr (H. Robinson); 25 at Emerald Marsh Conservation Area 13 May (J. Dinsmore).

- YELLOW-HEADED BLACKBIRD: 1 first-year male in *Calhoun* 6 Mar (T. McClendon); 1 female at Punta Gorda 30 Mar (T. Licata, T. Zinneman, photo to FOC); 1 female at Fort Walton Beach STF 14 Apr (B. Duncan).
- RUSTY BLACKBIRD: 2 (male & female) at Disney conservation land (*Osceola*) 9 Mar (C. Newton); 12 at Tallahassee 12 Mar (S. McCool); 3 at Paynes Prairie Preserve SP to 14 Mar (R. Rowan).
- BREWER'S BLACKBIRD: 1 male at Homestead (*Miami-Dade*) 19 Mar (J. Boyd, L. Manfredi, photo to FOC); 1 male at River Lakes Conservation Area 26 Mar (D. Freeland).
- COMMON GRACKLE: 1 at Dry Tortugas NP 28 Apr (C. Goodrich).
- SHINY COWBIRD: 3 at Eagle Lakes Park 18 Apr (D. Suitor); 1 male at Green Cay Wetlands 22 Apr (M. Berney); 1 at Key Largo 26 Apr (D. Freeland); 1 at Lake Apopka NSRA 29 Apr & 1 May (H. Robinson); 1 at Key West 1 May (C. Goodrich); 4 (2 females & 2 males) at Dry Tortugas NP 4 May (B. Mulrooney); 3 (1 female & 2 males) at Flamingo, Everglades NP 12 May (B. Rapoza) & 27 May (M. Berney); 1 male at Ponce de Leon Inlet 16 May (B. Orr); 1 adult male at Alligator Point 22 May (J. Murphy); 1 at Alachua 29 May (M. Reetz, specimen to UF).
- BRONZED COWBIRD: 8 at Eagle Lakes Park 6-18 Apr (D. Suitor), and 2 there (1 male displayed to 1 female) 28 Apr (B. Mulrooney); 2 (female & male) at Flamingo, Everglades NP 30 Apr (B. Mulrooney).
- ORCHARD ORIOLE: 15 at Clearwater (*Pinellas*) 20 Apr (L. Childress); 8 at Key West 20-21 Apr (C. Goodrich); 20 at Fort De Soto Park 21 Apr (P. Fellers et al.); 1 first-summer male at Belle Glade Marina (*Palm Beach*) 19 May (M. Berney).
- *BULLOCK'S ORIOLE: 1 female at Tallahassee to 12 Mar (F. Rutkovsky, J. Cavanagh).
- PURPLE FINCH: 1 at Gainesville to 10 Mar (R. Robinson); 8 (females and males) at Niceville (*Okaloosa*) 12 May (P. Baker et al.).
- HOUSE FINCH: 1 yellow-variant male at A. D. Barnes Park 4 Mar-21 Apr (B. Rapoza et al.); 2 (female & male) at Ponce de Leon Inlet 5 May (B. Orr); 2 (female & male) at Vero Beach 9 May (B. Wagner); 2 (female & male) at Dunedin (*Pinellas*) 27-28 May (S. Robinson); 10+ at San Antonio (*Pasco*) throughout May (S. Phillips); 1 pair and 1 fledgling at Brandon (*Hillsborough*) during late May (D. Goodwin).
- PINE SISKIN: 1 at Gainesville 7 Mar (J. Watson); up to 2 at Altamonte Springs 1-18 Apr (G. Bretz).
- PIN-TAILED WHYDAH: 1 male starting to molt into alternate plumage at Milton (*Santa Rosa*) in late May & 7 Jun (A. Stalcup).

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Winter 2006-2007 report not published previously: Western Tanager: 1 adult male at Perdido Key (*Escambia*) 23 Feb (Mickey Quigley).

Corrections to the Spring 2006 report: Lesser Nighthawk: the bird at St. George Island 27 Apr was identified later as an Antillean Nighthawk, which was also included in the report, so the Lesser Nighthawk report should be deleted. Northern Rough-winged Swallow: the date for one at Lake Jackson (*Leon*) should be 3 Mar, not 13 Mar. Cave Swallow: 3 at Bald Point 11 Apr should be attributed to John Murphy, not Gail Menk. We thank Gail Menk and Andy Wraithmell for bringing these errors to our attention.

Correction to Fall 2006 report: The possible hybrid ibis at Fort Walton Beach, reported as a Glossy × White-faced Ibis, was thought to be a Glossy × White Ibis.

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Florida Field Naturalist

ISSN 0738-999x

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

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The *Florida Field Naturalist* is a fully refereed journal emphasizing biological field studies and observations of vertebrates, especially birds, in and near Florida and the nearby West Indies. We welcome submission of original manuscripts containing new information from these areas. **We encourage electronic submission of manuscripts.** Please consult recent issues of the journal and the FOS website (<http://www.fosbirds.org/FFN/FFNGuidelines.htm>) for style, noting especially that manuscripts should:

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- (4) include metric units for all measurements;
- (5) use the form "7 June 2003" for all dates;
- (6) use the 24-hour clock for all indications of time (e.g., 0800, 1400);
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Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 35, No. 4

NOVEMBER 2007

PAGES 105-138

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