

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

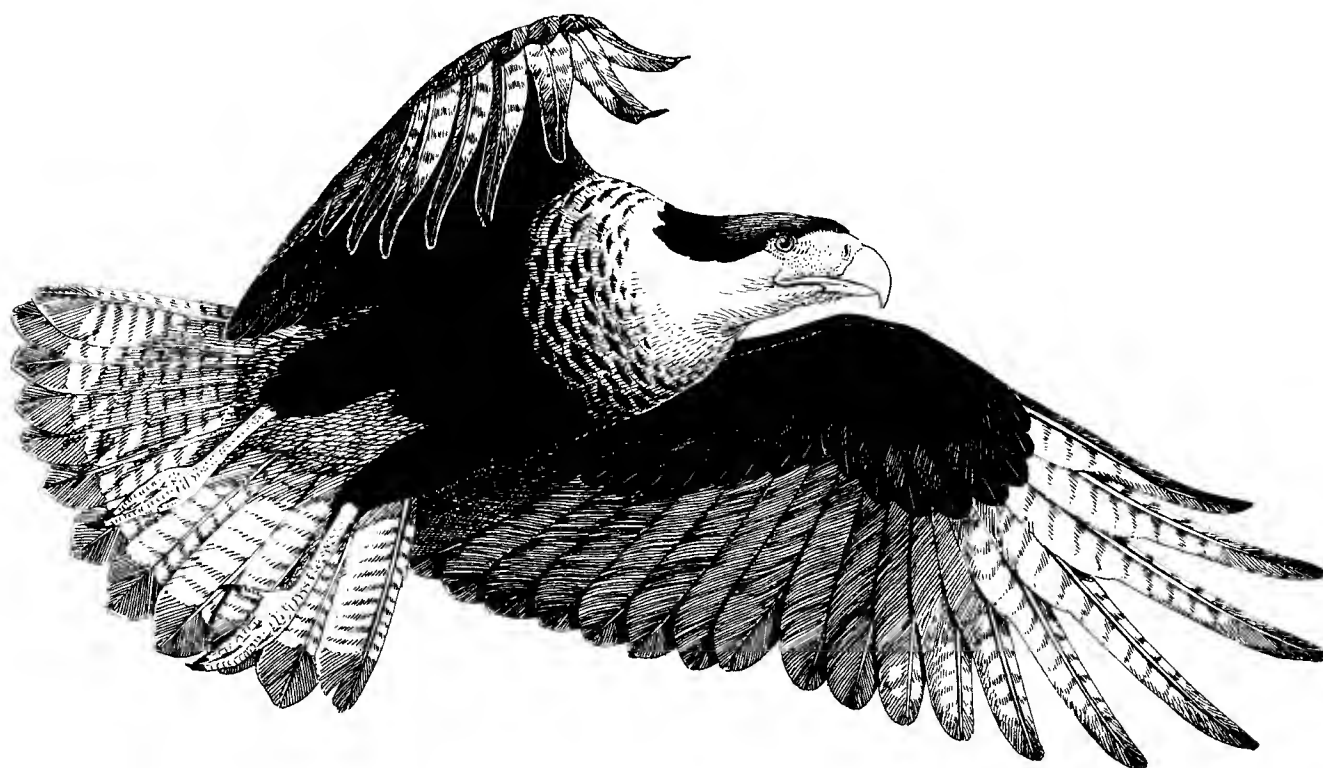
---

VOL. 45, No. 1

MARCH 2017

PAGES 1-38

---



Diane  
Pierce ©96

# FLORIDA ORNITHOLOGICAL SOCIETY

FOUNDED 1972

## OFFICERS

**PRESIDENT:** ADAM KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: kestrelkent@yahoo.com

**VICE PRESIDENT:** EMILY ANGELL, 475 Easy Street, Avon Park, FL 33825. Email: epipher@archbold-station.org

**SECRETARY:** COLE FREDRICKS, 325 Ruby Lake Loop, Winter Haven, FL 33884. Email: cfredricks@tampabay.rr.com

**TREASURER:** CHARLES H. FISHER, Jr., 4806 W. Beach Park Dr., Tampa, FL 33609. Email: chflshercpa@hotmail.com

**EDITOR, FLORIDA FIELD NATURALIST:** SCOTT ROBINSON, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

### Directors, Serving Until Spring 2017

GINA KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: ginakent@arcinst.org

DAVID SIMPSON, 139 S Willow St., Fellsmere, FL 32948. Email: simpsondavid@mac.com

### Directors, Serving Until Spring 2018

TODD ENGSTROM, 309 Carr Lane, Tallahassee, FL 32312. Email: engstrom@bio.fsu.edu

ERIN RAGHEB, 1105 SW Williston Rd., Gainesville, FL 32601. Email: erin.ragheb@myFWC.com

### Directors, Serving Until Spring 2019

NOEL BRANDON, Department of Integrated Environmental Science, 640 Dr. Mary McLeod Bethune Blvd., Daytona Beach, FL 32114. Email: noelb@cookman.edu

JIM EAGER, 350 Fillmore Ave., Apt. F-18, Cape Canaveral, FL 32920. Email: beachbirder@bellsouth.net

GRAHAM WILLIAMS, 530 Rosedale Ave., Longwood, FL 32750. Email: grahamevanwilliams@gmail.com

### Honorary Members

SAMUEL A. GRIMES 1979; HELEN G. CRUICKSHANK 1980; OLIVER L. AUSTIN, JR. 1982  
PIERCE BRODKORB 1982; WILLIAM B. ROBERTSON, JR. 1992; GLEN E. WOOLFENDEN 1994  
TED BELOW 1999; FRED E. LOHRER 2009

All persons interested in Florida's natural history, especially its abundant bird life, are invited to join the Florida Ornithological Society by writing to the Treasurer. Annual membership dues are \$25 for individual members, \$30 for a family membership, \$15 for students, \$45 for contributing members, and \$40 for institutional membership; add \$5 for overseas delivery. One-time contributions for life membership are \$400 for individuals and \$500 for families. All members receive *Florida Field Naturalist*.

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.

*Florida Field Naturalist* is published quarterly (March, 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, Museum Road at Newell Drive, University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at [www.fosbirds.org](http://www.fosbirds.org)

THIS PUBLICATION IS PRINTED ON NEUTRAL PH PAPER

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 1

MARCH 2017

PAGES 1-38

---

Florida Field Naturalist 45(1):1-13, 2017.

## FORAGING BEHAVIOR OF THE VARIEGATED FLYCATCHER (*Empidonomus varius*) AT TWO NORTH AMERICAN VAGRANCY SITES IN THE CONTEXT OF FORAGING IN ITS NATIVE RANGE

JON S. GREENLAW

10503 Mistflower Lane, Tampa, Florida 33647

**Abstract.**—Only two vagrant Variegated Flycatchers (*Empidonomus varius*), a South American tyrannid that has an austral migrant population, are presently known from Florida. The first occurred in June 2013 in St. Johns County, and the most recent in October 2015 in Broward County. Little is known about most aspects of the species' biology. Observations on foraging behavior of the species in Florida in one case added detail and some new information on the relationship of search and aerial prey captures on foliage to the structure of a favored tree crown that appeared to complement and facilitate the manner of foraging. Search and prey-capture behavior in Florida was generally consistent with the limited information available in the literature on foraging in its native range. The species is an aerial sallying forager, taking flying insects in open air and stationary prey on foliage. It also consumes fleshy fruits, which may vary in importance depending on season in South America. Similarly, one individual in Florida combined frugivory with insectivory. The primary tactic for capturing prey on foliage and in the air, and in taking fruit *in situ*, appears to be a sally-stall maneuver. Detailed descriptive and quantitative work on variation of intraspecific foraging behavior is often scarce in the avian literature, but such detail is needed to support comparative analyses that seek to understand the evolution of foraging radiations in groups of related birds.

Variegated Flycatchers (*Empidonomus varius*) are austral migrants in the southern portion of their range in South America. The birds from this population (*E. v. varius*), which breed in northern Argentina, Uruguay, Paraguay, and southern Brazil, migrate as far north as western Amazonia and northeastern South America east to western Venezuela, and rarely Trinidad (Ridgely and Tudor 1994, French 1973), to spend the austral winter. On rare occasions migrants mis-orient and move northward in error (in their austral spring) from their winter range, or overshoot their usual wintering destinations (in their austral fall), and end up in the United States or Canada in the

boreal fall or spring, respectively. Since 1977, six known individuals (Maine, early November [Abbott and Finch 1978]; Ontario, October to early November [Houle and Houle 1993, James 1991]; Tennessee, mid-May [Nicholson and Stedman 1988]; Washington state, early September [Denny 2009, Mlodinow and Irons 2009; Merrill and Bartels 2015]; and most recently, two in Florida [see below] in 2013 and 2015), have occurred far north of their normal breeding or wintering ranges in South America. Plumage coloration and pattern suggested the two Florida birds were likely representative of the nominate, migrant population that normally winters only on the continent of South America in northern tropical regions. The distinguishing features of *E. v. varius* present in both of the Florida individuals were dusky-brown feathers dorsally (in contrast, to paler brownish-gray or brownish in *E. v. rufinus*) and well streaked underparts on breast, upper abdomen, flanks, and under tail coverts (in contrast to reduced streaking, sometimes nearly obsolete, in *rufinus*) (Hilty 2003, Mobley 2004).

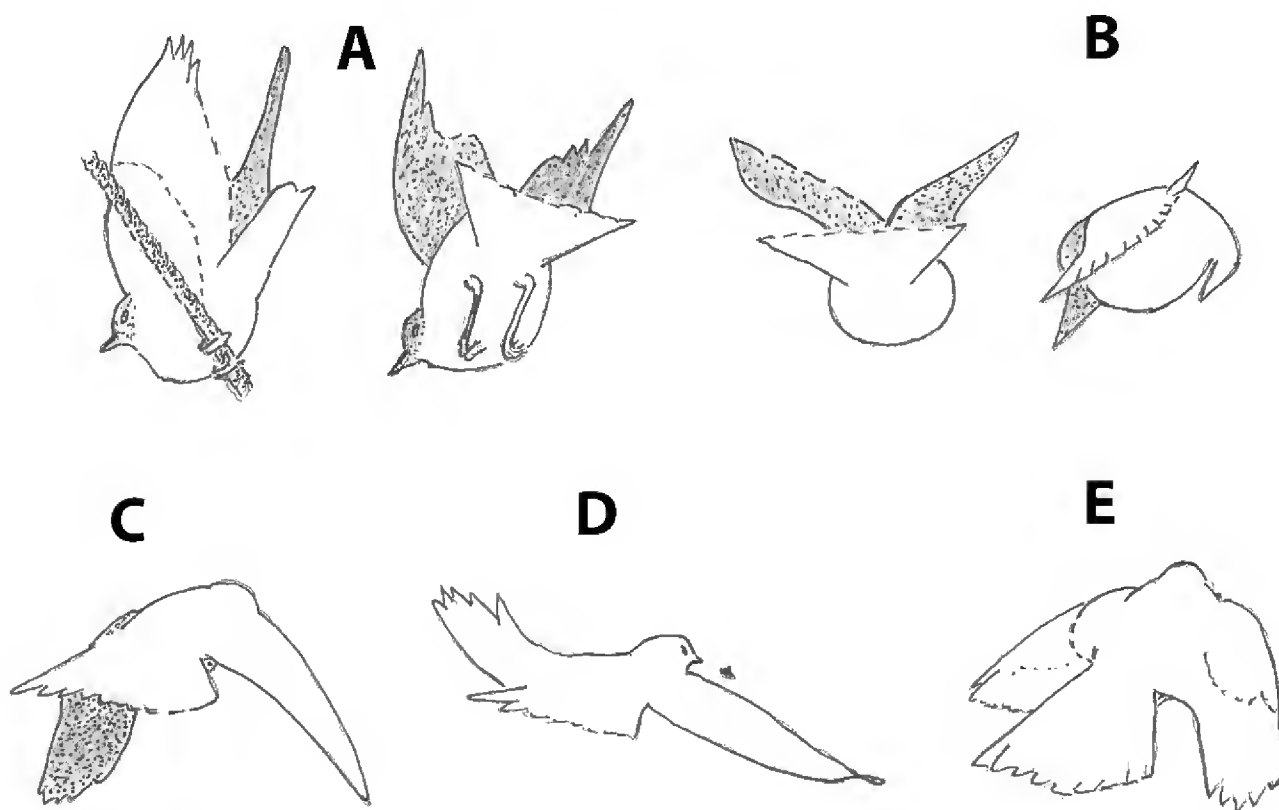
*Empidonomus varius* is the only member of its genus. Although not surprising, little is known about the ecology and behavior of the species in most of its broad range. The best information is a single study on a resident population (*rufinus*) in northeastern Brazil (Cintra 1997). Otherwise, bits of information mostly lacking detail appear in lists of species that summarize data from community-level studies (e.g., Las-Casas et al. 2012, Lasky and Keitt 2012, Malizia et al. 2005) or in regional treatments of local avifaunas (e.g., Aleixo and Galetti 1997, Pacheco et al. 2014). Other pieces of information come from studies on trophic ecology and adaptive radiation of tyrannid flycatchers in the Neotropics (Fitzpatrick 1980, 1981, 1985, Ohlson et al. 2008) and from one brief life history account (Mobley 2004). I spent about four hours observing the most recent vagrant occurrence of a Variegated Flycatcher in Florida, and was struck by its apparent dedicated focus on two trees, a fig (*Ficus*) and an adjoining Gumbo Limbo (*Bursera simaruba*; Burseraceae). Most trees in the neighborhood were mature Live Oaks (*Quercus virginiana*), which during my watches appeared to be ignored. Other field observers noted the bird occasionally visiting the oaks, apparently for brief periods of time. One observer, who watched the flycatcher on multiple days during its stay, referred to the fig as its “favorite tree” (L. Wegman, in litt. to Russ Titus, 6 November 2015).

My goals here are to (1) describe the foraging behavior that I observed in the 2015 vagrant at a site in south-eastern Florida, (2) characterize the apparent functional relationships between this bird and the architecture of the large fig (apparently the native Florida and northern neotropical strangler fig, *F. aurea*; Moraceae) and adjoining Gumbo Limbo, (3) add information on hawking behavior that was important to the 2013 bird in northeastern Florida, and (4) assess the

extent to which the limited observations in vagrant locations in Florida are representative of foraging behavior reported in its native range.

#### METHODS

My observations on foraging behavior reported here were opportunistic. Although I maintained a timely field record of my observations, and photographed the bird, the fruit source, and the trees, I made little effort to quantify my observations given the short time that I spent with the bird and distractions from other birders present. Observations focused on what appeared to be self-evident patterns of behavior that were performed repeatedly during the time that I was present on late-afternoon, 28 October, and mid-morning, 29 October 2015. I corresponded with three other observers (Rangel Diaz, Russ Titus, and Lee Wegman) to evaluate the extent their general observations on the bird's tree use corresponded or differed from mine. I relate my observations to the little information available in the published literature on the migratory population, as well as information on insectivory in a resident, tropical subspecies (*M. v. rufinus*) (Cintra 1997). Because my observations are based on a single individual, they are best described as anecdotal. I also illustrate (Fig. 1) and describe one foraging observation on the 2013 individual recorded on videotape during its single-day stopover. Here, I use the term “foraging” to refer to behaviors related to finding, capturing, and handling food. Moreover, I describe food capture maneuvers as specifically as possible to record details of behavior that may be useful to others who wish to undertake taxon com-



**Figure 1. Representative tracings from video-frames of Florida's first vagrant of *Empidonomus varius* (St. Johns County, 2013; see Greenlaw 2015) performing a complete hawking maneuver. Stages are labelled A (flight initiation from powerline, left, and attack commencement, right); B (approach flight and maneuver adjustment by basal tail torsion, right); C (final approach, angle of attack increases); D (final approach, prey visible in front of head); E (braking and semi-stall as insect captured). See text for further comments.**

parisons of tyrannids at the species or genus level. In most cases here I follow Remsen and Robinson's (1990) classification of aerial foraging maneuvers by arboreal birds to attack prey, but I depart by employing the term "hawk" or "hawking" to refer to the specialized form of aerial sallying to capture flying insects. The term "hawking behavior" is widely used and understood in the avian foraging literature. I use it because it avoids the ambiguity arising from an application of Remsen and Robinson's classification system stemming from maneuver categories (e.g., sally-stall, sally-hover, sally-strike) that apply to capturing insects in the air column and to taking arthropods found on fixed arboreal substrates (leaves, branches). In recent practice, authors using the classification segregate information on maneuver and substrate categories, and ignore relationships that can exist between the two aspects of trophic behavior (e.g., Gabriel and Pizo 2005, Martinez and Robinson 2016). Hawking behavior is sufficiently specialized that it deserves its own terminology (Fitzpatrick 1980, Robinson and Holmes 1982) in recognition of the special relationships between variation in aerial maneuver tactics that allow a flying bird to capture flying insects in three-dimensional space. More detail must be encouraged in the published literature on the foraging behavior of birds for which far too little is known in most species.

#### OBSERVATIONS

*Florida records of Variegated Flycatcher.*—Only two documented records of a Variegated Flycatcher exist for Florida. Both were verified by the Florida Ornithological Society Records Committee (Greenlaw 2015; A. Kratter, August 2016, ms. in preparation). The first was found by Diana Doyle on 5 June 2013 along Guana River Road at the entrance to Guana Tolomato Matanzas National Estuarine Research Reserve, St. Johns County (Greenlaw 2015). The habitat used by the bird was a semiopen area along a narrow road corridor bordered by scrub trees, and a disturbed mosaic of parking lots, buildings, and other patches of vegetation near water. It spent much or most of its time in intermittent, light rain hawking flying insects from a roadside powerline. A short video made by Doyle captured the perched bird scanning from the wire and performing a successful hawking maneuver (see below). The flycatcher was observed by several other birders. It remained for one day and was not seen again. The second individual (Fig. 2) was discovered by Russ Titus on 24 October 2015 in Evergreen Cemetery, Fort Lauderdale, Broward County. The vegetation consisted of an open, parklike stand of large, mature, and smaller sub-mature Live Oaks, several scattered strangler figs, and at least one Gumbo Limbo. Below the open canopy of trees, ground cover was mowed turf-grass lawn around the memorial stones and scattered, decorative shrubs. The bird remained until 31 October and then disappeared. While it was there, it was observed daily by numerous birders.

*2013 observations.*—As noted, the 2013 bird spent nearly all its foraging time hawking insects along the semiopen road corridor with screening trees on each side of the road. The detailed observations on its foraging behavior stem from two videoclips, one of which recorded a complete hawking maneuver. To my knowledge, nobody has characterized



**Figure 2. Florida's second vagrant of *E. varius* (Broward County, 2015; FOSRC accepted, August 2016) perched in typical "sit-and-wait" fashion on a branch in a large fig (*Ficus aureus*) under layer of canopy foliage in semiopen upper crown. Perches offered vistas of leaf undersurfaces, which were watched for stationary prey. Captures were by sallies to foliage.**

the movements of any passerine during a hawking maneuver based on an analysis of a taped record. Apart from the "sit-and-wait" (Huey and Pianka 1981) scanning session (at least 25 sec) before the launch, the sallying maneuver examined here was documented in full from its initiation on a powerline to capture of an insect. The perched, watchful phase involved abrupt, short rotations of the head, each alternating with a brief pause and rapid peering in its facing direction. Mostly the bird scanned to the front and sides to about 90°, but occasionally it turned its head to peer over its shoulder to the rear. The entire hawking maneuver from launch to capture lasted about two seconds, so the insect was fairly close to the bird. The small insect was visible on the tape and appeared to be heavy-bodied and short-winged. Earlier, a similar type of insect flew quickly on a parabolic course close over the perched bird's head, but the flycatcher appeared to ignore it or perhaps did not notice it.

As the bird leaned forward on its perch to initiate its aerial attack, it raised both wings fully over its back (Fig. 1A, left), and leaped into the air (Fig. 1A, right). Its momentum initially carried the bird below the

level of the powerline, but it quickly recovered and flew in the direction of its prey as it adjusted its course to the insect's changing position. Flight adjustment was inferred from variation in rotational positions of the spread-tail (Fig. 1B) early during its approach flight. As the bird closed on its prey, its angle of attack (body alignment relative to horizontal) increased (Fig. 1C) slightly, and its head started to elevate. Final closing attack (Fig. 1D) shows the insect close to the bird's head; the angle of attack of the flycatcher at this point is more exaggerated, with its head raised and its stereoscopic vision focused on its prey. The attack (Fig. 1E) came with a braking semi-stall maneuver, body angled upwards and wrists held up, and wings flared and cupped forward. The flared outer primaries exhibited strong, open wing slots during the capture. The bird apparently captured its prey successfully (the insect was not seen again flying past the bird), and immediately it banked and swerved right toward trees at the roadside.

*2015 observations.*—Observations of the 2015 bird revealed insectivory and frugivory. I observed hawking behavior on flying insects by the 2015 bird on 28 October, but not the next day during my watch. It spent time on exposed, small dead branches protruding above the live crown of the large Gumbo Limbo where the air column was visible 360° around the bird. Similarly, hawking also was observed by R. Diaz (in litt., 14 December 2015) on only one of his two visits. However, evidently it spent more time on 26 October “flycatching” in the air (L. Wegman to R. Titus, in litt.) than I encountered later in its stopover. My fieldnotes record estimated distances to prey of two hawking attacks, one about 3 m and a second about 10 m; both flights were flown horizontally from the perch. Both involved a terminal “sally-stall” capture maneuver (Remsen and Robinson 1990) similar to that illustrated in Fig. 1. In both instances, the bird returned to the same bare branches in the Gumbo Limbo to begin another period of watchfulness.

I saw frugivory on both days I observed the 2015 bird. Two other informants also mentioned watching the behavior on other days. The behavior was intermittent and lasted only long enough to snatch several fruits one at a time from the same small crop of ripe berries on an adventitious Virginia Creeper vine (*Parthenocissus quinquefolia*) about 4 m high on the upper, gnarled trunk of the fig where major limbs diverged. In each case, the flycatcher descended from higher perches in the crown, where it spent most of its foraging time, to a perch near the fruit source. From there it sallied about 3-4 m in a direct, horizontal flight followed by a partial, braking stall in front of the cluster when it grabbed a fruit, and returned to the same perch. The sally for fruit resembled a version of its hawking maneuvers. Fruits were simply swallowed whole without any preparation. On the two days I observed the bird, I watched it regurgitate and drop seeds as it sat on perches. Each creeper fruit is a fleshy berry



4-6 mm in diameter usually with two to three seeds. The fig itself had few fruits (one small cluster observed) and none of them was ripe.

Most of the bird's foraging activity involved sally-capture maneuvers at foliage from perches in the upper crown of a solitary fig in an open stand of mixed-age oaks. In a couple cases, I was not sure whether the prey substrate was a leaf or the air space near leaves. The fig was about 15 m tall (ca. 45-50 ft) and its broad, dome-like crown at least as wide. The bird perched in a fairly erect posture ( $45^{\circ}$ - $50^{\circ}$  oblique) on open, horizontal or low-angled, upper interior branches below the semiopen, peripheral foliage layer, and scanned leaves and twigs near and far from its position (Fig. 2). Scan distances were judged from its attack behavior when it launched outward sally flights. Most sallies were outward maneuvers ( $n = 14$ ) that ended (usually) with capture attacks on or (possibly) near foliage substrates. In two well-observed cases, the sally attacks were directed at foliage and employed a brief stall-strike or snatch maneuver similar to those observed in the videoclip of hawking and in plucking fruit on the wing (above). In one other well-observed case involving a maneuver directed at foliage overhead, the sally terminated in a brief stall-glean attack directed at the underside of a leaf. This sally was initiated steeply upwards and ended at a leaf cluster about 0.5-0.6 m above its perch, followed by a return to the same perch. In contrast, the outward, low-angled sallies at foliage varied from about four to six meters in length across a portion of the upper crown-spread. My notes on several sally maneuvers do not distinguish between the possibility of sally-strike on the way by, sally-stall, or sally-hover (flying in place) alternative capture attacks. In other cases, I was unable to see the attack substrate clearly from my position on the ground. In all outward sallies, the capture maneuvers carried the sallier away from its launch perch in the fig to a perch in another part of the crown. The sallying attacks were preceded by a variable "sit-and-wait" interval accompanied by scanning. It chiefly inspected foliage around and above its head in a series of sequential, rapid-peering scans preceded by short head rotations laterally from front to sides, or over its shoulder (Fig. 2). I did not witness visits to other trees in the vicinity, but, R. Diaz (in litt.) saw the bird leave on a long excursion, and thought it visited another fig in the cemetery. He also photographed it in a large oak perched on an interior branch below a relatively dense, peripheral foliage layer in a position similar to those chosen in the focal fig. L. Wegman (in litt.) reported seeing the flycatcher in another fig to the east, and perhaps in oaks, but it always returned to the first fig and the Gumbo Limbo. On the last day before the bird disappeared (31 October), a report on a birding listserv suggested the flycatcher may have been investigating other parts of the park-like cemetery. The status of the small fruit source in the fig just before its departure is unknown.

## DISCUSSION

*Foraging behavior: vagrancy sites versus native range.*—Here, I assume the behaviors of the two individuals in uncharacteristic geographic locations in Florida remain informative about foraging in the species. Species-typical behaviors, though flexible to a degree, are believed to be adaptive under the view that variation in these behaviors can affect the fitness of individuals. Increasingly, evidence supports the view that different search and food-capture tactics practiced by birds, each associated with a suite of morphological adaptations, allow effective exploitation of different food-type or patch-type resources present in different structural situations in habitats (e.g., Fitzpatrick 1980, 1985; Robinson and Holmes 1982; Schluter 1982; Moermond and Denslow 1985).

An issue arises concerning limited behavioral observations of a few individuals in out-of-range locations as to how representative the behaviors may be. Thus, the foraging behavior of a couple vagrant individuals in Florida need to be placed in the context of what may be known about this behavior in its native range. An observer can expect that in unfamiliar habitats an arboreal bird will exhibit flexibility in its use of unfamiliar plant species, but that it may be constrained by phylogeny and morphology during foraging to respond to similar vegetative structural features in similar ways and to perform similar search and prey capture tactics.

Except for details on insectivore foraging modes in Cintra (1997; see below), most published information is of a general nature. Remarks on foraging often are categorical, and refer to food type or trophic guild membership classifications offered in community or regional avifaunal studies. Categories applied to *E. varius* range in one population or another from frugivore, insects and fruits, primarily insectivore, insectivore, to omnivore (e.g., Haverschmidt 1968, Davis 1993, Malizia et al. 2005, Parrini and Pacheco 2011, Las-Casas et al. 2012, Laskey and Keitt 2012, Pacheco et al. 2014). These categories are only broadly informative. Four studies provided a general description of foraging modes or specific elements in the diet. Ridgely and Tudor (1989) noted that *E. varius* eats small fruits and sallies for insects in the air and on foliage, but they provided no details and spoke of the species as a whole. Another source reported that a single *E. varius* was observed catching swarming termites in the air (Vasconcelos et al. 2015). Parrini and Pacheco (2011) noted that *E. varius* and other species in southern Brazil ate soft fruits produced by the tree *Alchornea triplinervia* (Euphorbiaceae). Migrant *E. varius* commonly harvested fruits from this tree species before departure, and from a congeneric relative on its return. Most fruit were taken on the wing (92%,  $n = 25$  cases), while only 2 cases involved taking fruit while perched. These authors reported that *E. varius* tended to alternate fruit capture

with insectivory, as I observed. Finally, in the only life history review of the species, Mobley (2004) describes food and foraging as “insects, also small fruits” and “hawks flying insects and sallies to hover-glean items from foliage.” I cannot confirm “hover-gleaning,” but I follow Moermond and Denslow (1985), and Remsen and Robinson (1990), in distinguishing a transitory stall maneuver (momentary, fluttering hesitation in flight) from flying in place for more than just a moment (true hovering). Florida birds appeared to practice the former behavior, but another observer may characterize the same behavior as “hovering.” One student of tropical birds (Hilty 2003) described its foraging behavior in Colombia, where the migratory population often winters, as “sallies to air or flutters and hovers in front of foliage for insects and small fruit.” Overall, my observations agree with most of what has been reported on foraging in Variegated Flycatchers. The species appears to be a frequent aerial forager that combines taking arthropods (mainly insects) and soft fruits in a modestly diverse diet. Observations on the Florida vagrants, albeit tentative, suggest that it uses similar capture tactics (sallying) to take insects on leaves and in the air, and small, soft fruits *in situ* from arboreal sources (also see Parrini and Pacheco 2011). Whether transitory stall-sallying is a frequent capture maneuver elsewhere remains to be seen, but I suspect it is considering its use in different contexts in Florida. If so, then the behavior may provide some understanding of a notable primary feather notch in *Empidonomus* not shared by its clade relatives (*Myiodynastes*, *Legatus*) that otherwise have similar plumage appearances; the modification is shared with two of its closest generic relatives in the same clade (*Griseotyrannus*, *Tyrannus*) (Ohlson et al. 2008, Mobley 2004). The emargination or notching on the inner webs of outermost primaries produces broad-based slots (Fig. 1E) that serve in other species to enhance lift at slow air speeds and to reduce stall-speeds (Savile 1957)—perhaps a useful feature during sallying capture maneuvers in the present case. Yet, as a generalist aerial forager, *Empidonomus* is intermediate in other ecomorphological structures related to foraging between *Legatus*, a frugivore specialist, and *Tyrannus* hawking specialists (Fitzpatrick 1985:466).

A single quantitative study (Cintra 1997) of foraging behavior in a tropical assemblage of semi-openland tyrannids in Pará, Brazil, included information on foraging tactics and vertical tree use of *E. varius* in a savanna habitat near Santarém. I assume that the population of *E. varius* there was the resident subspecies. Four modes of insectivory were recorded for *E. varius*, among which hawking was observed about 70% of the time, while sallying to foliage, characterized as “outward hover,” “upward hover,” and “upward strike” (terminology, Fitzpatrick 1980), constituted <15% each to complete the relative frequency in the sample of observations. Two of these capture modes involve “hovering;” in contrast, birds performing upward strikes take prey from an overhead leaf by a

rapid, flying approach, and snapping or “striking” the immobile prey on the way by without hovering (Fitzpatrick 1980, Cintra 1997). In Florida, I did not witness an upward strike, but I did see what some observers in the literature may call “hovering” at the target site. For both outward hover and upward hover Cintra (1997), true hovering may be more likely after an upward sally than after an outward sally (Fitzpatrick 1980:45). But, Cintra described his “outward hover” as featuring a “brief hovering” maneuver, which suggests the possibility of a fluttering stall at the end of the sally. Remsen and Robinson (1990) remarked that many reports of hovering captures in the literature may be examples of “sally-stalling.” A cautionary remark is in order on Cintra’s (1997) study, which as noted focused on a resident population of *E. varius*. Some people suspect that the migrant and resident populations may represent separate species (Hilty 2003, Mobley 2004). In any event, within the range of search and capture modes expressed in *E. varius* populations, one might expect variation in frequencies of use of these modes depending on geography, season, and resource availability among other potential factors. For example, it is possible that hawking may be less frequent in migrant populations and frugivory more important (Hilty 2003) than in resident populations in the Amazonian tropics.

*Behavioral relationship to habitat structure.*—My observations also implicated an apparent relationship between the foraging behavior of the 2015 bird and the structure of the two trees where it devoted most of its foraging effort. The apparent complementary match between behavior and tree structure evoked the impression of a definite functional connection between bird and trees. This impression, which I term “form/function” matching to habitat structure (Ricklefs 2000), is well supported by a body of work in the avian literature on foraging ecology concerning the importance to foraging birds of vertical and horizontal structure within habitats, plant species composition, foliage distribution, and foliage arrangement on twigs (e.g., MacArthur and MacArthur 1961, James 1971, Robinson and Holmes 1982, 1984, Whelan 1989, Parrish 1995). Such habitat-behavior relationships may be important in habitat selection (e.g., James 1971) and are associated with ecomorphological adaptations (such as beak size and shape) that can constrain behavior and also promote efficiency in finding, capturing, and processing food (e.g., Fitzpatrick 1985, Moermond and Howe 1988). Often sallying to arboreal substrates depends on spotting mid-distant to distant, stationary prey on the underside of leaves in moderately or well-lighted conditions from relatively open perches (“open-perch searchers,” Robinson and Holmes 1982). The distribution of the foliage in the focal fig reflected the condition of many broad-leaved forest trees that are mature, namely leaves chiefly occur in a continuous or semi-continuous shell around the periphery of the crown. This foliage distribution-type is described as “monolayered”, in

contrast to younger trees in which foliage can be distributed through the crown volume from periphery to near the tree bole (multilayered) (Horn 1971). The focal fig, as in other monolayered trees, provided open, small branches near and below the foliage layer, which were suitable perches offering relatively unobstructed vistas of foliage near and moderately far from its vantage. No protruding twigs were present on the outside periphery of the canopy of the focal fig, so when it chose to hawk for flying prey in the air column beyond or above the trees, it moved to the adjoining Gumbo Limbo where it found several such perches. When it interrupted its other activities to pluck a few berries, it moved lower in the fig to a perch near the fruit source that provided open, horizontal flight access. The direct, unhesitant sallies to fruit clusters on the vine suggested the bird chose a cluster, perhaps even a particular berry, from its perch before it launched its foray. In contrast to the behavior of the flycatcher, a Northern Parula (*Parula americana*) entered clusters of peripheral foliage in the fig and searched leaves and twigs from the inside by active perch-shifting, each followed by brief scans; two prey attacks involved forward gleans from standing positions at near foliage.

The perch-height distribution measured by Cintra (1997) in savanna habitat in northeastern Brazil also appeared to express a relationship between perch use and foraging behavior. The puzzle in the distribution is the almost complete absence of perch use at the 90% level in trees in comparison to 100% and 60-80% levels. The most parsimonious explanation for this usage gap is that it reflected perch requirements of hawking (tops of crown in this species) and sallying to foliage (perches below the peripheral foliage canopy in the more open crown interior). Cintra's observations also describe the pattern of perch use in tree profiles by the 2015 Florida bird during perch sallying to foliage (fig, mostly 70-80% relative height) and hawking (Gumbo Limbo, 100%).

In summary, descriptions of foraging behavior of *E. varius* in South America encompass the behavior observed in Florida. The species is a semi-openland, sit-and-wait forager that specializes in sallying attacks on prey in open air and on foliage, and on taking small fruit. It was notable that the focal tree one individual used most often over a period of several days appeared to match the distance-search behavior of perch-to-foliage sallying to an overhead, umbrella-like foliage distribution above a network of open branches, which the bird used to locate potential prey. In contrast, hawking positions were from open peripheral perches at the top of an adjoining tree that permitted full view of the air column.

#### ACKNOWLEDGMENTS

I am indebted to Robert C. Dobbs for constructive comments that improved the manuscript. I thank Rangel Diaz, Russ Titus, and Lee Wegman for kindly answering my questions and providing observational information on the Fort Lauderdale bird. I am grateful to Diana

Doyle for access to her videotape of hawking behavior by the St. Johns County bird, which she submitted to the Florida Ornithological Society Records Committee. The videotape files are available in state Records Committee archives at the Florida Museum of Natural History, Gainesville.

## LITERATURE CITED

- ABBOTT, D. J., III, AND D. W. FINCH. 1978. First Variegated Flycatcher (*Empidonomus varius*) record for the United States. *American Birds* 32:161-163.
- ALEIXO, A., AND M. GALETTI. 1997. The conservation of the avifauna in a lowland Atlantic forest in south-east Brazil. *Bird Conservation International* 7:235-261.
- CINTRA, R. 1997. Spatial distribution and foraging tactics of tyrant flycatchers in two habitats in the Brazilian Amazon. *Studies of Neotropical Fauna and Environment* 32:17-27.
- DAVIS, S. E. 1993. Seasonal status, relative abundance, and behavior of the birds of Concepción, Departamento Santa Cruz, Bolivia. *Fieldiana Zoology, New Series* 71:1-33.
- DENNY, M. 2009. Variegated Flycatcher (*Empidonomus varius*) in southeastern Washington 6-7 September 2008: The story of discovery. *WOS [Washington Ornithological Society] News* 118: December 2008-January 2009.
- FFRENCH, R. 1973. *A Guide to the Birds of Trinidad and Tobago*. Livingston Publishing Company, Wynnewood, Pennsylvania.
- FITZPATRICK, J. W. 1980. Foraging behavior of neotropical tyrant flycatchers. *Condor* 82:43-57.
- FITZPATRICK, J. W. 1981. Search strategies of tyrant flycatchers. *Animal Behavior* 29:810-821.
- FITZPATRICK, J. W. 1985. Form, Foraging Behavior, and Adaptive Radiation in the Tyrannidae. Pages 447-470 *in* *Neotropical Ornithology* (P. A. Buckley, M. S. Foster, E. S. Morton, R. S. Ridgely, and F. G. Buckley, Eds.). *Ornithological Monographs* No. 36.
- GABRIEL, V. DE A., AND M. A. PIZO. 2005. Foraging behavior of tyrant flycatchers (Aves: Tyrannidae) in Brazil. *Revista Brasileira de Zoologia* 22:1072-1077.
- GREENLAW, J. S. 2015. Twenty-third report of the Florida Ornithological Society Records Committee: 2013. *Florida Field Naturalist* 43:19-36.
- HAVERSCHMIDT, F. 1968. *Birds of Surinam*. Oliver & Boyd, Edinburgh, United Kingdom.
- HILTY, S. L. 2003. *Birds of Venezuela*, 2nd ed. Princeton University Press, Princeton, New Jersey.
- HORN, H. S. 1971. *The Adaptive Geometry of Trees*. Princeton University Press, Princeton, New Jersey.
- HOULE, D., AND J. HOULE. 1993. First record of Variegated Flycatcher for Canada. *Birders' Journal* 2:291-300.
- HUEY, R. B., AND E. R. PIANKA. 1981. Ecological consequences of foraging mode. *Ecology* 62:991-999.
- JAMES, F. C. 1971. Ordinations of habitat relationships among breeding birds. *Wilson Bulletin* 83:215-236.
- JAMES, R. D. 1991. *Annotated Checklist of the Birds of Ontario*, 2nd ed. Royal Ontario Museum, Toronto.
- LAS-CASAS, F.-M. G., S. M. DE A. JÚNIOR, M. M. DIAS, AND C. A. BIANCHI. 2012. Community structure and bird species composition in a *caatinga* of Pernambuco, Brazil. *Revista Brasileira de Ornitologia* 20:302-311.
- LASKY, J. R., AND T. H. KEITT. 2012. The effect of spatial structure of pasture tree cover on avian frugivores in eastern Amazonia. *Biotropica* 44:489-497.
- MACARTHUR, R. H., AND J. W. MACARTHUR. 1961. On bird species diversity. *Ecology* 42:594-598.
- MALIZIA, L. R., BLENDINGER, P. G., M. E. ALVAREZ, L. O. RIVERA, N. POLITI, AND G. NICOLOSI. 2005. Bird communities in Andean premontane forests of northwestern Argentina. *Ornithologia Neotropical* 16:231-251.

- MARTINEZ, A. E., AND S. K. ROBINSON. 2016. Using foraging ecology to elucidate the role of species interactions in two contrasting mixed-species flock systems in northeastern Peru. *Wilson Journal of Ornithology* 128:378-390.
- MERRILL, R. J., AND M. BARTELS. 2015. Ninth report of the Washington Bird Records Committee (2008-2010). *Western Birds* 46:299-325.
- MLODINOW, S. G., AND D. S. IRONS. 2009. First record of the Variegated Flycatcher for western North America. *Western Birds* 40:47-50.
- MOBLEY, J. A. 2004. Subfamily Tyranninae. Pages 406-425 *in* Handbook of Birds of the World, Volume 9. Cotingas to Pipits and Wagtails Lynx Edicions, Barcelona.
- MOERMOND, T. C., AND J. S. DENSLOW. 1985. Neotropical avian frugivores: Patterns of behavior, morphology, and nutrition, with consequences for fruit selection. Pages 865-897 *in* Neotropical Ornithology (P. A. Buckley, M. S. Foster, E. S. Morton, R. S. Ridgely, and F. G. Buckley, Eds.) Ornithological Monographs No. 36.
- MOERMOND, T. C., AND R. W. HOWE. 1988. Ecomorphology of feeding: Behavioral abilities and ecological consequences. *Acta XIX Congressus Internationalis Ornithologici* 2265-2270. Ottawa, Canada.
- NICHOLSON, C. P., AND S. J. STEDMAN. 1988. The official list of Tennessee birds: addendum I. *Migrant* 59:1-4.
- OHLSON, J., J. FJELDSÅ, AND P. G. P. ERICSON. 2008. Tyrant flycatchers coming out in the open: Phylogeny and ecological radiation of Tyrannidae (Aves, Passeriformes). *Zoologica Scripta* 37:315-335.
- PACHECO, J. F., R. PARRINI, G. M. KIRWAN, AND G. A. SERPA. 2014. Birds of Vale das Taquaras region, Nova Friburgo, Rio de Janeiro state, Brazil: Checklist with historical and trophic approach. *Cotinga* 36:74-102.
- PARRINI, R., AND J. F. PACHECO. 2011. Frugivoria por aves em *Alchornea triplinervia* (Euphorbiaceae) na Mata Atlântica do Parque Estadual dos Três Picos, estado do Rio de Janeiro, Brasil. *Atualidades Ornitológicas On-line*, No. 162:33-41 <<http://www.ao.com.br>>.
- PARRISH, J. D. 1995. Effects of needle architecture of warbler habitat selection in a coastal spruce forest. *Ecology* 76:1813-1820.
- REMSEN, J. V., JR., AND S. K. ROBINSON. 1990. A classification scheme for foraging behavior of birds in terrestrial habitats. *Studies in Avian Biology* No. 13:144-160.
- RICKLEFS, R. E. 2000. Density dependence, evolutionary optimization, and the diversification of avian life histories. *Condor* 102:9-22.
- RIDGELY, R. S., AND G. TUDOR. 1994. *The Birds of South America, Vol. 2. The Suboscine Passerines*. University of Texas Press, Austin.
- ROBINSON, S. K., AND R. T. HOLMES. 1982. Foraging behavior of forest birds: The relationships among search tactics, diet, and habitat structure. *Ecology* 63:1918-1931.
- ROBINSON, S. K., AND R. T. HOLMES. 1984. Effects of plant species and foliage structure on the foraging behavior of forest birds. *Auk* 101:672-684.
- SCHLUTER, D. 1982. Seed and patch selection by Galápagos ground finches: Relation to foraging efficiency and food supply. *Ecology* 63:1106-1120.
- SHERRY, T. W., AND L. A. MCDADE. 1982. Prey selection and handling time in two neotropical hover-gleaning birds. *Ecology* 63:1016-1028.
- DE VASCONCELOS, M. F., D. HOFFMANN, M. C. DE ARAÚJO, AND P. N. VASCONCELOS. 2015. Bird-termite interactions in Brazil: A review with perspectives for future studies. *Biota Neotropica* 15:1-22.
- WHELAN, C. J. 1989. Avian foliage structure preferences for foraging and the effect of prey biomass. *Animal Behaviour* 38:839-846.

## DEFENSIVE BEHAVIOR OF OSPREYS (*Pandion haliaetus*) AT NATURAL AND ARTIFICIAL NEST SITES

CIERRA BRAGA

*Email: cbraga2012@my.fit.edu*

Ospreys (*Pandion haliaetus*) are found nearly worldwide and are common year-round in Florida (Bierregaard et al. 2016, Solensky 2004). Osprey nests in natural substrates (trees) and on artificial substrates (poles) can be found throughout Florida, primarily around sources of water because this raptor's diet is almost exclusively composed of fish (Bierregaard et al. 2016). Ospreys use artificial nest sites such as channel markers, utility poles, and platforms as a supplement to or replacement for natural nest sites, which may no longer be available due to alterations in their environment, such as deforestation due to commercial development (Castellanos & Ortega-Rubio 1995, Bierregaard et al. 2016). Nests in trees often have more cover due to branches, but artificial nest substrates have no cover and this can allow the nest to be more susceptible to intruders.

Nest predation can be reduced by nest defense behaviors by adults (Montgomerie & Weatherhead 1988). Ospreys conduct nest defense behaviors not only to avoid predation, but also other birds who may take over the nest for their own (Bierregaard et al. 2016). Predation pressures that Ospreys are face include raccoons (*Procyon lotor*) and other birds such as eagles that steal their eggs or kill the nestlings (Ortega-Jimenez et al., 2011). Although Ospreys are one of the most-studied North American raptors, little is known about Osprey nest defense (Bierregaard et al. 2016). Signs of territorial defense in Ospreys include: sitting upright in the nest to show that they are alert, shaking wings, warning vocalizations, and aerial chases of the intruder (Bretagnolle & Thibault 1993, Bierregaard et al. 2016).

In this study, I used observations at nests to address the following question: Is there a difference in the types and frequencies of nest defense behaviors exhibited by Ospreys nesting in natural substrates and nesting on artificial substrates? I hypothesize that Ospreys nesting on artificial substrates will spend significantly more time defending their nests by comparing nest defense behaviors over a period of 1 h than Ospreys nesting in trees because there is more cover at and proximate to nests in trees due to surrounding branches. Meanwhile, nests on poles tend to lack cover and can be more easily accessed by intruders, such as predators. I also wished to quantify the most commonly displayed defensive behavior performed by Ospreys at both artificial and natural nest sites.

### METHODS

During the months of January-May 2014, I conducted observations at five Osprey nests on poles and at five nests in trees near the Indian River Lagoon in Brevard County, Florida (Fig. 1, Table 1). The nests were randomly selected for this study, and their coordinates were determined by Google Earth. Nests were observed for 1 h total each. Each behavior was recorded after 1 min of observation during the hour in order to get a representation of nest defense behavior for a time budget. The behaviors were categorized into two types: nest defense and other behaviors.

Ospreys would Vocalize when another bird (typically another Osprey) was observed flying above the nest. Aerial Chases occurred when another Osprey landed on the nest or came near it, and one or both of the residents forced it away on the wing. I recorded Wing Shaking when an Osprey would shake its wings as a threatening gesture (Bretagnolle and Thibault 1993). Vigilance was defined as standing on the edge of the nest in an





**Figure 1. Osprey nest sites on the Indian River Lagoon, Brevard County, Florida, January – May 2014. The squares show the nests on artificial substrates, and the stars show the nests on natural substrates.**

alert posture. As in Bretagnolle and Thibault (1993), Ospreys sitting in the nest were considered to be resting; while a more vertical posture of the bird (standing on the edge of the nest) was considered to be Vigilant.

Due to the small sample of time collected for the behaviors, the nest defense behaviors analyzed were grouped into three types: Calling/Wing Shaking, Aerial Chases, and Edge.

**Table 1. Osprey nest sites on the Indian River Lagoon, Brevard County, Florida, January – May 2014.**

Nest site	Substrate type	Latitude	Longitude
Grills	Artificial	28°12'40.09"N	80°39'51.73"W
Chilly Spoons	Artificial	28°11'29.29"N	80°40'13.70"W
Captain Katanna's	Artificial	28°10'38.21"N	80°38'56.43"W
Post Rd/US 1, 7 Eleven	Artificial	28°10'20.40"N	80°38'51.66"W
Crab House 1	Artificial	28° 7'26.45"N	80°37'48.25"W
Elm Dr US 1, 1	Natural	28°10'30.35"N	80°38'51.36"W
Elm Dr US 1, 2	Natural	28°10'29.11"N	80°38'51.14"W
Elm Dr US 1, 3	Natural	28°10'25.85"N	80°38'48.87"W
Church	Natural	28°10'47.64"N	80°40'22.63"W
Suntree	Natural	28°13'26.59"N	80°40'40.53"W

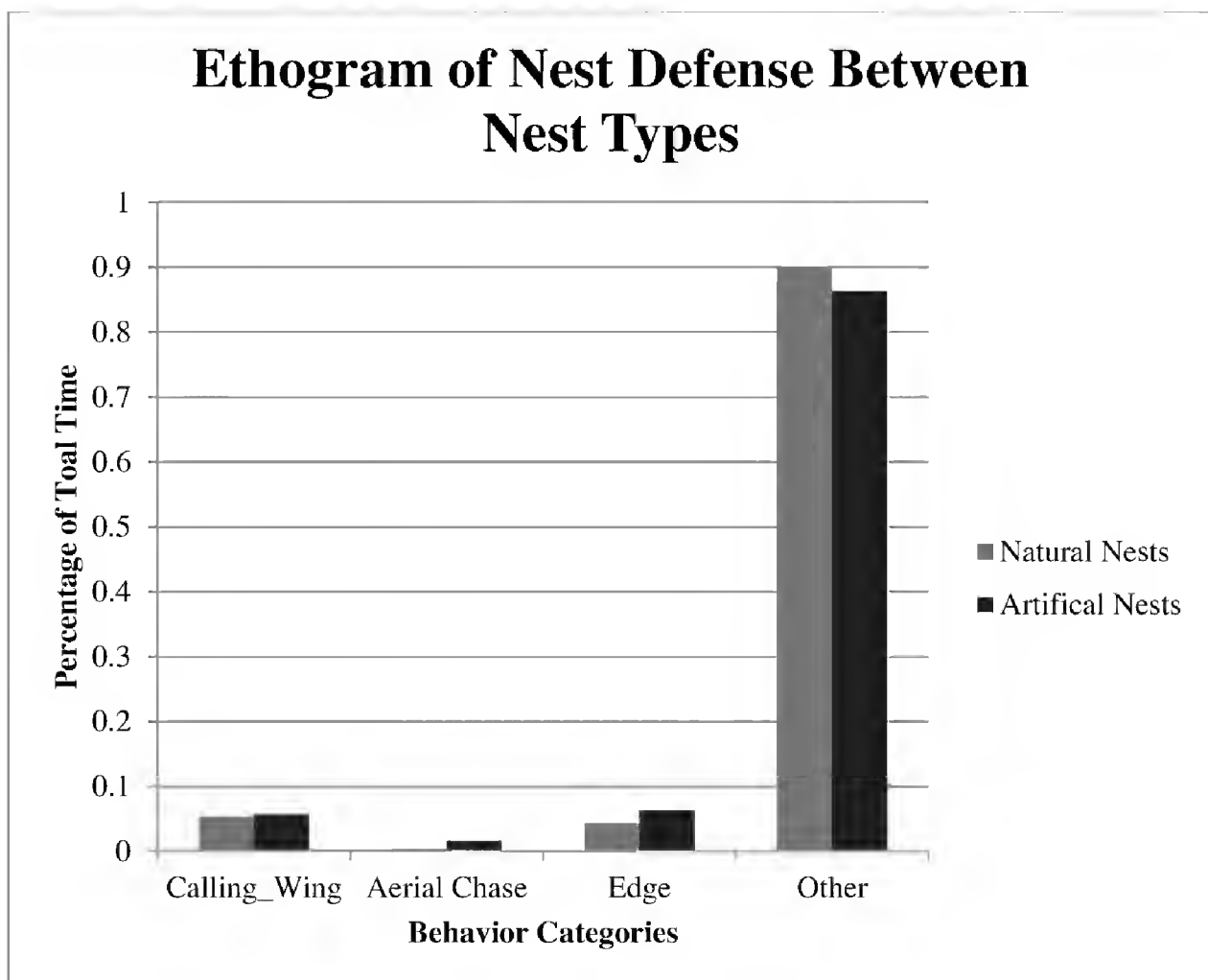
Calling/Wing were the vocalizations and wing-shaking behaviors; these were combined because they tended to occur simultaneously. Edge referred to the vigilance of the Osprey as it would stand on the edge of the nest. Other behaviors included eating, flying, cleaning, and sitting in the nest without showing signs of aggression. Statistical analyses were conducted in RStudio (RStudio Team 2015). Shapiro-Wilk test and variances were unequal (Bartlett test of homogeneity of variance), and I used a Wilcoxon signed rank test to test for differences in the nest-defense behavior categories between the artificial- and natural-nest substrates.

## RESULTS

There was no difference in the total territorial defense behaviors between natural and artificial nests (Fig. 2). However, I did find a difference in the total amount of time spent on nest-defense behaviors and other behaviors regardless of nest type ( $W = 0$ ,  $P < 0.01$ ). There was no difference in the amount of time spent on Calling/Wing Shaking and Edge (Fig. 2), or between Aerial Chase and Edge (Fig. 2), but there was a significant difference between the Calling/Wing Shaking and Aerial Chase (Fig. 2).

## DISCUSSION

Although I expected that Ospreys nesting on poles would spend significantly more time on nest defense than Ospreys nesting in trees, the data do not support this



**Figure 2. Ethogram of the behaviors observed at artificial and natural nest substrates, Indian River Lagoon, Brevard County, Florida, January – 2014.**

hypothesis. Similar to results of Castellanos and Ortega-Rubio's (1995) study, artificial and natural nest substrates did not differ much in the display of nest defense behaviors. I did find a difference between the total time spent on nest defense and other behaviors for each nest type (artificial and natural substrate). My results showed that nest defense does not make up the majority of the Osprey's time, at least in this study area during this time. The location of artificial nest structures and their distance from one another may have an influence on Osprey nest defense behavior. However, the lack of a difference for nest defense behaviors between nest types indicates that Ospreys are tolerant of not just different environments, but urbanization as well as indicated by Bierregaard et al. (2016). Whether or not the nest was on an artificial or in a natural substrate did not negatively affect the Osprey by having the Osprey exert more energy in nest defense behaviors. Nest-defense behaviors are used by Ospreys to prevent intruders from entering their nests to take them over to prey on the contents (Bierregaard et al. 2002). More studies on the predation and interaction of Ospreys with intruders would be necessary in order to address if there is a difference in the rate of predation and intrusion between artificial and natural nest substrates, but based off this study and others (Castellanos & Ortega-Rubio 1995, Bierregaard et al. 2016) that have not shown a noticeable difference for nest defense behaviors between nest types, it could be that the act of intruding upon a nest and the predation of the nest is an act of opportunity and not necessarily a common occurrence.

#### ACKNOWLEDGMENTS

This study was performed for an undergraduate research course at the Florida Institute of Technology. Special thanks to Dr. Christin Pruett and an anonymous referee for their constructive suggestions, which greatly improved the manuscript.

#### LITERATURE CITED

- BIERREGAARD, R. O., A. F. POOLE, M. S. MARTELL, P. PYLE, AND M. A. PATTEN. 2016. Osprey (*Pandion haliaetus*), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: <<https://birdsna.org/Species-Account/bna/species/osprey>>.
- BRETAGNOLLE, V., AND J. C. THIBAUT. 1993. Communicative behavior in breeding Ospreys (*Pandion haliaetus*): Description and relationship of signals to life history. *Auk* 110:736-751.
- CASTELLANOS, A., AND A. ORTEGA-RUBIO. 1995. Artificial nesting sites and Ospreys at Ojo de Liebre and Guerrero Negro Lagoons, Baja California Sur, Mexico. *Journal of Field Ornithology* 66:117-127.
- MONTGOMERIE, R. D., AND P. J. WEATHERHEAD. 1988. Risks and rewards of nest defence by parent birds. *Quarterly Review of Biology* 63:167-187.
- ORTEGA-JIMENEZ, V. M., S. ARRIAGA-RAMÍREZ, AND S. ALVAREZ-BORREGO. 2011. Parental infanticide by Osprey (*Pandion haliaetus*) during nest defense. *Journal of Raptor Research* 45:93-95.
- RSTUDIO TEAM (2015). RStudio: Integrated Development for R. RStudio, Inc., Boston, Massachusetts <<http://www.rstudio.com/>>.
- SOLENSKY, M. J. 2004. Partial migration and wintering use of Florida by Ospreys. *Journal of Raptor Research* 38:55-61.

**FIRST NORTH AMERICAN REPORT OF AN AMERICAN KESTREL (*Falco sparverius*) ROOSTING IN A MONK PARAKEET (*Myiopsitta monachus*) NEST**

JOSHUA M. DIAMOND

*Florida International University, Southeast Environmental Research Center,  
Miami, Florida 33199*

*Email: jdiam009@fiu.edu*

The Monk Parakeet (*Myiopsitta monachus*) is Florida's most common and conspicuous parrot; particularly widespread in urban and suburban environments (Pranty et al. 2006). In parts of Florida such as Broward County, they may outnumber all other parrots combined (Pranty and Epps 2002). It is the only parrot that does not nest in natural tree cavities, instead building large stick nests with many internal chambers, often compared to an apartment building (Goodfellow 2011). A survey of over 1000 Monk Parakeet nests in Florida found 50% were built on manmade structures, 39% on exotic trees, and 9% on native trees (Pranty 2009). Each cavity is unconnected, and empty chambers are sometimes occupied by other species. In this way, the Monk Parakeet creates a nest web, transforming resources for secondary cavity-nesters, similar to woodpeckers. These secondary nesters include perching birds like the White Monjita (*Xolmis irupero*), Screaming Cowbird (*Molothrus rufoaxillaris*), baywings (*Agelaioides* spp.), Guira Cuckoo (*Guira guira*), and Rock Dove (*Columba livia*), ducks such as Brazilian Teal (*Amazonetta brasiliensis*), and falcons such as the American Kestrel (*Falco sparverius*) and Spot-winged Falconet (*Spizapteryx circumcincta*) (Port and Brewer 2004, Nores 2009, Goodfellow 2011). The American Kestrel's range extends into South America, where it overlaps with the native range of Monk Parakeets. The American Kestrel is a widespread breeding resident in South America, except for the rainforests of the Amazon region. The Monk Parakeet's native range is more restricted, occurring primarily south of the Amazon. In Argentina, where both species are native, American Kestrels are periodically observed usurping Monk Parakeet nest cavities (de Lucca 1992). I began observing a group of Monk Parakeet nests in Miami, Florida at the start of February 2016. All birds were nesting on light towers surrounding an athletic complex at Florida International University. I found large stick nests on eight out of 12 towers surrounding the complex, each with one or two separate stick nests. On 8 February 8 I observed an American Kestrel, perching above the nests atop the towers. This kestrel was observed minutes later atop a different tower. The following day, I returned before dusk to observe parakeets returning to roost. I observed the kestrel fly to a tower with two unconnected parakeet nest piles, each with one visible cavity entrance. It briefly entered the lower nest, exiting about one minute later, and subsequently entered the upper nest, which it did not exit before sundown. Both nests on this tower were unusually quiet while the kestrel was present. The American Kestrel was observed in the same area for the next seven weeks, primarily perched and foraging. This bird's favorite perch was netting at the edge of the baseball field, from which it foraged on the wing for flying insects. On another dusk survey on 16 March, the kestrel again was observed returning to and roosting in the same nest.

I considered the possibility that this kestrel belonged to the rare subspecies Southeastern American Kestrel (*Falco sparverius paulus*). Most kestrels found in Florida are wintering migrants, members of the nominate race (*F. s. sparverius*) (Bohall-Wood and Collopy 1986). The Southeastern American Kestrel has been declining for decades,

and is listed as a threatened species by the State of Florida (Florida Natural Areas Inventory 2001). *F. s. paulus* was extirpated from Miami-Dade County around 1940, and from the 1940's through the 1980's, declined 82% in north-central Florida (Hoffman and Collopy 1988). If this were the rare subspecies, it would be the first nest in the region in decades. The kestrel was last seen 1 April, and I cannot assume it was the threatened subspecies. This is the first account of an American Kestrel using a Monk Parakeet nest in North America. While the American Kestrel was present, Monk Parakeets maintained a presence at the nest, but recorded activity was low, with no nest building observed. Following the kestrel's departure, nest activity appears to have resumed a normal pace. The Monk Parakeets were never seen attempting to chase away the kestrel, although I repeatedly observed parakeets at several nests chase away European Starlings (*Sturnus vulgaris*).

As Monk Parakeets have established populations north of Florida, this creates an interesting opportunity for American Kestrels. Monk Parakeets are urban adapted birds, thriving in human-dominated landscapes. Kestrels often forage in urban and suburban areas, but could be limited by a shortage of nest sites. Evidence suggests American Kestrels may be more flexible experimenting with unfamiliar nest and roost substrates. Kestrels lay pigmented eggs, while most cavity-nesting birds lay white eggs, suggesting they may have only recently adapted to cavity nests (Richards 1970). They are willing to explore novel roosts, as 85% of wintering birds in Louisiana and 68% of wintering birds in Pennsylvania used man-made substrates (Ardia 2001, Doody 1994). The Monk Parakeet nests represent a novel resource in urban North America, providing nests and roosts for kestrels, or other secondary-cavity nesters.

#### ACKNOWLEDGMENTS

This is contribution number 802 from the Southeast Environmental Research Center at Florida International University. I am grateful to John Parrish for many constructive suggestions that improved the manuscript.

#### LITERATURE CITED

- ARDIA, D. R. 2001. Winter roosting behavior of American Kestrels. *Journal of Raptor Research* 35:58-61.
- BOHALL-WOOD, P., AND M. W. COLLOPY. 1986. Abundance and habitat selection of two American Kestrel subspecies in North-Central Florida. *Auk* 103:557-563.
- DOODY, J. S. 1994. Winter roost-site use by female American Kestrels (*Falco sparverius*) in Louisiana. *Journal of Raptor Research* 28:9-12.
- FLORIDA NATURAL AREAS INVENTORY. 2001. Southeastern American Kestrel, *Falco sparverius paulus*.
- GOODFELLOW, P. 2011. *Avian Architecture: How Birds Design, Engineer, and Build*. Princeton University Press, Princeton, New Jersey.
- HOFFMAN, M. L., AND M. W. COLLOPY. 1988. Historical status of the American Kestrel (*Falco sparverius paulus*) in Florida. *Wilson Bulletin* 100:91-107.
- DE LUCCA, E. R. 1992. Nidificación del halconcito colorado (*Falco sparverius*) en nidos de cotorra (*Myiopsitta monachus*). *Hornero* 13:238-240.
- MCCOMB, W. C., S. A. BONNEY, R. M. SHEFFIELD, AND N. D. COST. 1986. Snag Resources in Florida: Are They Sufficient for Average Populations of Primary Cavity-Nesters? *Wildlife Society Bulletin* 14:40-48.
- MILLER, K. E. 2010. Nest-site limitation of secondary cavity-nesting birds in even-age southern pine forests. *Wilson Journal of Ornithology* 122:126-134.
- NORES, M. 2009. Use of active Monk Parakeet nests by Common Pigeons and response by the host. *Wilson Journal of Ornithology* 121:812-815.

- PORT, J. L., AND G. L. BREWER. 2004. Use of Monk Parakeet (*Myiopsitta monachus*) nests by Speckled Teal (*Anas flavirostris*) in eastern Argentina. *Ornitología Neotropical* 15:209-218.
- PRANTY, B. 2009. Nesting substrates of monk parakeets (*Myiopsitta monachus*) in Florida. *Florida Field Naturalist* 37:51-57.
- PRANTY, B., AND S. A. EPPS. 2002. Distribution, population status, and documentation of exotic parrots in Broward County, Florida. *Florida Field Naturalist* 30:111-150.
- PRANTY, B., K. A. RADAMAKER, AND G. KENNEDY. 2006. *Birds of Florida*. Lone Pine Publishing, Auburn, Washington.
- RICHARDS, G. L. 1970. American Kestrel, *Falco sparverius*, exhibits relic nest building behavior. *Condor* 72:476.

## **'SHADOW-BOXING' BY A NORTHERN MOCKINGBIRD (*Mimus polyglottos*)**

COREY T. CALLAGHAN

*Florida Atlantic University, Environmental Science Program, 777 Glades Road,  
Boca Raton, Florida 33431*

*Email: callaghan.corey.t@gmail.com*

The Northern Mockingbird (*Mimus polyglottos*) is a widespread, abundant species throughout North America, Mexico, and the Bahamas (Farnsworth et al. 2011). In Florida, it is a fairly common to very common resident (Greenlaw et al. 2014). They are urban adapters (Hanauer et al. 2010) that are more abundant in urban than non-urban habitats (Stracey and Robinson 2012), and this prevalence in urban landscapes has made Northern Mockingbirds a common subject of scientific studies (Farnsworth et al. 2011).

At the Banyan Bay Apartment Complex, Coconut Creek, Broward County, between April 2015 and December 2015, I frequently observed a Northern Mockingbird that consistently perched on and 'attacked' mirrors and windshields of various cars. Around 12 November 2015, I noticed that the mockingbird had only one foot (Fig. 1a), at which point I was increasingly intrigued by this individual's behavior. Following this observation, I watched this bird more intently (nearly daily) from 12 November 2015 until 1 December 2015. This bird was very tame, allowing close approach (~2-3 m) by humans, dogs, and moving cars. Throughout this time frame, I never observed the bird outside of a 0.08 ha area within the complex. It continuously perched on multiple cars, spending more time perching on cars than any other object. It would sometimes fly into a Gumbo Limbo (*Bursera simaruba*) tree to eat berries. At times, it would stay perched on a car, continuously, for up to 30 minutes. The interesting behavior, however, was when it would attack the mirrors and windshields of cars. This behavior varied in both vigor and duration, from short (~2 s) to long (~7 s) bouts in front of the mirror. The bird would swoop down to the mirror, hovering and wing-flashing. Sometimes, hovering and wing-flashing was accompanied by the bird thrusting its feet towards its reflection (Fig. 1c), and other times pecking at its reflection (Fig. 1b). At other times, the bird would simply sit on the windshield and continuously wing-flash and peck at its reflection.

The behavior described above is defined as 'shadow-boxing', which refers to a bird that fights its own image reflected in mirrors (Ritter and Benson 1934). The term was first used in the avian literature, as far as I can tell, by Dickey (1916). This behavior has been reported in a number of species around the world, both in captivity and the wild, as reviewed by Roerig (2013); he reports four accounts of Northern Mockingbird shadow-boxing, none of which provide the sorts of details I present here. Interestingly, despite the lack of scientific references, an internet search for 'mockingbird attacking mirror' yields a multitude of images and videos of this behavior.

Wing-flashing of Northern Mockingbirds is a well-known and studied behavior (Selander and Hunter 1960, Mueller and Mueller 1971) and it is generally thought that wing-flashing is used in territorial and predator defense (Dhondt and Kemink 2008). Given the intensity and forcefulness of the shadow-boxing behavior, I hypothesize this behavior is linked to territorial defense, as in the case of the California Towhee (*Melospiza crissalis*; Dickey 1916, Ritter and Benson 1934). However, unlike the other reports, this behavior is likely not tied to nesting, given the time of year and no observation of a mate. In Florida, breeding can extend from late February until mid-late August (Farnsworth et al. 2011), an unusually long nesting season.



**Figure 1. a) Northern Mockingbird (*Mimus polyglottos*), missing a foot, perched on a car mirror at Banyan Bay Apartment Complex, Coconut Creek, Broward County, Florida. b-d) The ‘shadow-boxing’ behavior of the mockingbird, attacking its reflection in the mirror; showing wing-flashing, pecking, and feet thrusting at its reflection.**

Given the increasing human population and thereby urbanization, opportunities for these types of behaviors will continue to increase. This note highlights the need for further study of such behaviors to investigate their prevalence and any potential effects they may have on the individual birds partaking in such behaviors.

#### ACKNOWLEDGMENTS

I thank D. Harshbarger, J. Chastant, an anonymous referee for comments that helped to improve this paper.

#### LITERATURE CITED

- DHONDT, A. A., AND K. M. KEMINCK. 2008. Wing-flashing in northern mockingbirds: Anti-predator defense? *Journal of Ethology* 26:361-365.
- DICKEY, D. R. 1916. The shadow-boxing of *Pipilo*. *Condor* 18:93-99.
- FARNSWORTH, G., G. A. LONDONO, J. UNGVARI MARTIN, K. C. DERRICKSON AND R. BREITWISCH. 2011. Northern Mockingbird (*Mimus polyglottos*), *The Birds of North America Online* (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <<http://bna.birds.cornell.edu/bna/species/007> doi:10.2173/bna.7>.
- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. 2014. *The Robertson and Woolfenden Florida Bird Species: An Annotated List*. Florida Ornithological Society Special Publication No. 8, Gainesville.



- HANAUER, R. E., C. M. STRACEY, AND S. K. ROBINSON. 2010. Why has an urban adapter, the Northern Mockingbird (*Mimus polyglottos*), declined in Florida? *Florida Field Naturalist* 28:135-189.
- MUELLER, H. C., AND N. S. MUELLER. 1971. Flashes of white in the wings of other species elicit territorial behavior in a Mockingbird. *Wilson Bulletin* 83:442-443.
- RITTER, W. E., AND S. B. BENSON. 1934. "Is the Poor Bird Demented?" Another Case of "Shadow Boxing." *Auk* 51:169-179.
- ROERIG, J. 2013. Shadow boxing by birds—a literature study and new data from southern Africa. *Ornithological Observations* 4:39-68.
- SELANDER, R. K., AND D. K. HUNTER. 1960. On the functions of wing-flashing in Mockingbirds. *Wilson Bulletin* 72:340-345.
- STRACEY, C. M., AND S. K. ROBINSON. 2012. Are urban habitats ecological traps for a native songbird? Season-long productivity, apparent survival, and site fidelity in urban and rural habitats. *Journal of Avian Biology* 43:50-60.

**FIRST DOCUMENTATION OF A SWALLOW-TAILED KITE  
(*Elanoides forficatus*) PREYING ON AN INFANT SQUIRREL**

DAVID L. SHERER AND MATTHEW FUIRST

*Avian Ecology Program, Archbold Biological Station, Venus, Florida 33960*

*Email: dlsherer@gmail.com*

*Email: mfurst@gmail.com*

Swallow-tailed Kites (*Elanoides forficatus*; hereafter kites) commonly breed in southern Florida and are annual migrants through the state each spring (Meyer 1995). Kites detect prey by soaring low over wetlands, grasslands, shrublands and forests and consume a variety of small vertebrate and invertebrate prey including frogs, lizards, nestling birds, snakes and insects (Robertson 1988, Meyer 1995). Breeding males provision nesting females and/or nestlings predominantly with vertebrate prey (97%), of which 67% are frogs and reptiles and 30% birds (Meyer et al. 2004), but outside the breeding season, kites consume insects almost exclusively (Lee and Clark 1993). There are few published records containing observations of kites preying on small mammals, although Meyer (1995) noted infrequent predation of bats and Robertson (1988) stated that kites may capture “rodents (rarely?).”

On 7 March 2016, at approximately 1215 EST, we observed a kite maneuvering through the pine-dominated tree canopy in the plaza at Archbold Biological Station in Highlands County, Florida. The kite initially flew in from the east and circled low over the canopy for about two minutes. The kite made one unsuccessful attack on an unidentified prey item, then exited the canopy before attacking a second time. The kite then flew from the pines carrying a small animal in its talons. Once clear of the pine canopy, we observed that the prey item was an infant eastern gray squirrel (*Sciurus carolinensis*). The entire episode lasted no longer than three minutes.

Our observation represents the first instance we know of where a kite captured a squirrel. The nest from which the squirrel was captured was approximately 11 m high in a 22 m slash pine (*Pinus elliottii*) covered with Spanish moss (*Tillandsia usneoides*). Although the wooded plaza at Archbold Biological Station is home to other potential prey of kites, such as reptiles, amphibians, and small birds, eastern gray squirrels are abundant, and may represent a viable opportunistic prey source. This may be particularly true immediately after arrival during kites’ spring migration, but prior to the onset of the breeding season. Kites are known to be opportunistic predators across their range (Meyer 1995), and their highly varied diets in the tropics may serve to supplement insect prey (Gerhardt et al. 2004, Robinson 1994). In Florida, kites may opportunistically target small mammals – or similarly atypical prey such as small adult passerines (Cox 2012) – during or shortly after their migration, when other prey items may yet be scarce. Tree frog (*Hyla* spp.) activity in February and March is much lower than peak levels in April through June (Meshaka and Layne 2015), and most passerine species are unlikely to have begun nesting at this time (FWC 2003). In 2016, we first sighted kites at Archbold on 24 February, consistent with typical early spring arrivals (Greenlaw et al. 2014), but earlier than the breeding season which typically occurs from mid-March through early-August (Stevenson and Anderson 1994, Greenlaw et al. 2014). The earliest known laying date in Florida was 5 March (Meyer 1995). It is probable that this squirrel was consumed by the capturing bird, but possible that

it was fed to a mate, either as part of courtship or conceivably to a female on a nest; however, it was probably too early in the season for the latter and certainly too early for the prey to have been fed to nestlings.

#### ACKNOWLEDGMENTS

We thank Reed Bowman and Jim Cox for providing valuable feedback on previous drafts of this manuscript, Fred Lohrer for stimulating its development, and Shane Pruett for resources on previous field observations at Archbold Biological Station. We are grateful to the staff and interns at Archbold for their support, and to the organization itself for the opportunity to live and work in the unique scrub ecosystem of the Lake Wales Ridge.

#### LITERATURE CITED

- COX, J. A. 2012. Swallow-tailed Kite (*Elanoides forficatus*) captures an adult Brown-headed Nuthatch (*Sitta pusilla*). *Florida Field Naturalist* 40:56-57.
- FWC [FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION]. 2003. Florida's Breeding Bird Atlas: A Collaborative Study of Florida's Birdlife. < <http://myfwc.com/bba>>. Accessed 16 June 2016.
- GERHARDT, R. P., D. M. GERHARDT, AND M. A. VÁSQUEZ. 2004. Food delivered to nests of Swallow-tailed Kites in Tikal National Park, Guatemala. *Condor* 106:177-181.
- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. 2014. The Robertson and Woolfenden Florida Bird Species: An Annotated List. Florida Ornithological Society, Special Publication No. 8, Gainesville, Florida.
- LEE, D. S., AND M. K. CLARK. 1993. Notes on post-breeding American Swallow-tailed Kites, *Elanoides forficatus* (Falconiformes: Accipitridae), in north-central Florida. *Brimleyana* 19:185-203.
- MESHAKA, W. E., JR., AND J. N. LAYNE. 2015. The Herpetology of Southern Florida. *Herpetological Conservation and Biology* 10 (Monograph 5).
- MEYER, K. D. 1995. Swallow-tailed Kite (*Elanoides forficatus*). In *The Birds of North America Online*, No. 138 (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York.
- MEYER, K. D., S. M. MCGEHEE, AND M. W. COLLOPY. 2004. Food deliveries at Swallow-tailed Kite nests in southern Florida. *Condor* 106:171-176.
- ROBERTSON, W. B., JR. 1988. American Swallow-tailed Kite. Pages 109-131 in *Handbook of North American Birds*, Vol. 4 (R. S. Palmer, Ed.). Yale University Press, New Haven, Connecticut.
- ROBINSON, S. K. 1994. Habitat selection and foraging ecology of raptors in Amazonian Peru. *Biotropica* 26:443-458.
- STEVENSON, H. M., AND B. H. ANDERSON. 1994. *The Birdlife of Florida*. University Press of Florida, Gainesville, Florida.

**IN MEMORIAM**  
**David W. Johnston, 1926-2015**

David Ware Johnston, a past president of the Florida Ornithological Society, died on July 26, 2015 at his home in Fairfax, Virginia. He was born in Miami, Florida, on November 23, 1926, but spent most of his early life in Atlanta, Georgia. There through the Boy Scouts, he became fascinated with birds. After naval service in World War II, he attended the University of Georgia where he earned a BS in 1949 and a MS in 1950. He was always active in the Georgia Ornithological Society and served as editor of its journal, *The Oriole*, during 1956-1959.

After earning a PhD from the University of California at Berkeley (1954) he taught at Mercer University (1954-1959) and Wake Forest University (1959-1963) before coming to the University of Florida in 1963. During his 16 years in Gainesville, among many research interests, he did important work on aspects of the Indigo Bunting's ecology and biology, fat deposition and depletion by migratory birds, and pesticide accumulation in the fatty tissues of birds; in all of these studies he used tower-killed birds from Herbert L. Stoddard's WCTV study on Tall Timbers Research Station for most of his specimen material. Johnston devoted much time investigating and writing about the biogeography of West Indian birds, particularly those of the Cayman Islands, and his interest in island avifaunas led him far afield to such places as Wake Island and Alaska.

He also found time to prepare hundreds of expertly crafted study skins as a teaching collection for the Department of Zoology. These specimens are now housed at the nearby Florida Museum of Natural History, designated as the David W. Johnston Teaching Collection, and are used heavily for teaching courses in ornithology, vertebrate zoology, and wildlife ecology.

Johnston was a Fellow of the American Ornithologists' Union (1974), and served as president of FOS during 1977-1979. He edited *Bird-Banding* (now *Journal of Field Ornithology*) and *Ornithological Monographs*, and for a time was director of the ecology program of the National Science Foundation.

He went to George Mason University in Virginia in 1981 and though he retired from academia in 1988, he stayed involved in science, being a member of the Virginia Society of Ornithology, and serving as an editor and advisor to government and international organizations such as the World Bank, World Wildlife Fund, Wildlife Management Institute, and U.S. Forest Service. He became interested in the history of natural

history (he also liked to repair old clocks); among his seven written or edited books was “*The History of Ornithology of Virginia*,” as well as “*A Guide to Bird Finding in Virginia*,” “*Virginia’s Endangered Species*,” and “*Ecology and Conservation of Neotropical Migrant Landbirds*,” the last winning the best-edited book award from the Wildlife Society in 1999. He published a hundred or so peer-reviewed papers in various scientific journals. One of his final works, “*Cedar Key: Birding in Paradise, Finding Birds Then and Now*,” was published in 2009.

He is survived by his wife of 34 years, Esta, three children, and many friends and colleagues in the Florida ornithological community.

*Robert L. Crawford, 208 Junius St., Thomasville, Georgia 31792*

## FIELD OBSERVATIONS

**Summer Report: June-July 2016.**—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Electronic 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 follow this report.

Sight-only observations are considered “reports” while only those observations supported by verifiable evidence (photographs, video or audio recordings, or specimens) are called “records.” Species for which documentation is required by the FOC and by the FOS Records Committee (FOSRC; <fosbirdsorg/official-florida-state-bird-list>) 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, AFR = Air Force Range, EOS = end of season, m. obs = many observers, NERR = National Estuarine Research Reserve, NP = National Park, NSRA = North Shore Restoration Area, 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 numbers. Photographs or video- or audio-recordings archived by the FOC are identified by a plus (+).

### SUMMARY OF THE SUMMER SEASON

This report does not purposefully include many data collected from the Breeding Bird Atlas II, which concluded the five-year project. FOSRC review species listed in this report include a potential first state record Fea’s Petrel, a Red-footed Booby in *Pinellas*, a Hudsonian Godwit in *St. Johns*, and two each Alder Flycatcher and Willow Flycatcher at Lake Apopka NSRA.

The FOC is seeking volunteers interested in joining the committee as regional compilers for counties that are currently uncovered. The first region would include *Suwannee*, *Columbia*, *Gilchrist*, *Union*, and *Bradford* Counties. A second region would be *Pasco*, *Hillsborough*, *Manatee*, and *Sarasota*. A third area could be covered by one or multiple interested individuals: *Polk*, *Osceola*, *Hardee*, *De Soto*, *Highlands*, *Glades*, and *Okeechobee* Counties. Responsibilities would include soliciting and compiling notable field observations for these counties at the end of each season, to be included in the report. Interested individuals should contact the state compiler listed at the end of this report.

### SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 1 on Howard Road (*Nassau*) 4 Jun (T. Crane); 5 flying N on Halifax River at Tom Renick Park, Ormond Beach (*Volusia*) 8 Jun (H. Robinson); 8 at Lem Turner Spray Fields (*Duval*) 26 Jun (D. Foster) represented a significant decline from last year; 25 at Jefferson County Recycling Center (*Jefferson*) 5 Jul (M. Smith, R. Emond); 6 at Westside Industrial Park (*Duval*) 25 Jul (M. Charest).

CANADA GOOSE: 2 at Wacahoota (*Alachua*) 21 Jul (J. Pruitt).

BLACK SWAN: 1 at Seminole (*Pinellas*) 2 Jun 2016 (+R. Smith).

- EGYPTIAN GOOSE: 1 at Twin River Golf Club, Oviedo (*Seminole*) 2 Jul (G. Leavens, J. Leavens) provided perhaps the first county record.
- BLUE-WINGED TEAL: Up to 4 at Paynes Prairie Preserve SP (*Alachua*) 1-26 Jun (M. Manetz, T. Anderson et al.); up to 2 males at Lake Apopka NSRA (*Orange*) 18 Jun-19 Jul (+P. Hueber, H. Robinson, m. obs).
- NORTHERN SHOVELER: 1 drake continued at Big Talbot Island SP - Spoonbill Pond (*Duval*) through EOS (K. Dailey); 1 female at Merritt Island NWR (*Brevard*) 4 Jun (P. Hueber).
- REDHEAD: 5 at Wm. E. Dunn WTF (*Pinellas*) 1-3 Jun (+B. Cochrane, m. obs); 2-4 at Tierra Verde (*Pinellas*) 1-14 Jun (+D. Sauvageau, m. obs); 1 at N St. Petersburg (*Pinellas*) 21-24 Jun (M. Burns, C. Gjervold).
- RING-NECKED DUCK: 4 (1 male, 3 females) at Alligator Lake (*Columbia*) throughout season (J. Krummrich); 2 (1 male, 1 female) at Lake Okahumpka (*Sumter*) 14 Jun (J. Mann, S. Mann, D. Grimes); 4 at Lake Morton (*Polk*) 16 Jun (D. Simpson); 1 at Sweetwater Wetlands Park (*Alachua*) 3-20 Jun (M. Manetz, L. Davis et al.).
- GREATER SCAUP: 2 at Crystal Bay (*Citrus*) 12-19 Jun (A. Coquerel, +E. Roche).
- LESSER SCAUP: 1 female at Bystre Lake (*Hernando*) 25 Jun-EOS (J. Mann, +S. Mann); 1 male at Spring Hill (*Hernando*) 26 Jun-10 Jul (+B. Hansen, A. Hansen et al.); 1 female at Spring Hill 24 Jul-EOS (B. Hansen, A. Hansen).
- BLACK SCOTER: Up to 8 at Huguenot Memorial Park (*Duval*) through 17 Jun and 2 there through 24 Jul (K. Dailey, G. Williams et al.); 5 at Little Estero Island Critical Wildlife Area, Fort Myers Beach (*Lee*) 4 Jun, 4 there 12 Jun, 3 there Jun 30, 2 there 21 Jul, and 1 remained through EOS (M. Rousher, +R. Kaskan et al.).
- HOODED MERGANSER: 1 at Paynes Prairie Preserve SP 1-6 Jun (F. Goodwin, J. Mays et al.); 1 female off Heckscher Drive (*Duval*) 9 Jun-18 Jul (K. Dailey).
- RUDDY DUCK: 1 at Lake Morton 16 Jun-31 Jul (D. Simpson, R. Blair).
- COMMON LOON: 1 at Ponce de Leon Inlet (*Volusia*) 13 Jun (M. Brothers); 1 in alternate plumage near Indian River at Cocoa (*Brevard*) 22 Jun was taken to rehab (R. Stewart).
- HORNED GREBE: 1 of 3 late spring birds remained at Wm. E. Dunn WTF to 5 Jun (+B. Cochrane, m. obs).
- AMERICAN FLAMINGO: 1 at Mile Marker 58, Grassy Key (*Monroe*) 17 Jun-1 Jul (D. Mader, +M. Hedden, m. obs); 3 at Cedar Key (*Levy*) 24 Jun (C. Bester); 1 at Big Carlos Pass (*Lee*) 27 Jul (P. Heubeck).
- \*FEA'S PETREL: 1 offshore Elliott Key, Biscayne NP (*Miami-Dade*) 5 Jun (R. Torres, +L. Manfredi, et al.), pending acceptance by the FOSRC would provide the first state record.
- CORY'S SHEARWATER: 1 off *Lee* 12 Jun (D. McQuade, +T. McQuade et al.); 5 off Tom Renick Park, Ormond Beach 19 Jun (H. Robinson); 9 *Calonectris d. borealis* about 72 km off Ponce de Leon Inlet (*Volusia*) 24 Jul including 1 "Scopoli's" race, *C. d. diomedea* (M. Brothers et al.).
- GREAT SHEARWATER: 1 off Tom Renick Park, Ormond Beach 19 Jun (H. Robinson); 1 at Ormond-By-The-Sea (*Volusia*) 19 Jun (M. Brothers); 5 moribund from *Volusia* beaches were brought to the Marine Science Center, Ponce Inlet, 19 and 20 Jun (+M. Brothers); 3 off Ponce de Leon Inlet 20 Jun during NE winds of 25-35 knots (M. Brothers); 1 off *Lee* 30 Jul (D. McQuade, +T. McQuade, et al.).
- AUDUBON'S SHEARWATER: 9 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- WILSON'S STORM-PETREL: 39 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.); 1 off *Lee* 30 Jul (D. McQuade, +T. McQuade).
- LEACH'S STORM-PETREL: 3 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- BAND-RUMPED STORM-PETREL: 1 off *Lee* 12 Jun and 2 there 30 Jul (D. McQuade, +T. McQuade); 1 moribund from a *Volusia* beach was brought to the Marine Science Center, Ponce Inlet, 19 Jun during NE winds of 25-35 knots (+M. Brothers; specimen to

- FLMNH) represented the first specimen for Florida's Atlantic coast north of *Miami-Dade*; 3 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- STORM-PETREL SP: 2 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- MAGNIFICENT FRIGATEBIRD: 39 in *Hernando* 7 Jun (C. Black, A. Hansen, B. Hansen, J. McKay); 1 heading N off Tom Renick Park, Ormond Beach 19 Jun and 1 Jul (H. Robinson); 1 juv. over Halifax River near Port Orange Bridge (*Volusia*) 15 Jun (M. Brothers); 1 at Peters Point Beachfront Park (*Nassau*) 5 Jul (B. Spencer).
- BROWN BOOBY: 1 offshore perched on buoy at Ponce de Leon Inlet 8 Jun (M. Brothers); 1 off *Lee* 12 Jun (D. McQuade, +T. McQuade); 2 imm. off Tom Renick Park, Ormond Beach 26 Jun (H. Robinson).
- \*RED-FOOTED BOOBY: 1 immature standing in the road at Pass-A-Grille Beach following Tropical Storm Colin 7 Jun (*fide* +A. Nulph) provided the third *Pinellas* record; it was taken to Suncoast Seabird Sanctuary for rehab but died the next day.
- NORTHERN GANNET: 1 at Ormond-By-The-Sea 19 Jun (M. Brothers); 1 at St. Vincent NWR (*Franklin*) 12 Jul (J. Murphy).
- AMERICAN WHITE PELICAN: 40-50 at Alligator Lake throughout season (J. Krummrich); up to 106 at Big Talbot Island SP-Spoonbill Pond throughout season (K. Dailey, m. obs); 9 at Hague (*Alachua*) 28 Jun (J. Hintermister).
- BROWN PELICAN: About 50 nested at Egret Island Sanctuary, Lake Butler, Windermere with 2 nests still active in Jun (+C. Lee) provided the first *Orange* breeding record.
- AMERICAN BITTERN: 1 at Lake Apopka NSRA 5 Jun (P. Hueber).
- LEAST BITTERN: One pair at Imeson Center (*Duval*) 4 Jun (D. Foster); 30 at International Paper Wetlands (*Escambia*) 12 Jun (J. Callaway, B. Callaway) was the highest number ever for the westernmost 3 counties; 1 at Guana Tolomato Matanzas NERR-Six Mile Landing (*St. Johns*) 15-21 Jun (D. Reed et al.).
- GREAT BLUE HERON: 2 migrating about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- GREAT BLUE HERON, WHITE MORPH: 1 at Kathryn Abbey Hanna Park (*Duval*) 27 Jul-EOS (*fide* K. Dailey).
- REDDISH EGRET: 1 white morph at Ponce de Leon Inlet 17 Jun (M. Brothers); 1 at St. Marks NWR (*Wakulla*) 29 Jul (D. Bryan).
- GLOSSY IBIS: Up to 4 at Big Talbot Island SP-Spoonbill Pond 4 Jun-23 Jul (K. Dailey, m. obs); 6 at Eastman/Taminco Sanctuary (*Santa Rosa*) 5 Jul (L. Kelly, B. Furlow); 1 at Okaloosa County Water and STF (*Okaloosa*) 20 Jul (B. Chambers).
- ROSEATE SPOONBILL: Up to 2 at Paynes Prairie Preserve SP to 17 Jul (T. Greenberg, J. Mays et al.).
- OSPREY: 140 at Lake Apopka NSRA 20 Jun (H. Robinson).
- SWALLOW-TAILED KITE: 51 on 16 Jul, 60 on 19 Jul, and 60+ on 30 Jul, all at same site east of Brooksville (*Hernando*) (K. Wood, L. Lane); 50 at Oxford (*Sumter*) on 20 Jul (A. Horst); 10 at ne Jefferson County (*Jefferson*) 28 Jul (M. Smith, R. Emond); 20 at Tom Renick Park, Ormond Beach 10 Jul (H. Robinson); 280 at Lake Apopka NSRA 21 Jul (H. Robinson).
- SNAIL KITE: 1 at Smyrna Dunes Park (*Volusia*) 4 Jul (S. Simmons).
- MISSISSIPPI KITE: 1 adult at Lake Apopka NSRA 27 May-30 Jul (+P. Hueber et al., H. Robinson, m. obs); 1 at Tom Renick Park, Ormond Beach 29 Jun (H. Robinson); 4 east of Brooksville 30 Jul (K. Wood).
- SHORT-TAILED HAWK: 1 at J. N Ding Darling NWR, Sanibel (*Lee*) 2 Jun and 31 Jul (R. Borchelt et al.); 1 at Alva (*Lee*) 3 Jun (R. Barber); 1 light morph at St. Johns County Agricultural Extension (St. Johns) 3 Jun (D. Doyle); 1 at Big Cypress NP (*Collier*) 6 Jun (T. Zambon); 1 at Harns Marsh, Lehigh (*Lee*) 7 Jun (T. Obrock); 1 dark morph at Russell Landing, Haw Creek Preserve SP (*Flagler*) 7 Jun (M. Brothers); 1 at Monroe Station (*Collier*) 12 Jun (A. Kent, C. Fisher); 1 at Gainesville (*Alachua*) 15-29 Jun (P. Hosner); 1 light morph at Tom Renick Park, Ormond Beach 15 Jun (H. Robinson); 1



- at Naples (*Collier*) 17 Jun (C. Weissburg); 1 at Newnans Lake (*Alachua*) 19 Jun (J. Hintermister, D. Segal); 1 at San Felasco Hammock (*Alachua*) 26 Jun (H. Adams); 1 at Six Mile Cypress Slough Preserve (*Lee*) 5 and 14 Jul (T. Obrock, C. Ewell); 1 dark morph at Lake Apopka NSRA 12 Jul (H. Robinson); 1 at J. N Ding Darling NWR-Bailey Tract, Sanibel (*Lee*) 31 Jul (F. Paulsen).
- PURPLE GALLINULE: Up to 4 adults at Lake Seminole Park (*Pinellas*) 18 June (+J. Clayton, S. Aversa).
- AMERICAN COOT: 2 at I-295 and I-95 interchange in *Duval* 5 Jun (K. Dailey, M. Dailey).
- SANDHILL CRANE: Up to 5, including 3 colts at New World Avenue (*Duval*) throughout season (J. Graham et al.).
- WHOOPIING CRANE: 1 at Paynes Prairie Preserve SP throughout the season (M. Manetz, M. O'Sullivan et al.).
- AMERICAN AVOCET: 4 in southwestern *Hernando* 7 Jun (C. Black); 4 males in alternate plumage at Port Orange 16 Jun (+M. Brothers); 6 at Three Rooker Bar, Fort De Soto Park (*Pinellas*) 30 Jul (+C. Yilmaz).
- PIPING PLOVER: 1 at Outback Key, Fort De Soto Park (*Pinellas*) 1 Jun (E. Plage); 1 at Merritt Island NWR 4 Jun (+P. Hueber, M. Harris); 1 at South Anclote Key (*Pinellas*) 10 Jun (+D. Sauvageau); 1 at Big Talbot Island SP - Spoonbill Pond 16 Jul (K. Dailey); 6 at Outback Key, Fort De Soto Park 28 Jul (E. Plage).
- SPOTTED SANDPIPER: 1 at Paynes Prairie Preserve SP 1 Jun (J. Mays, D. Segal); 1 at Sweetwater Wetlands Park 15 Jun (G. Parks et al.); 5 at Big Talbot Island SP - Spoonbill Pond 16 Jul (K. Dailey); 1 at Sweetwater Wetlands Park 17 Jul (J. Hintermister).
- SOLITARY SANDPIPER: 1 off Highway 100 in Bunnell (*Flagler*) 4 Jul (M. Brothers); 1 at Gainesville 17 Jul (R. Rowan); 1 at Jeffco Dairy (*Jefferson*) 22 Jul (M. Smith, R. Emond).
- GREATER YELLOWLEGS: 1 at Paynes Prairie Preserve SP 3 Jun (J. Mays, C. Leonard); up to 2 at Gainesville 25 Jul-EOS (R. Rowan, M. Manetz et al.).
- WILLET: 1 at Shands Pier (*Clay*) 29 Jun (G. Williams, S. Raduns); 2 at Lake Apopka NSRA 30 Jun and 1 there 18 Jul (H. Robinson); 260 on the beach at Tom Renick Park, Ormond Beach 24 Jul and 240 there on 30 Jul (H. Robinson).
- LESSER YELLOWLEGS: Up to 2 at Paynes Prairie Preserve SP to 3 Jun (P. Polshek, J. Mays et al.); 1 at Sweetwater Wetlands Park 18 Jul (D. Rohan).
- WHIMBREL: 2 at Tom Renick Park, Ormond Beach 19 Jun (H. Robinson); 1 at St. Vincent NWR 20 Jun (J. Murphy); 1 at Marco Island (*Collier*) 4 Jun and 2 there 2 Jul (M. Higgins); 2 at Ten Thousand Islands NWR, Shell Key Flats (*Collier*) 7 Jul (M. Gurley); 1 at Sanibel Causeway (*Lee*) 7 Jul (E. Combs); 1 at Gasparilla Island SP (*Lee*) 10 Jul (C. Leonard); 1 at Bonita Beach (*Lee*) 27-29 Jul (R. Kaskan); 10 at Cape Romano (*Collier*) 29 Jul (K. Laakkonen); 1 at Carlos Point, Fort Myers Beach (*Lee*) 31 Jul (R. Kaskan).
- LONG-BILLED CURLEW: 1 at St. Vincent NWR 5 Jul (+J. Murphy); 1 at Cayo Costa SP (*Lee*) 31 Jul (R. Reppenning).
- \*HUDSONIAN GODWIT: 1 at Guana Tolomato Matanzas NERR Six Mile Landing (*St. Johns*) 19 Jun (D. Reed, m. obs).
- MARbled GODWIT: 1 flying s at Tom Renick Park, Ormond Beach 15 Jul (H. Robinson); 137 at Three Rooker Bar, Fort De Soto Park 28 Jul (E. Plage).
- SEMIPALMATED SANDPIPER: Up to 34 through 5 Jun at Paynes Prairie Preserve SP (R. Rowan, J. Mays et al.); 1 at St. Vincent NWR 15 Jul (+J. Murphy); up to 9 at Gainesville 25 Jul-EOS (R. Rowan, M. Manetz et al.).
- WESTERN SANDPIPER: 1 at Gainesville 25-27 Jul (R. Rowan, M. Manetz et al.); up to 150 at Outback Key, Fort De Soto Park 29 Jul (E. Plage).
- LEAST SANDPIPER: Up to 4 at Paynes Prairie Preserve SP to 5 Jun (L. Davis, R. Terrill et al.); 1 at Sweetwater Wetlands Park 23 Jul (H. Adams); 1 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- WHITE-RUMPED SANDPIPER: 1 at Outback Key, Fort De Soto Park 1 Jun (E. Plage).

- PECTORAL SANDPIPER: 1 at Big Talbot Island SP - Spoonbill Pond 16 Jul (K. Dailey).
- DUNLIN: 1 at Paynes Prairie Preserve SP 2-3 Jun (R. Rowan, J. Mays et al.); 1 in breeding plumage at Outback Key, Fort De Soto Park 29 Jul (E. Plage).
- STILT SANDPIPER: 2 at Big Talbot Island SP - Spoonbill Pond 16 Jul (K. Dailey); up to 2 at Gainesville 25-30 Jul (R. Rowan, A. Kratter et al.).
- WILSON'S SNIPE: 1 at Sweetwater Wetlands Park 11 Jun (R. Rowan).
- WILSON'S PHALAROPE: 1 at Okaloosa County Water and STF 19 Jun-9 Jul (M. Swan, B. Purdy); 1 at St. Marks NWR 22 Jun (D. Morrow).
- POMARINE JAEGER: 1 adult and 1 immature off *Lee* 12 Jun (D. McQuade, +T. McQuade, et al.); 1 found exhausted on a *Pinellas* beach 3 Jul was taken to rehab and released (+A. Nulph).
- LAUGHING GULL: Seasonal high count of **11,934** at Huguenot Memorial Park's breeding colony on 2 Jun (*fide* K. Dailey).
- HERRING GULL: 1 at Newnans Lake 9 Jun (J. Middleton).
- LESSER BLACK-BACKED GULL: One immature at Redington Beach (*Pinellas*) 8 Jul (+B. Perry).
- GLAUCOUS GULL: 1 continued from the spring season at Three Rooker Bar, Fort De Soto Park 4 Jun-30 Jul (+C. Yilmaz, m. obs).
- GREAT BLACK-BACKED GULL: 1 2nd-cycle at Outback Key, Fort De Soto Park 23 Jun-29 Jul represented *Pinellas*' first June record (+T. Ploger, N Ploger).
- BROWN NODDY: 1 flew past John's Pass (*Pinellas*) 7 Jun (C. Gjervold).
- SOOTY TERN: 1 at Three Rooker Bar, Fort De Soto Park 4 Jun (+J. McGinity); 7 at Newnans Lake 7 Jun (A. Kratter, J. Mays et al.); 1 at St. Petersburg Beach 7 Jun (E. Forys); 3 at old St. George Island causeway (*Franklin*) 25 Jun (E. Thompson, +J. Murphy); 1 at Sand Key Park (*Pinellas*) 26 Jun (+D. Yarbrough); 6 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- SOOTY/BRIDLED TERN: 3 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- BRIDLED TERN: 6 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- LEAST TERN: 150+ at Ponce de Leon Inlet 17 Jun (M. Brothers); 1 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- GULL-BILLED TERN: 2 at Paynes Prairie Preserve SP 4 Jun (C. Deutsch, M. Bruce); 1 at Port Orange 16 Jun (+M. Brothers); 2 at Tom Renick Park, Ormond Beach 4 Jul (H. Robinson).
- CASPIAN TERN: 1 at Newnans Lake 3 Jun (J. Mays, P. Polshek); 1 at Newnans Lake 7 Jun (T. Anderson).
- BLACK TERN: 4 at Newnans Lake 7 Jun (J. Mays, A. Kratter et al.); 2 at Ponce de Leon Inlet 17 Jun (M. Brothers); 1 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- ROSEATE TERN: 2 at Ponce de Leon Inlet 10 Jun and 1 there 30 Jun, mark the 3rd consecutive June at this location (+M. Brothers).
- COMMON TERN: 6 at Ponce de Leon Inlet 17 Jun (M. Brothers); 5 off Tom Renick Park, Ormond Beach 1 Jun and 29 there 19 Jun (H. Robinson).
- ARCTIC TERN: 2 adults off Tom Renick Park, Ormond Beach 19 Jun (H. Robinson); 1 second-cycle at Ponce de Leon Inlet 22 Jun (+M. Brothers).
- FORSTER'S TERN: 2 at Newnans Lake 7 Jun (A. Kratter, J. Mays et al.); 3 at Lake Lochloosa (*Alachua*) 7 Jun (P. Polshek); 27 at Floridatown (*Santa Rosa*) 19 Jun (B. Pranty, V. Ponzio); up to 40 at Shands Pier 29 Jun (G. Williams).
- ROYAL TERN: Seasonal high count of **14,259** at Huguenot Memorial Park's breeding colony on 2 Jun (*fide* K. Dailey).
- SMOOTH-BILLED ANI: Up to 2 continued at Loxahatchee NWR (*Palm Beach*) through EOS (m. obs)
- BURROWING OWL: 14 at Watermelon Pond (*Alachua*) 9 Jun (M. Drummond, J. Mays).
- RUBY-THROATED HUMMINGBIRD: 1 at Fort De Soto Park (*Pinellas*) 29 Jul (R. Smith, E. Plage).

- BELTED KINGFISHER: 1 at Cross Creek (*Alachua*) 30 Jun (M. Bruce); 1 at Egans Creek Greenway (*Nassau*) 4 Jul (J. Graham, C. Davis).
- RED-HEADED WOODPECKER: 1 juv. at Lake Apopka NSRA, where the species is not known to breed 27 Jun and an adult there 25 Jul (H. Robinson).
- AMERICAN KESTREL: A pair fledged 2 young at Lake Apopka NSRA 2 Jun (H. Robinson).
- PEREGRINE FALCON: 1 at St. Vincent NWR 7 Jun (J. Murphy).
- NANDAY PARAKEET: 2 at Tom Renick Park, Ormond Beach 1 Jun (H. Robinson).
- RED-MASKED PARAKEET: 1 at NE St. Petersburg 24 Jun (+J. Clayton) provided the 2<sup>nd</sup> *Pinellas* record.
- \*ALDER FLYCATCHER: 2 at Lake Apopka NSRA 18 Jun (K. Hamblett, P. Hueber).
- \*WILLOW FLYCATCHER: 2 at Lake Apopka NSRA 18 Jun (+P. Hueber, K. Hamblett; details to FOSRC).
- TROPICAL KINGBIRD: 1 in Clewiston (*Hendry*) 27 Jun (D. Simpson).
- GRAY KINGBIRD: 1 at Lake Apopka NSRA 13 Jun (H. Robinson); 1 at Little Talbot Island SP (*Duval*) 16 Jul (K. Dailey).
- TREE SWALLOW: 1 at Tom Renick Park, Ormond Beach 3 Jul (H. Robinson); 1 at Lake Apopka NSRA 30 Jun-22 Jul (+P. Hueber, H. Robinson, m. obs).
- BANK SWALLOW: 1 at Lake Apopka NSRA 20 Jun (H. Robinson); 1 at Gulf Breeze (*Santa Rosa*) 22 Jul (B. Duncan); singles at Tom Renick Park, Ormond Beach 27 and 31 Jul (H. Robinson).
- CLIFF SWALLOW: 1 at Lake Apopka NSRA 7 Jul (H. Robinson); 2 at Tom Renick Park, Ormond Beach 31 Jul (H. Robinson).
- BARN SWALLOW: At Tom Renick Park, Ormond Beach, the last northbound swallows were noted 31 May, while the first southbound were seen 12 Jun (H. Robinson).
- TUFTED TITMOUSE: 1 at Fort De Soto Park 9-26 Jun was an irregular visitor at the park (R. Smith).
- BROWN-HEADED NUTHATCH: 3-4 at Brooker Creek Preserve (*Pinellas*) throughout the season (+C. Gjervold).
- AMERICAN ROBIN: 2 at Gainesville throughout the season (G. Parks, T. Webber et al.); 1 adult at Sawgrass Lake Park (*Pinellas*) 29 Jul (+J. Clayton, S. Tavaglione).
- GRAY CATBIRD: 2 confirmed breeding at Lake Apopka NSRA 12 Jun-4 Aug (+P. Hueber, L. Folts, m. obs); 1 in S Miami (*Miami-Dade*) 13 Jun (A. Kent); 1 at Plantation Preserve (*Broward*) 22-30 Jun (S. Kaplan); 2 at Gainesville 24 Jun-3 Jul (D. Shehee, A. Kent et al.).
- LOUISIANA WATERTHRUSH: 1 on Fort George Island (*Duval*) 3 Jul (K. Dailey); 1 at Santa Fe River near I-75 (*Alachua*) 3 Jul (D. Segal); 2 at Lake Apopka NSRA 12 Jul (H. Robinson); 1 at Alligator Point (*Franklin*) 17 Jul (J. Murphy).
- BLACK-AND-WHITE WARBLER: 1 at John Chesnut Park (*Pinellas*) 1 Jun (D. Sauvageau); 1 at Sawgrass Lake Park 10 Jul (+J. Clayton); 2 at San Felasco Hammock 15 Jul (J. Donsky); 1 about 72 km off Ponce de Leon Inlet 24 Jul (M. Brothers et al.).
- SWAINSON'S WARBLER: 1 at Tate's Hell SF (*Franklin*) 10 Jul (J. Murphy).
- AMERICAN REDSTART: 1 at Evinston (*Alachua*) 23 Jul (T. Halback); 1 at John Chesnut Park 29 Jul (+T. Mast).
- YELLOW WARBLER: 2 at Cedar Key 30 Jul (D. Henderson).
- PALM WARBLER: 1 "Western" at Office Depot parking lot (*Broward*) 14 Jun (+A. Seelye-James).
- PRAIRIE WARBLER: 1 singing at North Key (*Levy*) 10 Jun (R. Rowan); 4 at Gainesville 23 Jul (R. Rowan, A. Kratter).
- YELLOW-BREASTED CHAT: At least 7 pairs at Lake Apopka NSRA this summer (H. Robinson); 1 at Tate's Hell SF 26 Jun (J. Murphy).
- CHIPPING SPARROW: 1 adult at Long Pine Key Campground, Everglades NP (*Miami-Dade*) 22 Jun (L. Manfredi, m. obs).
- SEASIDE SPARROW: 2 at St. Vincent NWR 18 Jul (J. Murphy).
- BLUE GROSBEAK: At least 17 pairs at Lake Apopka NSRA this summer (H. Robinson).

INDIGO BUNTING: At least 20 pairs at Lake Apopka NSRA this summer (H. Robinson).

PAINTED BUNTING: 1 singing male at Lake Apopka NSRA throughout the season (H. Robinson).

SHINY COWBIRD: At least 3 (1 male, 2 females) at Lake Apopka NSRA 5 Jun-11 Jul (P. Hueber, H. Robinson, m. obs); 2 at Alligator Point 19 Jun (+J. Murphy); 1 male at Destin (*Okaloosa*) 23-25 Jul (B. Combs).

ORCHARD ORIOLE: At least 35 pairs at Lake Apopka NSRA this summer (H. Robinson).

HOUSE FINCH: 4 at Tom Renick Park, Ormond Beach 24 Jul (H. Robinson); 53 at Lake Apopka NSRA 25 Jul (H. Robinson).

SCALY-BREASTED MUNIA: 8 at Innerarity Point (*Escambia*) 11 Jun (K. Stanmore); 3 in Pace (*Santa Rosa*) 13 Jun (L. Kelly); 12 in Pace 16 Jun (D. Stangeland, B. Pranty, V. Ponzio); nesting at Home Depot, Pensacola 25 Jun (J. Callaway, B. Callaway); nesting in Gonzalez (*Escambia*) 2 Jul (B. Callaway); 6 in W Pensacola 3 Jul (S. Coster, C. Coster); 2 in N Pensacola 19 Jul (P. Hombert).

PIN-TAILED WHYDAH: 1 in E Pensacola (*Escambia*) 1 Jul (*fide* C. Tebay).

**Contributors:** Howard Adams, Trina Anderson, Steve Aversa, Roxy Barber, Cathy Bester, Clay Black, Roberta Blair, Rick Borchelt, Michael Brothers, Matt Bruce, Dana Bryan, Mark Burns, Brenda Callaway, Jerry Callaway, Bill Chambers, Mike Charest, JoAnna Clayton, Bruce Cochran, Barbara Combs, Ed Combs, Andre Coquerel, Timothy Crane, Kevin Dailey, Marie Dailey, Candice Davis, Lloyd Davis, Chip Deutsch, Jennifer Donsky, Diana Doyle, Michael Drummond, Bob Duncan, Robert Emond, Charlie Ewell, Charles Fisher, Lynn Folts, David Foster, Bruce Furlow, Colin Gjervold, Frank Goodwin, Jeffrey Graham, Tina Greenberg, Debbie Grimes, Mark Gurley, Teresa Halback, Karen Hamblett, Al Hansen, Bev Hansen, Mitchell Harris, Mark Hedden, Dale Henderson, Monica Higgins, John Hintermister, Peggy Hombert, Alice Horst, Pete Hosner, Philip Huebeck, Paul Hueber, Steven Kaplan, Richard Kaskan, Les Kelly, Adam Kent, Andy Kratter, Jerry Krummrich, Keith Laakkonen, Lucille Lane, Gary Leavens, Janet Leavens, Charles Lee, Charlene Leonard, Douglas Mader, Mike Manetz, Larry Manfredi, Jane Mann, Steve Mann, Tom Mast, Jonathan Mays, Jim McGinity, Jim McKay, David McQuade, Tammy McQuade, John Middleton, Don Morrow, John Murphy, Amy Nulph, Tom Obrock, Matt O'Sullivan, Geoff Parks, France Paulsen, Breanna Perry, Eric Plage, Denise Ploger, Troy Ploger, Peter Polshek, Valerie Ponzio, Bill Pranty, Jerry Pruitt, Bruce Purdy, Steve Raduns, Diane Reed, Robert Repenning, Harry Robinson, Elaine Roche, Danny Rohan, Meg Rousher, Rex Rowan, Danny Sauvageau, Alan Seelye-James, Debbie Segal, Danny Shehee, Scott Simmons, David Simpson, Marvin Smith, Ron Smith, Bridget Spencer, Daniel Stangeland, Karen Stanmore, Renee Stewart, Malcolm Swan, Sue Tavaglione, Carol Tebay, Ryan Terrill, Ezra Thompson, Roberto Torres, Tom Webber, Casey Weissburg, Graham Williams, Kristin Wood, Doug Yarbrough, Cuneyt Yilmaz, Terry Zambon

Report prepared by **Kevin E. Dailey**, state compiler (6661 Beatrix Drive, Jacksonville, Florida 32226, <kedailey@yahoo.com>). Regional compilers are **Bruce H. Anderson** (2917 Scarlet Road, Winter Park, Florida 32792, <scizortail@aol.com>), **Robin Diaz** (200 Ocean Lane Drive #PB-1, Key Biscayne, Florida 33149, <rd4birds@bellsouth.net>), **Bob and Lucy Duncan** (614 Fairpoint Drive, Gulf Breeze, Florida 32561, <Town\_Point@bellsouth.net>), **Charlie Ewell** (115 SW 51st Terrace, Cape Coral, Florida 33991, <anhinga42@comcast.net>), **Bev Hansen** (6573 Pine Meadows Drive, Spring Hill, Florida 34606, <bevalhansen@earthlink.net>), **John Murphy** (766 Alligator Drive, Alligator Point, Florida 32346, <southmoonunder@mchsi.com>), and **Ron Smith** (1500 85th Avenue North, St. Petersburg, Florida 33702, <rsmithbirds@gmail.com>).

## **OUR FOS FIELD OBSERVATIONS COMMITTEE NEEDS YOUR SKILLS**

The FOS Field Observations Committee seeks volunteers interested in joining the committee as regional compilers for counties that are currently uncovered. The first region would include *Suwannee*, *Columbia*, *Gilchrist*, *Union*, and *Bradford* Counties. A second region could be covered by one or several interested individuals: *Polk*, *Osceola*, *Hardee*, *De Soto*, *Glades*, and *Okeechobee* Counties. Responsibilities would include soliciting and compiling notable field observations for these counties at the end of each season, to be included in the report. Interested individuals should contact the state compiler listed at the end of this report.

## BE A FRIEND OF FFN

*Florida Field Naturalist* is the journal of FOS, an important communication vehicle for the Florida scientific and birding community. Increasing costs need to be offset with a combination of member dues and contributions.

Please consider a donation of \$50, \$100, \$200 or more to FRIENDS OF FFN. Your gift will allow FFN to improve its artwork, including four-color photographs of rarities similar to the one of the state's first Varied Bunting, published in the February 2006 issue, and other improvements in the content and appearance of our journal.

Contributions to FRIENDS OF FFN will be added to a special endowment of FOS, the interest of which will be used to improve the journal. Please write a check payable to the Florida Ornithological Society and specify that the gift is for FOS Friends of FFN. Send your check to the Treasurer: Charles H. Fisher, Jr., c/o Reilly, Fisher & Solomon PA, 4950 W. Kennedy Blvd., Ste. 610, Tampa, FL 33609. E-mail: chf1shercpa@hotmail.com

We thank the following generous donors for contributing to FRIENDS OF FFN:

### 2012

James E. Cavanagh, Jr.  
Silvio Crespo, Jr.  
Robin Diaz  
David Hartgrove  
Larry Hribar  
John M. Murphy  
Billi Wagner  
William Post  
Anthony White  
Robert Budliger  
Theodore H. Below

### 2013

Silvio Crespo, Jr.  
Larry Hribar  
Mary Landsman  
John Murphy  
Robin Diaz  
Andrew Kratter  
Robert & Lucy Duncan  
Michael Brothers

James E. Cavanagh, Jr.  
Robert Budliger  
Tim Towles  
Nancy Prine

### 2014

Stephen Gross  
William Courser  
David Hartgrove  
John Murphy  
Robin Diaz  
Larry Hribar  
Wilfred Yusek  
Silvio Crespo, Jr.  
James E. Cavanagh, Jr.  
Kevin & Marie Dailey  
St Johns River WMD  
(In Memory of Judy Bryan)  
Richard L. West  
Billi Wagner  
William Post  
John L. Wuepper

Michael Brothers  
 Wade Nolan  
 Ann Paul  
 Anthony White  
 Stuart R. Wilson  
 James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Hartgrove  
 Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2015**

James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Hartgrove

Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2016**

Michael Brothers  
 James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Bob & Lucy Duncan  
 Todd Engstrom  
 David Goodwin  
 David Hartgrove  
 Earl & Dorothy Horn  
 Barbara C. Kittleson  
 John Michael Murphy  
 Stephen Nesbitt  
 Will Post  
 Nancy A. Prine  
 Raymond G. Scory  
 Paul Sykes

**SPECIAL PUBLICATIONS OF THE  
FLORIDA ORNITHOLOGICAL SOCIETY**

- M. C. BOWMAN. 1978. **Species Index to Florida Bird Records in *Audubon Field Notes* and *American Birds*, Volumes 1-30, 1947-1967.** Florida Ornithological Society Special Publication No. 1. xii + 43 pages. \$4.
- J. A. COX. 1987. **Status and Distribution of the Florida Scrub Jay.** Florida Ornithological Society Special Publication No. 3. vii + 110 pages. \$8.
- R. W. LOFTIN, G. E. WOOLFENDEN, AND J. A. WOOLFENDEN. 1991. **Florida Bird Records in *American Birds* and *Audubon Field Notes* (1947-1989): Species Index and County Gazetteer.** Florida Ornithological Society Special Publication No. 4. xiv + 99 pages. \$8.
- R. W. LOFTIN. 1991. **West Indian Bird Records in *American Birds* and *Audubon Field Notes* (1947-1990): Species Index by Islands.** Florida Ornithological Society Special Publication No. 5. ix + 90 pages. \$8.
- W. B. ROBERTSON, JR. AND G. E. WOOLFENDEN. 1992. **Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 6. ix + 260 pages. FOS members: \$15 soft cover, \$20 hard cover; Non-members: \$18 soft cover, \$23 hard cover.
- G. E. WOOLFENDEN, W. B. ROBERTSON, JR., AND J. COX. 2006. **The Breeding Birds of Florida.** Florida Ornithological Society Special Publication No. 7. ii + 142 pages. \$12.
- J. S. GREENLAW, B. PRANTY, AND R. BOWMAN. 2014. **The Robertson and Woolfenden Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 8. viii + 435 pages. \$24.

**To order Special Publications:** Please send a check payable to the *Florida Ornithological Society* to the Treasurer:

**Charles H. Fisher, Jr.**  
**c/o Reilly, Fisher & Solomon PA**  
**4950 W. Kennedy Blvd., Ste. 610**  
**Tampa, FL 33609**  
**E-mail: chf1shercpa@hotmail.com**

For Special Publication Number 8 only, there is a flat price of \$24, which *includes* tax and shipping.

For all other Special Publications, your check should include the price given in the list above plus tax and shipping as determined here:

**Shipping:** Add \$2 shipping for 1-5 copies; \$4 for 6-10 copies.

**Sales Tax:** Florida residents add the sales tax for the county in which the Special Publications will be delivered. Calculate the sales tax based on the total cost of the special publications plus shipping.



# FLORIDA ORNITHOLOGICAL SOCIETY

FOUNDED 1972

## OFFICERS

**PRESIDENT:** ADAM KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: kestrelkent@yahoo.com

**VICE PRESIDENT:** EMILY ANGELL, 475 Easy Street, Avon Park, FL 33825. Email: epipher@archbold-station.org

**SECRETARY:** COLE FREDRICKS, 325 Ruby Lake Loop, Winter Haven, FL 33884. Email: cfredricks@tampabay.rr.com

**TREASURER:** CHARLES H. FISHER, Jr., 4806 W. Beach Park Dr., Tampa, FL 33609. Email: chflshercpa@hotmail.com

**EDITOR, FLORIDA FIELD NATURALIST:** SCOTT ROBINSON, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

### Directors, Serving Until Spring 2017

GINA KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: ginakent@arcinst.org

DAVID SIMPSON, 139 S Willow St., Fellsmere, FL 32948. Email: simpsondavid@mac.com

### Directors, Serving Until Spring 2018

TODD ENGSTROM, 309 Carr Lane, Tallahassee, FL 32312. Email: engstrom@bio.fsu.edu

ERIN RAGHEB, 1105 SW Williston Rd., Gainesville, FL 32601. Email: erin.ragheb@myFWC.com

### Directors, Serving Until Spring 2019

NOEL BRANDON, Department of Integrated Environmental Science, 640 Dr. Mary McLeod Bethune Blvd., Daytona Beach, FL 32114. Email: noelb@cookman.edu

JIM EAGER, 350 Fillmore Ave., Apt. F-18, Cape Canaveral, FL 32920. Email: beachbirder@bellsouth.net

GRAHAM WILLIAMS, 530 Rosedale Ave., Longwood, FL 32750. Email: grahamewanwilliams@gmail.com

### Honorary Members

SAMUEL A. GRIMES 1979; HELEN G. CRUICKSHANK 1980; OLIVER L. AUSTIN, JR. 1982  
PIERCE BRODKORB 1982; WILLIAM B. ROBERTSON, JR. 1992; GLEN E. WOOLFENDEN 1994  
TED BELOW 1999; FRED E. LOHRER 2009

All persons interested in Florida's natural history, especially its abundant bird life, are invited to join the Florida Ornithological Society by writing to the Treasurer. Annual membership dues are \$25 for individual members, \$30 for a family membership, \$15 for students, \$45 for contributing members, and \$40 for institutional membership; add \$5 for overseas delivery. One-time contributions for life membership are \$400 for individuals and \$500 for families. All members receive *Florida Field Naturalist*.

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.

*Florida Field Naturalist* is published quarterly (March, 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, Museum Road at Newell Drive, University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at [www.fosbirds.org](http://www.fosbirds.org)

THIS PUBLICATION IS PRINTED ON NEUTRAL PH PAPER

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 1

MARCH 2017

PAGES 1-38

---

## CONTENTS

### ARTICLES

- Foraging behavior of the Variegated Flycatcher (*Empidonomus varius*)  
at two North American vagrancy sites in the context of foraging  
in its native range  
*Jon S. Greenlaw* ..... 1-13

### NOTES

- Defensive behavior of Ospreys (*Pandion haliaetus*) at natural and artificial  
nest sites  
*Cierra Braga* ..... 14-17
- First North American report of an American Kestrel (*Falco sparverius*)  
roosting in a Monk Parakeet (*Myiopsitta monachus*) nest  
*Joshua M. Diamond* ..... 18-20
- 'Shadow-boxing' by a Northern Mockingbird (*Mimus polyglottos*)  
*Corey T. Callaghan* ..... 21-23
- First documentation of a Swallow-tailed Kite (*Elanoides forficatus*)  
preying on an infant squirrel  
*David L. Sherer and Matthew Furst* ..... 24-25

### IN MEMORIAM

- David W. Johnston 1926-2015  
*Robert L. Crawford* ..... 26-27

### FIELD OBSERVATIONS

- Summer Report: June-July 2016  
*Kevin E. Dailey* ..... 28-34

### ANNOUNCEMENTS

- Our Field Observations Committee needs your skills. .... 35
- Friends of FFN. .... 36-37
- FOS Special Publications ..... 38

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 45, No. 2

MAY 2017

PAGES 39-70



# FLORIDA ORNITHOLOGICAL SOCIETY

FOUNDED 1972

## OFFICERS

**PRESIDENT:** ADAM KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: kestrelkent@yahoo.com

**VICE PRESIDENT:** EMILY ANGELL, 475 Easy Street, Avon Park, FL 33825. Email: epipher@archbold-station.org

**SECRETARY:** COLE FREDRICKS, 325 Ruby Lake Loop, Winter Haven, FL 33884. Email: cfredricks@tampabay.rr.com

**TREASURER:** CHARLES H. FISHER, Jr., 4806 W. Beach Park Dr., Tampa, FL 33609. Email: chflshercpa@hotmail.com

**EDITOR, FLORIDA FIELD NATURALIST:** SCOTT ROBINSON, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

### Directors, Serving Until Spring 2017

GINA KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: ginakent@arcinst.org

DAVID SIMPSON, 139 S Willow St., Fellsmere, FL 32948. Email: simpsondavid@mac.com

### Directors, Serving Until Spring 2018

TODD ENGSTROM, 309 Carr Lane, Tallahassee, FL 32312. Email: engstrom@bio.fsu.edu

ERIN RAGHEB, 1105 SW Williston Rd., Gainesville, FL 32601. Email: erin.ragheb@myFWC.com

### Directors, Serving Until Spring 2019

NOEL BRANDON, Department of Integrated Environmental Science, 640 Dr. Mary McLeod Bethune Blvd., Daytona Beach, FL 32114. Email: noelb@cookman.edu

JIM EAGER, 350 Fillmore Ave., Apt. F-18, Cape Canaveral, FL 32920. Email: beachbirder@bellsouth.net

GRAHAM WILLIAMS, 530 Rosedale Ave., Longwood, FL 32750. Email: grahamevanwilliams@gmail.com

### Honorary Members

SAMUEL A. GRIMES 1979; HELEN G. CRUICKSHANK 1980; OLIVER L. AUSTIN, JR. 1982  
PIERCE BRODKORB 1982; WILLIAM B. ROBERTSON, JR. 1992; GLEN E. WOOLFENDEN 1994  
TED BELOW 1999; FRED E. LOHRER 2009

All persons interested in Florida's natural history, especially its abundant bird life, are invited to join the Florida Ornithological Society by writing to the Treasurer. Annual membership dues are \$25 for individual members, \$30 for a family membership, \$15 for students, \$45 for contributing members, and \$40 for institutional membership; add \$5 for overseas delivery. One-time contributions for life membership are \$400 for individuals and \$500 for families. All members receive *Florida Field Naturalist*.

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.

*Florida Field Naturalist* is published quarterly (March, 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, Museum Road at Newell Drive, University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at [www.fosbirds.org](http://www.fosbirds.org)

THIS PUBLICATION IS PRINTED ON NEUTRAL PH PAPER

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 2

MAY 2017

PAGES 39-70

---

Florida Field Naturalist 45(2):39-44, 2017.

## HATCHING FAILURE IN A FLORIDA POPULATION OF HOUSE FINCHES (*Haemorrhous mexicanus*)

CLAIRE GENTILE<sup>1,2</sup> AND CHRISTINE M. STRACEY<sup>1,3,4,5</sup>

<sup>1</sup>*Department of Biology, Westminster College, 1840 S 1300 E,  
Salt Lake City, Utah 84105*

<sup>2</sup>*Present Address: University of Washington School of Medicine,  
4333 Brooklyn Ave. NE, Seattle, Washington 98105*

<sup>3</sup>*Department of Biology and Florida Museum of Natural History,  
University of Florida, Gainesville, Florida 32611-7800*

<sup>4</sup>*Present address: Department of Biology, Guilford College,  
Greensboro, North Carolina 27410*

<sup>5</sup>*Corresponding author email: straceycm@guilford.edu*

**Abstract.**—We analyzed data on hatching failure rates of an introduced population of House Finches (*Haemorrhous mexicanus*) in Gainesville, Florida. We calculated overall hatching failure rates for 67 nests and also compared hatching failure rates of nests (n=53) located on lights under aluminum roofs to nests (n=14) at other locations. Average hatching failure for all nests was 0.201 +/- 0.045 SE. There was no significant difference in hatching failure between nests in lights (0.225 +/-0.053) and other locations (0.113 +/-0.074). Overall, this population has relatively high rates of hatching failure. Two hypotheses could explain such high rates of nest failure: a reduction in genetic diversity because of a founder effect and high nest site temperature. Future studies, therefore, should document both genetic diversity of this population and nest site temperatures.

The House Finch (*Haemorrhous mexicanus*) is common throughout North America (Badyaev et al. 2012), and was introduced to the east coast in the 1930s by the release of a small number of captive birds on Long Island (Elliot and Arbib 1953). In 1945 and 1946, the number of individuals in the population was estimated to be 24 and 38, respectively (Elliot and Arbib 1953) and had expanded to Florida by the mid-1990s

(Badyaev et al. 2012). Introduced populations of birds with fewer than 150 individuals have increased rates of hatching failure (Briskie and Mackintosh 2004). During another study (Stracey and Robinson 2012), we observed what appeared to be high rates of hatching failure for House Finches in Gainesville, Alachua County, Florida.

In this study, we calculated/compared overall rates of hatching failure for House Finches in Gainesville, Alachua County, Florida. House Finches in Gainesville build their nests in extreme, varying environments (Stracey and Robinson 2012). Some nests are built in shrubs, parking garages, or on buildings where the temperature around the nest remains at typical, ambient levels. Other nests, however, are built on top of light structures beneath aluminum roofs, hereafter referred to as light nests (Fig. 1), which have the potential to reach high temperatures. We therefore also compared hatching failure rates from nests on lights to those in typical nest sites to test if there was an effect of nest site location on hatching failure.

#### METHODS

We collected data on hatching failure rates of House Finches over a four-year period from 2004 to 2007. We located nests at ten study sites in Gainesville including the University of Florida campus, K-12 schools, residential neighborhoods, and parking lots (Stracey and Robinson 2012). For each nest, we defined the nest site as either “light” or “other.” Light nests were those built on top of lights under aluminum roofing (Fig. 1) and occurred at eight different locations. Other nest sites included shrubs, parking garage structures, and buildings at five different locations. The contents of nests were typically recorded every four days, with gaps ranging from three to fifteen days. For each nest, we recorded clutch size and number of unhatched eggs. We calculated hatching failure as the number of unhatched eggs divided by the clutch size and calculated overall rates of hatching failure for this population. We then compared hatching failure rates of light and other nests using a two-tailed Mann-Whitney test.

#### RESULTS

We observed a total of 67 House Finch nests, with 53 nests categorized as “light” and 14 nests categorized as “other.” The average clutch size was 4.12 +/- 0.09 SE. The average hatching failure for all observed nests was 0.201 +/- 0.045 SE. The average hatching failure rate of “light” nests was 0.225 +/- 0.053 SE, while the average for “other” nests was 0.113 +/- 0.074 SE. There was no significant difference in hatching failure between light and other nests ( $U = 336.35$ ,  $n_1 = 53$ ,  $n_2 = 14$ ,  $P = 0.60$ ).

#### DISCUSSION

The average hatching failure rate across multiple bird species is 10 percent, yet introduced populations of less than 150 founding



**Figure 1.** Example of a House Finch nest placed in a “light” nest site, situated between a light and the aluminum roof of a breezeway.

individuals show hatching failure rates that average  $21.6 \pm 5.6$  percent (Briskie and Mackintosh 2004). We documented an average hatching failure rate of  $20.1 \pm 4.5$  percent for this introduced population of House Finches. Reduced genetic diversity can increase hatching failure (Bensch et al. 1994, Kempnaers et al. 1996, Hansson 2004, Spottiswoode and Moller 2004, Mackintosh and Briskie 2005) and introduced populations of House Finches have lower allelic richness and heterozygosity relative to native populations, indicating decreased genetic diversity (Hawley et al. 2006). Our data are consistent with the hypothesis that reduced genetic diversity could be causing high rates of hatching failure in this population, but the data need to be compared to hatching failure rates of native populations of House Finches. A native House Finch population in Arizona had a hatching failure rate of 12.9%

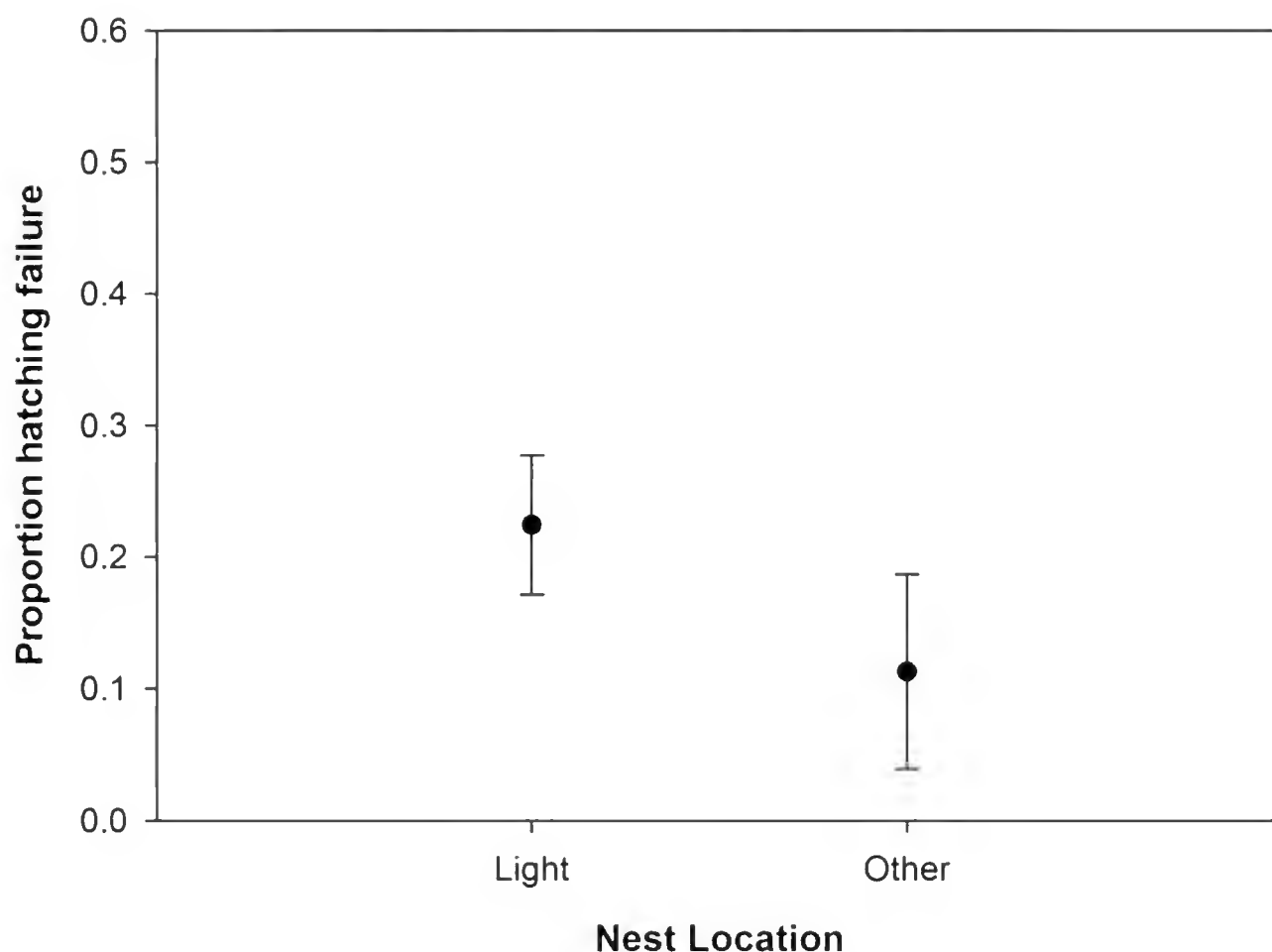
(reported as mean hatching success = 87.1 +/- 19%; Stein et al. 2010), while an introduced population in New York had an average hatching failure rate of 36.9% (reported as mean hatching success = 63.1 +/- 7.1%; Hartup and Kollias 1999). While these data are suggestive that genetic diversity may play a role in hatching failure rates, data on levels of genetic diversity of this population are necessary to assess this hypothesis.

Another factor linked to increased rates of hatching failure is exposure to high ambient temperatures (Arnold et al. 1987, Veiga 1992, Arnold 1993, Serrano et al. 2005). For example, nests of Ash-throated Flycatchers (*Myiarchus cinerascens*) in metal fence posts in Arizona had significantly hotter nests (>41° C) than those nesting in bluebird boxes and only one pole nest successfully fledged young (Dunning and Bowers 1990). Presumably, our light nests, placed between a light and an aluminum roof, reached significantly higher temperatures than nests placed in other locations. Light nests had a hatching failure rate of 22.5 +/- 4.5 percent and other nest sites had a rate of 11.3 +/- 7.4 percent. We did not, however, find a significant effect of nest site on rate of hatching failure, which could be a result of our limited sample size for other nests (N = 14). There may also be an interaction between time of year and nest site location as temperatures early in the season are not likely to reach levels where they would negatively affect hatching rates. Unfortunately, because of our limited sample of nests from other sites, we are unable to look for an interaction between time of year and nest site. Alternatively, incubating females, which rarely leave the nest when temperatures exceed 27° C (Badyaev et al. 2012), may be able to regulate the nest microclimate sufficiently to avoid hatching failure. Cooper et al. (2006) found that Eastern Bluebird (*Sialia sialis*) nest boxes would reach temperatures as high as 46° C, but the nest pocket with eggs remained at 40.5° C. Without data on nest microclimate we are unable to further assess this hypothesis.

Whether incubation by female House Finches prevents lethal heating or nests never reach lethal temperatures, building nests in these light locations does not appear to have a significant immediate fitness cost to House Finches. Furthermore, these nests experienced very low levels of nest predation (Stracey and Robinson 2012) that likely outweigh any increase in hatching failure. To address the possible cost of increased temperature on nesting success, it is critical that future studies place data loggers at the nest site and inside the nest pocket to record actual temperatures.

In order to tease apart the effects of genetic diversity and temperature on hatching failure in this Florida population of House Finches, future studies should collect data on genetic diversity of the finches and employ data loggers to record nest temperature. In





**Figure 2.** The average proportion of eggs that failed to hatch for nests built on top of lights under aluminum roofs (light nests; see Fig. 1) and nests located in shrubs, parking garage structures, buildings, etc. (other nests;  $U' = 336.35$ ,  $n_1 = 53$ ,  $n_2 = 14$ ,  $P = 0.60$ ).

addition, differences in humidity and eggshell structure may differ between native and non-native populations affecting rates of hatching failure (Stein and Badyaev 2011) and need to be taken into account in future studies. A larger sample of nests located in sites other than lights is also needed. Although this population in Florida appears to have a high hatching failure rate, these birds have still been able to thrive on the East coast and have expanded their range to cover the majority of the United States.

#### ACKNOWLEDGMENTS

We thank S. Robinson for logistic and financial support during data collection, T. Richard for assistance with field work, and Sonya LeClair and S. Robinson for suggestions that improved the manuscript.

#### LITERATURE CITED

- ARNOLD, T. W. 1993. Factors affecting egg viability and incubation time in prairie dabbling ducks. *Canadian Journal of Zoology* 71:1146-1152.
- ARNOLD, T. W., F. C. ROHWER, AND T. ARMSTRONG. 1987. Egg viability, nest predation, and the adaptive significance of clutch size in prairie ducks. *American Naturalist* 130:643-653.

- BADYAEV, A. V., V. BELLONI, AND G. E. HILL. 2012. House Finch (*Haemorrhous mexicanus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Retrieved from the Birds of North America Online: <<http://bna.birds.cornell.edu/bna/species/046>>.
- BENSCH, S., D. HASSELQUIST, AND T. VON SCHANTZ. 1994. Genetic similarity between parents predicts hatching failure: Nonincestuous inbreeding in the Great Reed Warbler? *Evolution* 48:317-326.
- BRISKIE, J. V., AND M. MACKINTOSH. 2004. Hatching failure increases with severity of population bottlenecks in birds. *Proceedings of the National Academy of Sciences* 10:558-561.
- COOPER, C. B., W. M. HOCHACHKA, T. B. PHILLIPS, AND A. A. DHONDT. 2006. Geographical and seasonal gradients in hatching failure in Eastern Bluebirds *Sialia sialis* reinforce clutch size trends. *Ibis* 148:221-230.
- DUNNING, J. B., AND R. K. BOWERS. 1990. Lethal temperatures in Ash-throated Flycatcher nests located in metal fence posts. *Journal of Field Ornithology* 61:98-103.
- ELLIOT, J. J., AND R. S. ARBIB, JR. 1953. Origin and status of the House Finch in the eastern United States. *Auk* 70:31-37.
- HANSSON, B. 2004. Marker-based relatedness predicts egg-hatching failure in great reed warblers. *Conservation Genetics* 5:339-348.
- HARTUP, B. K., AND G. V. KOLLIAS. 1999. Field investigation of *Mycoplasma gallisepticum* infections in House Finch (*Carpodacus mexicanus*) eggs and nestlings. *Avian Diseases* 43:572-576.
- HAWLEY, D. M., D. HANLEY, A. A. DHONDT, AND I. J. LOVETTE. 2006. Molecular evidence for a founder effect in invasive House Finch (*Carpodacus mexicanus*) populations experiencing an emergent disease epidemic. *Molecular Ecology* 15:263-275.
- KEMPENAERS, B., F. ADRIAENSEN, A. J. VAN NOORDWIJK, AND A. A. DHONDT. 1996. Genetic similarity, inbreeding, and hatching failure in Blue Tits: Are unhatched eggs infertile? *Proceedings of the Royal Society Biological Sciences* 263:79-185.
- MACKINTOSH, M. A., AND J. V. BRISKIE. 2005. High levels of hatching failure in an insular population of the South Island robin: a consequence of food limitation? *Biological Conservation* 122:409-416.
- SERRANO, D., J. L. TELLA, AND E. URSUA. 2005. Proximate causes and fitness consequences of hatching failure in Lesser Kestrels *Falco naumanni*. *Journal of Avian Biology* 36:242-250.
- SPOTTISWOODE, C., AND A. P. MOLLER. 2004. Genetic similarity and hatching success in birds. *Proceedings of the Royal Society Biological Sciences* 271:267-272.
- STEIN, L. R., AND A. V. BADYAEV. 2011. Evolution of eggshell structure during rapid range expansion in a passerine bird. *Functional Ecology* 25:1215-1222.
- STEIN, L. R., K. P. OH, AND A. V. BADYAEV. 2010. Fitness consequences of male provisioning of incubating females in a desert passerine bird. *Journal of Ornithology* 151:227-234.
- STRACEY, C. M., AND S. K. ROBINSON. 2012. Does nest predation shape urban bird communities? Pages 49-70 in *Urban Bird Ecology and Conservation* (C. A. Lepczyk and P. S. Warren, Eds.). *Studies in Avian Biology* 45, University of California Press, Berkeley, California.
- VEIGA, J. P. 1992. Hatching asynchrony in the House Sparrow: A test of the Egg-Viability Hypothesis. *American Naturalist* 139:669-675.

## **IMPROVISED COURTSHIP FEEDING BY AN OSPREY (*Pandion haliaetus*) PAIR**

JAMES R. THOMAS

*1175 Grand Pointe Dr., Gulf Breeze, Florida 32563*

During the early part of the breeding cycle male Ospreys (*Pandion haliaetus*) supply their female mates with fish. This is known as courtship feeding. After a successful hunt the male typically consumes part of his catch away from the nest before depositing the remaining portion in the nest for the female (Poole 1989, Green and Krebs 1995). Typically, the female subsequently flies with the fish to a separate perch for consumption. The exchange of the fish is normally dependent upon an intact functional nest. While observing various nesting Ospreys on Santa Rosa Island, Escambia County, Florida in 2014, I observed and photographed a male Osprey that necessarily “improvised” in a novel way so as to courtship feed his mate in the absence of a functional nest.

I watched this pair for a period of several weeks in the spring of 2014 as they attempted to build a nest in the top of a dead tree. The tree offered little in the way of long branches or other features that might support a typical Osprey nest of the platform type. As a result, most of the nesting material that was delivered by the male and female to the potential nesting site either immediately, or eventually, fell from the tree to the ground. After approximately 20 days of construction, the nest had no real discernible organization, consisting mostly of a few sticks and bits of disorganized vegetation.

During one period of observation, around 15 days after the beginning of nest construction, the male arrived at the nesting site with the posterior portion of a fish in his left talons. He perched on what remained of a dead primary branch of the nesting tree, and the female continued to perch on the remaining trunk of the tree approximately 2.5 meters from him (Fig. 1). Note that in the photo there is no significant (functional) nest present in the tree below the pair. From his perch the male extended his left leg towards the female with a portion of fish in talons. The female, however, did not leave her perch.

Rather than drop the fish into the very rudimentary nest (which would be usual courtship feeding behavior for an Osprey), the male continued to hold on to the fish. Ospreys rarely retrieve dropped fish from the ground (Poole 1989). After a few minutes, the male flew to the female, and hovered before her. While she fed on the fish he continued to hover and hold the fish in his left talons (Fig. 2). The female remained on her perch during this time. The male hovered for



**Figure 1. Perched male Osprey on the left holds posterior half of a fish in left talons and extends it towards the female. The female remains perched opposite him. Note that in the photo there is no significant (functional) nest present in the tree below the pair.**

approximately 10 to 15 sec while she fed on the fish, and then returned to his perch with the fish in his talons. He repeated this behavior two or three more times and allowed the female to feed each time. During the entire time I observed the pair, the male did not take any meat from the fish for himself. He eventually dropped the remains of the fish into the rudimentary nest and it immediately fell to the ground. Neither bird attempted to recover it.

I am unable to find other reports of an Osprey courtship feeding its mate by holding food in its talons while hovering. Perhaps this is not surprising. Usual courtship feeding behavior in this species does not involve the direct feeding of the female by the male. Instead, male Ospreys deliver fish to the female by dropping the fish in the nest. While males of some avian species will courtship feed females by presenting food items directly to them, they are often seasonally monogamous and are competing with other males for a female's attention. Since Ospreys typically mate for life, the male is not courtship feeding the female to gain her attention. Most likely, the male is feeding the female to promote successful brooding (Poole 1985, Green and Krebs 1995).



**Figure 2.** After a few minutes, the male flies to the female, and subsequently hovers at a height that allows her to feed on the fish while remaining on her perch.

Courtship feeding in birds exists in many forms (Galván and Sanz 2011). It typically occurs during the early part of the breeding cycle. In many species it involves the presentation of solid or regurgitated food by the male to the female. In species where the female courts the male, the behavioral roles are usually reversed. The function of courtship feeding has been difficult to discern in breeding Ospreys and other avian (and even non-avian) species (Poole 1984, Green and Krebs 1995). While the function of courtship feeding in Ospreys remains controversial, recent reports on other avian species suggest that courtship feeding promotes overall brood success. In a study by Galván and Sanz (2011) on 170 species of birds, it was noted that many of the avian species that practice courtship feeding are those in which the female is solely responsible for most aspects of reproduction, including nest-building and the incubation of eggs. They proposed that the male's primary responsibility in these species is to feed the female. In a relatively early paper, Royama (1966) studying tits in the genus

*Parus* concluded that the feeding of females by the males may have a nutritional function rather than a courtship function; males may provide a substantial part of the females' food when (1) the females need to produce a large number of eggs on successive days, and (2) the females are incubating eggs and are not able to spend time acquiring food. Lifjeld and Slagsvold (1986) found a positive correlation between the rate of courtship feeding by male Pied Flycatchers (*Ficedula hypoleuca*) and the body weights of the female and the pair's offspring at the time of fledging. Courtship fed females also experienced shorter incubation periods.

I believe that the behavior of the male Osprey that I observed represents a form of behavioral "improvisation" driven by the biologic need to courtship feed under difficult circumstances (the absence of a nest). The male was forced to formulate a unique behavioral response, one that included at least two behavioral components not typically a part of courtship feeding in this species: (1) hovering, and (2) the holding of prey in talons to facilitate the feeding of a mate. Hovering is a component of some Osprey courtship displays such as the Fish-flight, and Ospreys may also hover while scouting for prey. It is not a behavior that is routinely observed in association with courtship feeding. Furthermore, I have never personally seen, and am unable to find any report of, a male Osprey directly feeding the female while holding a fish in its talons.

Ethologists use the term "fixed action pattern" or "modal action pattern" to denote instinctive behavioral sequences that are relatively invariant within a species. Often initiated by a particular stimulus, these sequences run to completion and are free of environmental influences. For these reasons they are thought to be "hard-wired" within the brain and, in this way, they are not learned behaviors. Other behaviors in animals appear to be learned and the learning process is often one of trial and error. Wolfgang Kohler (1925) proposed another form of animal learning, which he first observed in chimpanzees (*Pan troglodytes*), that does not involve trial and error. It is known as insight learning. Insight learning occurs when the solution to a problem is realized by an individual animal in a sudden and abrupt manner.

It is possible that the behavior exhibited by the male Osprey described in this paper is an example of insight learning. Perhaps the best argument for this is that the courtship feeding behavior of the male Osprey described above has not been previously reported and, therefore, may simply be a product of insight learning by this one particular male Osprey under rather unique circumstances.

It is also possible that the unique behavior demonstrated by this male Osprey during courtship feeding is a product of higher-order innovation and problem solving by trial and error. However, I did not

observe previous “trials” and one might also expect to find previous reports of this behavior by Ospreys if this were the case. Again, the absence of such reports suggests that the behavior is a product of insight learning by the male of this Osprey pair.

Generally corvids, parrots, and some raptors are considered to have intellectual abilities that are greater than other avian species (Emery 2006). Lefebvre et al. (1997) proposed a method of measuring avian intelligence in terms of innovation in feeding habits. Another raptor, the Peregrine Falcon (*Falco peregrinus*), members of the Order Ciconiiformes, and the corvids scored highest in this study.

#### LITERATURE CITED

- BIRKHEAD, T. R., AND C. M. LESSELS. 1988. Copulation behaviour of the Osprey. *Animal Behaviour* 36:1672-1682.
- BIONDI, L. M., M. S. BO, AND A. I. VASSALLO. 2010. Inter-individual and age differences in exploration, neophobia, and problem solving ability in a Neotropical raptor (*Milvago chimango*). *Animal Cognition* 13:701-710.
- EMERY, N. J. 2006. Cognitive ornithology: The evolution of avian intelligence. *Philosophical Transactions of the Royal Society B* 361:23-43.
- GALVAN, I., AND J. J. SANZ. 2011. Mate-feeding has evolved as a compensatory energetic strategy that affects breeding success in birds. *Behavioral Ecology* 22:1088-1095.
- GREEN, D. J. AND E. A. KREBS. 1995. Courtship-feeding in Ospreys *Pandion haliaetus*: A criterion for mate assessment? *Ibis* 137:35-43.
- KOHLER, W. 1925. *Mentality of Apes*. Harcourt, Brace & World (U.S. edition).
- L. LEFEBVRE, P. WHITTLE, E. LASCARIS, AND A. FINKELSTEIN. 1997. Feeding innovations and forebrain size in birds. *Animal Behaviour* 53:549-560.
- LIFJELD, J., AND T. SLAGSVOLD. 1986. The function of courtship feeding during incubation in the pied flycatcher *Ficedula hypoleuca*. *Animal Behaviour* 34:1441-1453.
- POOLE, A. F. 1984. Reproductive limitations in coastal Ospreys: an ecological and evolutionary perspective. Ph.D. dissertation, Boston University, Boston, Massachusetts.
- POOLE, A. 1985. Courtship feeding and Osprey reproduction. *Auk* 102:479-492.
- POOLE, A. 1989. *Ospreys: A Natural and Unnatural History*. Cambridge University Press, Cambridge, U.K.
- ROYAMA, T. 1966 A re-interpretation of courtship feeding. *Bird Study* 13:116-129.
- STOKES, A. W., AND H. W. WILLIAMS. 1971. Courtship feeding in gallinaceous birds. *Auk* 88:543-559.

**RAFINESQUE'S BIG-EARED BAT  
(*Corynorhinus rafinesquii*) IN A FLORIDA CAVE IN WINTER**

*Lisa M. Smith*<sup>1</sup>, *John Mayersky*<sup>2</sup>, and *Jeffery A. Gore*<sup>2</sup>

<sup>1</sup>*Florida Fish and Wildlife Conservation Commission, Gainesville, Florida 32601*

*Email: Lisa.Smith@myfwc.com*

<sup>2</sup>*Florida Fish and Wildlife Conservation Commission, Panama City, Florida 32409*

Rafinesque's big-eared bat (*Corynorhinus rafinesquii*) occurs across the southeastern United States from Illinois to Florida (Lacki and Bayless 2013). This species roosts in various natural and anthropogenic settings (Barbour and Davis 1969, Belwood 1992, Hurst and Lacki 1999), but roost sites and winter roosting behavior vary with latitude. In the northern portion of their range, Rafinesque's big-eared bats typically overwinter in caves and mines in colonies as large as 1,500 individuals (Pearson 1962, Hurst and Lacki 1999, Lacki and Bayless 2013). Further south, winter colonies are much smaller, usually containing <50 individuals (Trousdale and Beckett 2004, Sasse et al. 2011, Clement and Castleberry 2013). Moreover, Rafinesque's big-eared bats in the south rarely roost in caves and instead occur in widely dispersed colonies in tree cavities (Clement and Castleberry 2013, Fleming et al. 2013) or manmade structures, including cisterns (Sasse et al. 2011), abandoned buildings (Finn 1996, Loeb and Zarnoch 2011), and bridges (Trousdale and Beckett 2004, Ferrara and Leberg 2005). We found only one record from the southern coastal plain of a Rafinesque's big-eared bat wintering in a cave, and that occurred in central Alabama (Best et al. 1992). The few winter roost sites documented in Florida were in abandoned buildings or culvert bat houses, and bats roosted in those sites year-round without an extended period of torpor (Finn 1996, Kevin Oxenrider, pers. obs.). A single non-torpid individual was found in winter in a highway culvert in Walton County, in northwest Florida (Paul Moler, pers. obs.), but no Rafinesque's big-eared bats have been reported in Florida caves in the winter.

During winters from December 2014 through March 2016, we visited 145 caves in north Florida 1-3 times to assess their status as bat roosts. On 2 February 2015, we observed a Rafinesque's big-eared bat in a cave at Falling Waters State Park in Washington County. The bat was not observed during visits in February 2014 or 2016, and no Rafinesque's big-eared bats were detected at other caves. To our knowledge, this is the first record of a Rafinesque's big-eared bat in a cave during the winter in Florida. Despite extensive surveys of cave bats in Florida (Rice 1955, Gore and Hovis 1998, Gore et al. 2012), only two Rafinesque's big-eared bats have been recorded in Florida caves and both are summer records: one in Florida Caverns State Park in Jackson County in 1942 (Florida Museum of Natural History, specimen UF 13016) and the other in a manmade cave near Silver Springs in Marion County (Neill 1953).

The Rafinesque's big-eared bat we observed was roosting in the twilight area of a short, narrow, fissure cave connecting two sinkholes. The open structure of this cave allows for large temperature fluctuations and increased airflow, conditions typically found in Rafinesque's big-eared bat hibernacula in the northern portion of the species range (Mumford and Whitaker 1982). The bat was roosting in this smaller, more exposed cave despite the presence of a larger, darker, and more climatically stable cave <20 m away. This neighboring cave is one of the largest tri-colored bat (*Perimyotis subflavus*)



hibernacula in Florida, and Rafinesque's big-eared bats frequently hibernate in caves near tri-colored bats and southeastern myotis (*Myotis austroriparius*) (Hurst and Lacki 1999, Sasse et al. 2011). However, the Rafinesque's big-eared bat we observed was within 3 m of a lone tri-colored bat.

The bat we observed was torpid and its surface body temperature was 3.0° C, the same temperature as the cave wall. These bats are typically more active and alert when roosting than are those of many other species, and they often undergo short bouts of torpor and move between different roost sites (Johnson et al. 2012). We visited the cave only once in 2015 and do not know how long the bat was present. Frequent roost switching may explain why we did not observe the bat during our survey in 2014 or 2016.

It is not clear why Rafinesque's big-eared bats rarely roost in caves during the winter in the southern portion of their range. Although caves are not as abundant in the southeastern coastal plain as in some more northern parts of the species range (Culver and Pipan 2009), caves are present and north Florida in particular contains many potential cave roosts (Florea and Vacher 2009). We suspect that the relatively warm climate of north Florida allows Rafinesque's big-eared bats to survive in a variety of roosts and remain active because insect prey is available on most nights. But that still leaves the question of why caves, which have relatively stable temperatures, are not used as roosting sites where caves are common or when temperatures are low. Minimum temperatures on the three days preceding our observation ranged from -1 to 2° C, which may have made the cave an attractive temporary roost. Although our observation demonstrates that Rafinesque's big-eared bats sometimes roost in Florida caves in winter, it only adds to the mystery of why non-cave sites are usually selected over stable cave environments as winter roosts.

#### LITERATURE CITED

- BARBOUR, R. W., AND W. J. DAVIS. 1969. Bats of America. The University Press of Kentucky, Lexington.
- BELWOOD, J. J. 1992. Southeastern big-eared bat, *Plecotus rafinesquii macrotis*. Pages 287-293 in Rare and Endangered Biota of Florida, Volume 1 (Mammals) (S. R. Humphrey, Ed.), University Press of Florida, Gainesville.
- BEST, T. L., S. D. CAREY, K. G. CAESAR, AND T. H. HENRY. 1992. Distribution and abundance of bats (Mammalia: Chiroptera) in coastal plain caves of southern Alabama. National Speleological Society Bulletin 54:61-65.
- CLEMENT, M. J., AND S. B. CASTLEBERRY. 2013. Divergent roosting habits of Rafinesque's big-eared bat and southeastern myotis during winter floods. American Midland Naturalist 170:158-170.
- CULVER, D. C., AND T. PIPAN. 2009. The Biology of Caves and Other Subterranean Habitats. Oxford University Press, Oxford, UK.
- FERRARA, F. J., AND P. L. LEBERG. 2005. Influence of investigator disturbance and temporal variation on surveys of bats roosting under bridges. Wildlife Society Bulletin 33:1113-1122.
- FINN, L. S. 1996. Roosting and foraging ecology of a southeastern big-eared bat (*Corynorhinus rafinesquii macrotis*) maternity colony in central Florida. Final Report to The Nature Conservancy, Maitland, Florida.
- FLEMING, H. L., J. L. BELANT, AND D. M. RICHARDSON. 2013. Multi-scale roost site selection by Rafinesque's big-eared bat (*Corynorhinus rafinesquii*) and southeastern myotis (*Myotis austroriparius*) in Mississippi. American Midland Naturalist 169:43-55.
- FLOREA, L. J., AND H. L. VACHER. 2009. The southeastern coastal plain: an overview. Caves and Karst in America. <[http://digitalcommons.wku.edu/geog\\_fac\\_pub/22](http://digitalcommons.wku.edu/geog_fac_pub/22)>. Accessed 15 March 2016.

- GORE, J. A., AND J. A. HOVIS. 1998. Status and conservation of southeastern myotis maternity colonies in Florida caves. *Florida Scientist* 61:160-169.
- GORE, J. A., L. LAZURE, AND M. E. LUDLOW. 2012. Decline in the winter population of gray bats (*Myotis grisescens*) in Florida. *Southeastern Naturalist* 11:89-98.
- HURST, T. E., AND M. J. LACKI. 1999. Roost selection, population size, and habitat use by a colony of Rafinesque's big-eared bats (*Corynorhinus rafinesquii*). *American Midland Naturalist* 142:363-371.
- JOHNSON, J. S., M. J. LACKI, S. C. THOMAS, AND J. F. GRIDER. 2012. Frequent arousals from winter torpor in Rafinesque's big-eared bat (*Corynorhinus rafinesquii*). *PLoS ONE* 7(11):e49754. doi:10.1371/journal.pone.0049754.
- LACKI, M. J., AND M. L. BAYLESS. 2013. A conservation strategy for Rafinesque's big-eared bat (*Corynorhinus rafinesquii*) and southeastern myotis (*Myotis austroriparius*). Bat Conservation International, Austin, Texas.
- LOEB, S. C., AND S. J. ZARNOCH. 2011. Seasonal and multiannual roost use by Rafinesque's big-eared bats in the coastal plain of SC. Pages 111-121 in *Conservation and Management of Eastern Big-eared Bats: A Symposium* (S. C. Loeb, M. J. Lacki, and D. A. Miller, Eds.). U.S. Department of Agriculture, Forest Service, Southern Research Station, Asheville, North Carolina.
- MUMFORD, R. E., AND J. O. WHITAKER, JR. 1982. *Mammals of Indiana*. Indiana University Press, Bloomington.
- NEILL, W. T. 1953. A Florida specimen of Le Conte's lump-nosed bat. *Journal of Mammalogy* 34:382-383.
- PEARSON, E. W. 1962. Bats hibernating in silica mines in southern Illinois. *Journal of Mammalogy* 43:27-33.
- RICE, D. W. 1955. Life history and ecology of *Myotis austroriparius* in Florida. *Journal of Mammalogy* 38:15-32.
- SASSE, D. B., D. A. SAUGEY, AND D. R. ENGLAND. 2011. Winter roosting behavior of Rafinesque's big-eared bat in southwestern Arkansas. Pages 123-128 in *Conservation and Management of Eastern Big-eared Bats: A Symposium* (S. C. Loeb, M. J. Lacki, and D. A. Miller, Eds.). U.S. Department of Agriculture, Forest Service, Southern Research Station, Asheville, North Carolina.
- TROUSDALE, A. W., AND D. C. BECKETT. 2004. Seasonal use of bridges by Rafinesque's big-eared bat, *Corynorhinus rafinesquii*, in southern Mississippi. *Southeastern Naturalist* 3:103-112.

## FIELD OBSERVATIONS

**Fall Report: August-November 2016.**—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Electronic 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 follow this report.

Sight-only observations are considered “reports” while only those observations supported by verifiable evidence (photographs, video or audio recordings, or specimens) are called “records.” Species for which documentation is required by the FOC and by the FOS Records Committee (FOSRC; <fosbirds.org/official-florida-state-bird-list>) 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, AFR = Air Force Range, EOS = end of season, m. obs. = many observers, NERR = National Estuarine Research Reserve, NP = National Park, NSRA = North Shore Restoration Area, 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 numbers. Photographs or video- or audio-recordings archived by the FOC are identified by a plus (+).

### SUMMARY OF THE FALL SEASON

The fall season will be remembered for two hurricanes that impacted Florida: Hermine and Matthew. Hurricane Hermine made landfall in the Big Bend area on 1 September and brought several notable pelagic species to *Franklin*, including Brown Noddy, Sooty Tern, Bridled Tern, and an amazing 11 tern species to *Alachua*. Hurricane Matthew skirted the eastern seaboard 6-8 October from *Miami-Dade* all the way through *Nassau*. Matthew had a significant coastal impact from *Volusia* north, where it devastated coastal dune habitat in northern *Flagler*, *St. Johns*, *Duval*, and *Nassau*. In addition, Matthew caused significant damage to the pier at Fort Clinch SP, destroyed the Shands pier in *Clay*, and forced the closure of Huguenot Memorial Park in *Duval* for over four months. In less-affected counties observers attributed many unusual inland coastal or pelagic species to Matthew, including a Black-capped Petrel in *Alachua*.

This report reflects the taxonomic / sequence changes from the 2016 American Ornithologists' Union's (AOU) Supplement. FOSRC review species listed in the report include a Brant, American Black Duck, Red-necked Grebe, Hudsonian and Bar-tailed Godwit, Long-tailed Jaeger, Black-legged Kittiwake, Sabine's Gull, Red-footed Booby, Neotropic Cormorant, Long-eared Owl, multiples each of Yellow-bellied, Alder, and Willow Flycatchers, two Say's Phoebes, a La Sagra's Flycatcher, Sulphur-bellied Flycatcher, Thick-billed Vireo, Lapland Longspur, “Audubon's” Yellow-rumped Warbler, Black-throated Gray Warbler, and a Western Spindalis.

The FOC is seeking volunteers interested in joining the committee as regional compilers for counties that are currently uncovered. The first region would include

*Suwannee, Columbia, Gilchrist, Union, and Bradford* Counties. A second region could be covered by one or multiple interested individuals: *Polk, Osceola, Hardee, De Soto, Glades, and Okeechobee* Counties. Responsibilities would include soliciting and compiling notable field observations for these counties at the end of each season, to be included in the report. Interested individuals should contact the state compiler listed at the end of this report.

## SPECIES ACCOUNTS

- BLACK-BELLIED WHISTLING-DUCK: ca. 100 at Monticello (*Jefferson*) 15 Nov (M. Smith).  
 FULVOUS WHISTLING-DUCK: 65 at Lake Apopka NSRA (*Orange*) 31 Oct (H. Robinson).  
 GREATER WHITE-FRONTED GOOSE: 1 at Tallahassee (*Leon*) 22 Oct (J. Cavanagh).  
 SNOW GOOSE: 6 at St. Marks NWR (*Wakulla*) 27 Nov (D. Gagne, D. Olavarria, D. Fraser); 3 white morphs, 2 adults, 1 immature, at Ponce de Leon Inlet (*Volusia*) 29 Nov (+M. Brothers et al.).  
 \*BRANT: 1 at East Cape Camp, Cape Sable, Everglades NP (*Monroe*) 25-26 Nov (+A. Washuta).  
 TRUMPETER SWAN: One with pinioned wings at Eagle Lake Park (*Pinellas*) 18-20 Aug (+K. Duncan, m. obs.).  
 GADWALL: 4-7 at Lake Maggiore (*Pinellas*) 20-27 Nov (+S. Tavaglione); 23 at Lake Apopka NSRA 21 Nov (H. Robinson).  
 \*AMERICAN BLACK DUCK: Up to 3 at Perdue Pond Wildlife Area (*Duval*) 20 Nov-EOS (D. Foster).  
 MALLARD: 2 at Paynes Prairie Preserve SP (*Alachua*) 1 Sep (M. O'Sullivan, M. Manetz et al.); 19 at St. Marks NWR 27 Nov (D. Gagne, D. Olavarria, D. Fraser).  
 CINNAMON TEAL: 1 at Guana Tolomato Matanzas NERR-Six Mile Landing (*St. Johns*) 8 Nov (D. Reed et al.).  
 NORTHERN SHOVELER: 1 continued from the previous winter season at Big Talbot Island SP - Spoonbill Pond (*Duval*) through 27 Aug (K. Dailey et al.); 1 at the Okaloosa County STF (*Okaloosa*) 22 Aug (D. Stangeland).  
 NORTHERN PINTAIL: 1 at Merritt Island NWR (*Brevard*) 18 Aug (J. Stefancic); 1 at Lake Apopka NSRA 14 Nov-EOS (H. Robinson); 1-2 females at William E. Dunn WTF (*Pinellas*) 19-29 Nov (+B. Cochrane).  
 CANVASBACK: Up to 2 at Sweetwater Wetlands Park (*Alachua*) 13-19 Nov (D. Rohan, M. Manetz); 1 male at Lake Apopka NSRA 21 Nov (H. Robinson).  
 REDHEAD: 1 male at Tierra Verde (*Pinellas*) 29 Aug-23 Oct (R. Smith).  
 RING-NECKED DUCK: 1 at Tierra Verde 30 Oct (+S. Tavaglione); ca. 1600 on one retention pond at The Villages (*Sumter*) 24 Nov (J. Dinsmore).  
 LESSER SCAUP: 1 at south *Pinellas* 10 Aug (T. Ploger, D. Ploger).  
 SURF SCOTER: 1 at Lake Apopka NSRA 24 Oct (H. Robinson); 1 at Tomoka SP, Ormond Beach (*Volusia*) 19 Nov (+M. Brothers); 1 at John U. Lloyd SP (*Broward*) 25 Nov (+M. Berney); 1 at Marco Island (*Collier*) 27 Nov (+M. Higgins); 1 at Belleair Beach (*Pinellas*) 27 Nov (K. Nelson).  
 WHITE-WINGED SCOTER: 1 at Tomoka SP, Ormond Beach 25 Nov (+M. Brothers).  
 BLACK SCOTER: 2 continued at Huguenot Memorial Park (*Duval*) through 6 Aug (K. Dailey et al.); 103 at Fort Pickens (*Escambia*) 8 Nov (B. Duncan, L. Duncan); 120 at Santa Rosa Island (*Okaloosa*) 8 Nov (K. Christman); 1 female at Boca Ciega Bay (*Pinellas*) 14-24 Nov (+T. Ploger, D. Ploger); up to 100 at Tomoka SP, Ormond Beach 19-25 Nov (+M. Brothers); 3-4 at Tarpon Springs (*Pinellas*) 20-27 Nov 19 (D. Gagne et al.); 1 at Bayport (*Hernando*) 22 Nov (B. Pranty); 80 at Fort Pickens 28 Nov (B. Duncan, L. Duncan); 45 at Ponce de Leon Inlet 29 Nov (M. Brothers et al.).  
 LONG-TAILED DUCK: 1 at J. N. Ding Darling NWR (*Lee*) 26 Nov (+D. Richard).  
 COMMON GOLDENEYE: 1 adult female at Melbourne (*Brevard*) 30 Nov (+J. Eager).

- HOODED MERGANSER: 247 at Brighton Bay (*Pinellas*) 27 Nov (M. Burns).
- RED-BREASTED MERGANSER: 1 at Big Talbot Island SP - Spoonbill Pond 6 Aug (K. Dailey).
- AMERICAN FLAMINGO: 1 at mile marker 58, Grassy Key (*Monroe*) 23 Aug (K. Miller).
- PIED-BILLED GREBE: 41 on Lake Maggiore 14 Oct (+S. Tavaglione); 5 recently fledged young, downtown Pensacola (*Escambia*) 24 Oct (B. DeArman).
- HORNED GREBE: 2 at Lake Apopka NSRA 17 Nov (H. Robinson).
- \*RED-NECKED GREBE: 1 adult at Robert J. Strickland Memorial Park, Hudson (*Pasco*) 15 Nov (+J. Eager).
- COMMON GROUND-DOVE: 1 on a nest at Inverness (*Citrus*) 6 Oct (R. Lovestrand).
- WHITE-WINGED DOVE: 2 at Tom Renick Park, Ormond Beach 3 Aug (H. Robinson); 1 at Atlantic Beach (*Duval*) 24 Nov (D. Pridgen).
- YELLOW-BILLED CUCKOO: 1 at Half Moon WMA (*Sumter*) 3 Nov (A. Horst).
- BLACK-BILLED CUCKOO: 1 at Sawgrass Lake Park (*Pinellas*) 7 Sep (+D. Love); up to 3 at Fort De Soto Park 28 Sep-4 Oct (+S. Olsen, P. Brannon, +R. Smith et al.); 1 at Curry Hammock SP (*Monroe*) 8 Oct (*fide* R. Diaz); 1 at St. George Island SP (*Franklin*) 9 Oct (+J. Stevenson); 1 at Newberry (*Alachua*) 9 Oct (L. Holt).
- SMOOTH-BILLED ANI: 1 at Loxahatchee NWR (*Palm Beach*) 23 Aug-28 Sep (m. obs.); 2 at L-31 Spreader Canal at SW 232 Avenue (*Miami-Dade*) 12 Nov (M. Porcelli); 1 at STA-5/6 (*Hendry*) 19 Nov-EOS (M. England, +C. Groff et al.).
- GROOVE-BILLED ANI: Up to 2 at Lake Apopka NSRA 17 Oct and 9 Nov-EOS (H. Robinson, +C. Newton, R. Geisler); 1 at St. Marks NWR 13 Nov (+A. Kent, G. Kent).
- COMMON NIGHTHAWK: 61 migrating at Ponce Inlet 12 Sep (M. Brothers).
- EASTERN WHIP-POOR-WILL: 1 at Evergreen Cemetery (*Broward*) 17 Sep (M. Berney); 1 at Forest Run Park (*Pinellas*) 24 Sep (R. Smith); 1 found injured at south *Pinellas* was taken to rehab 1 Oct (+R. Smith); 2 at Reddie Point Preserve (*Duval*) 28 Oct (J. Graham, C. Davis); 1 at Old Jennings Recreation Area (*Clay*) 5 Nov (J. Graham); 3 at Ringhaver Park (*Duval*) 7 Nov (J. Graham, C. Davis).
- RUFIOUS HUMMINGBIRD: Up to 2 at Castellow Hammock Park (*Miami-Dade*) 25 Sep-EOS (+L. Manfredi, m. obs.).
- BUFF-BELLIED HUMMINGBIRD: 2 at Castellow Hammock Park 23 Oct-EOS (+S. Juan); 1 was banded at Pensacola 31 Oct (*fide* B. Duncan); 1 at Eastpoint (*Franklin*) 17 Nov-EOS (+S. Klink).
- PURPLE SWAMPHEN: 1 at Lake Apopka NSRA 5 Nov-EOS (+P. Hueber, m. obs.).
- LIMPKIN: 1 at Flagler Estates, Hastings (*St. Johns*) 11 Oct (C. Hooker).
- SANDHILL CRANE: 1 at Gulf Breeze (*Santa Rosa*) 13 Nov (S. McNemar); 20 at St. Marks NWR 24 Nov (J. Cavanagh).
- WHOOPIING CRANE: 1 ten-year old wild-hatched female present throughout the season at Paynes Prairie Preserve SP (J. Hintermister, D. Segal et al.); 1 one-year old wild-hatched female at Lake Tuscawilla (*Alachua*) 12 Oct-6 Nov (C. Burney, L. Predny, D. Young).
- AMERICAN AVOCET: 1 at Paynes Prairie Preserve SP 8 Aug (D. Dacol); 1 at Caladesi Island (*Pinellas*) 20 Aug (+S. Mann, J. Mann); 4 at Dunedin Causeway (*Pinellas*) 21 Aug (D. Goebel); up to 22 at Treasure Island Beach (*Pinellas*) 2 Sep (R. Smith et al.); 28 at Fred Howard Park (*Pinellas*) 21 Oct (+B. Perry); 7 at Lake City Sprayfield (*Columbia*) 28 Oct (D. Segal); 18 at Honeymoon Island SP (*Pinellas*) 15 Nov (+R. Lane); up to 3 at Paynes Prairie Preserve SP 16 Nov-EOS (M. Manetz et al.); 14 at Clapboard Creek (*Duval*) 20 Nov (K. Dailey).
- BLACK-BELLIED PLOVER: 2 at Paynes Prairie Preserve SP 7 Aug (D. Segal); up to 3 at Lake Apopka NSRA 15-22 Aug (H. Robinson); 18 at CR 305 south of intersection with CR 304, west of Cody's Corner (*Flagler*) 29 Aug (M. Brothers); up to 3 at Paynes Prairie Preserve SP 11-19 Nov (B. Carroll, C. Deutsch).
- AMERICAN GOLDEN-PLOVER: 1 at CR305 sod fields (*Flagler*) 13-15 Aug (M. Brothers et al.); 1 at Paynes Prairie Preserve SP 30 Aug-2 Sep (M. Manetz et al.); 1 flyover at Lake

- Apopka NSRA 3 Sep (+L. Folts *vide* P. Hueber); 1 at the Okaloosa County STF 13-27 Sep (B. Purdy, G. Floyd, D. Stangeland); 1 at Bald Point SP (*Franklin*) 10 Oct (+J. Murphy); 1 adult at Disappearing Island, Ponce Inlet (*Volusia*) 24 Oct (M. Brothers); 1 at CR 721 Teal Pond (*Highlands*) 4-8 Nov (D. Simpson, m. obs.).
- UPLAND SANDPIPER: 1 at Avon Park (*Polk*) 10 Aug (D. Estabrooks); 33 at Hatton Highways Sod Fields (*Palm Beach*) 20 Aug (D. O'Malley).
- WHIMBREL: 1 at Tom Renick Park, Ormond Beach 1 Sep (H. Robinson); 1 at Lake Apopka NSRA 3 Sep (P. Hueber, +M. Hill, m. obs.).
- LONG-BILLED CURLEW: 1 at Browns Farm Road (*Palm Beach*) 21 Aug (+C. Sanchez); 1 at St. Vincent NWR (*Franklin*) 22 Aug (J. Murphy).
- \*HUDSONIAN GODWIT: 1 juvenile at Big Carlos Pass (*Lee*) 15 Oct (J. Boyd, B. Rapoza).
- \*BAR-TAILED GODWIT: 1 adult at Fred Howard Park, Tarpon Springs 16-18 Oct (+S. Rendon, +J. Eager, m. obs.), details to FOSRC.
- MARbled GODWIT: 1 at Huguenot Memorial Park 4 Aug (M. Chappell); 170 at Fort De Soto Park (*Pinellas*) 15 Oct (J. Eager).
- Ruddy TURNSTONE: 1 at Newnans Lake (*Alachua*) 2-3 Sep (S. Goodman et al.); 1 at Lake Apopka NSRA 8 Sep (H. Robinson).
- RED KNOT: 138 at Caladesi Island 20 Aug (S. Mann, J. Mann); 150 at Fort De Soto Park 15 Oct (J. Eager).
- STILT SANDPIPER: Up to 3 at Big Talbot Island SP - Spoonbill Pond 3-27 Aug (K. Dailey); 1 at Tallahassee 6 Sep (J. Cavanagh); 5 at Lake City Sprayfield (*Columbia*) 28 Oct (D. Segal).
- SANDERLING: At Lake Apopka NSRA 20 Aug (1 in sod field; J. Thomton) and 3 Sep (2 in flight and heard calling; P. Hueber, G. Williams, m. obs.); 1 at Lake Lochloosa (*Alachua*) 2 Sep (S. Goodman, T. Goodman).
- DUNLIN: Up to 15 at Paynes Prairie Preserve SP 29 Oct-EOS (M. Bruce et al.).
- PURPLE SANDPIPER: 1 at Fort Clinch SP pier (*Nassau*) 28 Nov (M. Haas).
- BAIRD'S SANDPIPER: 1 at CR 827 - Bolles Canal (*Palm Beach*) 14 Aug (P. Bithorn, K. Sarsfield); 1 at the Okaloosa County STF 11 Sep (B. Duncan, L. Duncan, C. Brown, P. Brown).
- WHITE-RUMPED SANDPIPER: 1 at the Okaloosa County STF 15-16 Oct (G. Floyd, M. Swan); 1 at Big Talbot Island SP - Spoonbill Pond 22 Oct (W. Nolan).
- BUFF-BREASTED SANDPIPER: Up to 7 off Route 100 west of Bunnell (*Flagler*) 29 Aug-3 Sep (M. Brothers, m. obs.); 1 at Treasure Island Beach 31 Aug-2 Sep (D. Darrell-Lambert, E. Plage, +J. Clayton); 3 at Davis Park, Nocatee (*St. Johns*) 4-5 Sep and 1 there 11-14 Sep (D. Reed, C. Elder, m. obs.).
- PECTORAL SANDPIPER: Up to 3 at Big Talbot Island SP - Spoonbill Pond 3-27 Aug (K. Dailey); 2 at Nocatee Athletic Fields (*St. Johns*) 4 Aug (D. Reed); up to 4 were at n. St. Petersburg (*Pinellas*) 27-28 Aug (+R. Smith, m. obs.); 36 at Treasure Island Beach 1 Sep (D. Darrell-Lambert).
- WESTERN SANDPIPER: 1 at Paynes Prairie Preserve SP 7-8 Aug (D. Segal et al.); up to 3 at Paynes Prairie Preserve SP 29 Aug-1 Sep (M. Manetz, T. Anderson et al.); 1 at Sweetwater Wetlands Park 14 Sep (R. Rowan, D. Rohan).
- SHORT-BILLED DOWITCHER: 7 at Paynes Prairie Preserve SP 31 Aug (M. O'Sullivan); 1 at Newnans Lake 2 Sep (R. Rowan, M. O'Sullivan et al.).
- LONG-BILLED DOWITCHER: 1 at Big Talbot Island SP - Spoonbill Pond 3 Aug (K. Dailey); up to 4 at Fort De Soto Park 29 Oct (+R. Smith, R. Harrod).
- AMERICAN WOODCOCK: 1 at Tillie K. Fowler Regional Park (*Duval*) 19 Nov (K. Dailey, M. Dailey).
- WILLET: 5 at *Alachua* 2-4 Sep (J. Mays, M. Bruce et al.).
- WILSON'S PHALAROPE: 1 at Felda (*Collier*) 22 Aug (D. True); up to 2 at Lake Apopka NSRA 22 Aug-20 Sep (+P. Hueber, H. Robinson, G. Williams); 3 at Big Talbot Island SP

- Spoonbill Pond 24 Aug (D. Segal, J. Donsky); 3 at Merritt Island NWR 3 Sep (D. Young).
- RED-NECKED PHALAROPE: 1 specimen collected at Guana Tolomato Matanzas NERR 28 Aug (*fide* D. Reed); 2 at Newnans Lake 2 Sep (J. Hintermister, P. Laipis, B. Shea); 1 offshore *Collier* 4 Sep (D. McQuade et al.); 3 at Big Talbot Island SP - Spoonbill Pond 14 Sep (P. Leary); 18 offshore *Lee* 25 Sep (D. McQuade et al.); 10 at John U. Lloyd SP 29 Oct (M. Berney).
- PARASITIC JAEGER: 1 at Dania Beach Pier (*Broward*) 6 Oct (M. Berney).
- \*LONG-TAILED JAEGER: 2 subadults offshore *Miami-Dade* 18 Sep (R. Torres, +D. O'Malley et al.).
- \*BLACK-LEGGED KITTIWAKE: 1 immature at Boynton Beach Inlet Park (*Palm Beach*) 12-13 Nov (+M. Gomes).
- \*SABINE'S GULL: 1 immature at Boynton Beach Inlet Park 23 Oct (D. Essian).
- FRANKLIN'S GULL: 1 at Bayport 23 Nov (A. Hansen, B. Hansen); 1 at St. Marks NWR 27 Nov (D. Gagne, D. Olavarria, D. Fraser).
- HERRING GULL: 1 at Newnans Lake 8 Oct (J. Hintermister, A. Kent et al.).
- LESSER BLACK-BACKED GULL: 37 (26 adults) at Outback Key 14 Oct provided a record high count for *Pinellas* (E. Plage, A. Kent et al.).
- GLAUCOUS GULL: 1 3rd-cycle at Madeira Beach and other south *Pinellas* beaches 13 Sep-19 Oct (+R. Smith, L. Smith et al.); 1 first-cycle at Helen Cooper Floyd Park (*Duval*) 11 Nov (D. Pridgen).
- GREAT BLACK-BACKED GULL: 1 at St. Marks NWR 27 Nov (D. Gagne, D. Olavarria, D. Fraser).
- BROWN NODDY: 1 at Alligator Point (*Franklin*) 2 Sep (J. Murphy); 1 at Newnans Lake 2 Sep (S. Robinson).
- SOOTY TERN: 3 at Alligator Point 2 Sep (J. Murphy); up to 12 at John's Pass (*Pinellas*) 2 Sep (P. Plage, E. Plage, W. Meehan, m. obs.); 1 at Weekiwachee Preserve (*Hernando*) 2 Sep (M. Gardler); 130 at *Alachua* 2 Sep (A. Kratter, J. Mays et al.); 2 at Pahokee Marina - Lake Okeechobee (*Palm Beach*) 7 Oct (M. Berney).
- BRIDLED TERN: 1 at Bald Point SP 1 Sep (+J. Murphy); 1 at Paynes Prairie Preserve SP 2 Sep (R. Terrill, J. Mays); 2 immatures at John's Pass 2 Sep (E. Plage, P. Plage, R. Smith).
- LEAST TERN: 19 at *Alachua* 2 Sep (M. O'Sullivan, R. Terrill et al.).
- GULL-BILLED TERN: 2 at Big Talbot Island SP - Spoonbill Pond 3 Aug (K. Dailey); 2 at Weekiwachee Preserve 2 Sep (M. Gardler); 5 at *Alachua* 2 Sep (J. Mays, A. Kratter et al.).
- CASPIAN TERN: 4 at *Alachua* 2 Sep (R. Rowan, D. Segal et al.).
- COMMON TERN: 9 at *Alachua* 2 Sep (M. O'Sullivan, A. Kratter et al.); 373 at Outback Key (*Pinellas*) 13 Sep (E. Plage).
- ROYAL TERN: 5 at *Alachua* 2 Sep (M. O'Sullivan, J. Martin et al.); 1 at Newnans Lake 7-8 Oct (R. Terrill, C. Bateman et al.).
- SANDWICH TERN: 4 at *Alachua* 2 Sep (R. Terrill, S. Ewing et al.).
- BLACK SKIMMER: 1 at Paynes Prairie Preserve SP 30 Aug (M. Manetz); 4 at *Alachua* 2 Sep (S. Goodman, T. Tompkins et al.).
- RED-THROATED LOON: 1 at Alligator Point 13 Sep (D. Gagne, D. Olavarria, D. Fraser).
- COMMON LOON: 1 at Fred Howard Park 11 Aug (S. Reardon); 1 at Fort De Soto Park 13-18 Sep (B. Showler, +J. Fisher).
- BLACK-CAPPED PETREL: 1 at Newnans Lake 8 Oct (A. Kent et al.).
- CORY'S SHEARWATER: 1 Scopoli's subspecies offshore *Collier* 4 Sep (+D. McQuade et al.); 15 offshore *Collier* 11 Nov (T. Marvel).
- BAND-RUMPED STORM-PETREL: 2 offshore *Miami-Dade* 20 Aug (+R. Torres, L. Manfredi); 1 offshore *Lee* 21 Aug (D. McQuade et al.).

- MAGNIFICENT FRIGATEBIRD: 4 at Guana Tolomato Matanzas NERR 2 Sep (D. Reed); 47 at Weekiwachee Preserve 2 Sep (M. Gardler); 8 flew east at Bushnell (*Sumter*) 2 Sep (L. Lane); 35 at *Alachua* 2-3 Sep (R. Terrill, B. Tarbox et al.); 1 at Little Talbot Island SP (*Duval*) 13 Sep (R. Becker); 1 at Fort Clinch SP 13 Sep (G. Pfoh); 1 at Markham Park and Sawgrass Recreation Park (*Broward*) 7 Oct (M. Berney); 52 offshore Crandon Park Beach (*Miami-Dade*) 2 Nov (Ro. Diaz).
- BROWN BOOBY: Up to 9 at Philippe Park (*Pinellas*) 17 Aug-30 Nov (S. Murasko, J. Zarolinski, +D. Yarbrough, m. obs.); 1 at John U. Lloyd SP 5 Nov-EOS (+M. Berney).
- \*RED-FOOTED BOOBY: 1 immature at Fowey Rocks Light (*Miami-Dade*) 2 Nov (J. Kushlan, +K. Hines).
- \*NEOTROPIC CORMORANT: 1 at Wakodahatchee Wetlands (*Palm Beach*) 29 Sep-EOS (S. Young, m. obs.).
- AMERICAN BITTERN: 1 at Ringhaver Park 22 Aug (C. Davis); 1 at Paynes Prairie Preserve SP 1 Sep (M. O'Sullivan, R. Rowan et al.); 1 at Green Cay Wetlands (*Palm Beach*) 15 Sep (+L. Fell).
- GREAT BLUE HERON, WHITE MORPH: 1 continued at Kathryn Abbey Hanna Park (*Duval*) through 22 Oct (m. obs.).
- BLACK-CROWNED NIGHT-HERON: 1 incubating eggs at Ellie Schiller Homosassa Springs Wildlife SP (*Citrus*) 10 Nov (B. Curran et al.).
- GLOSSY IBIS: 2 at St. Petersburg 8 Aug (M. Burns, +R. Smith).
- WHITE-FACED IBIS: 1 at Tallahassee 9 Aug (J. O'Connell); 1 at the Okaloosa County STF 11 Sep (B. Duncan, L. Duncan, C. Brown, P. Brown); 7 at St. Marks NWR 27 Nov (D. Gagne, D. Olavarria, D. Fraser).
- SWALLOW-TAILED KITE: 250 at Lake Apopka NSRA 11 Aug (H. Robinson); 1 over Fort De Soto Park 21 Sep (+J. Mangold et al.).
- WHITE-TAILED KITE: 1 at Gulf Breeze 22 Oct (B. Duncan, L. Duncan); 1 at Kissimmee Prairie Preserve SP (*Okeechobee*) 20 Nov (J. Strohsahl).
- MISSISSIPPI KITE: 1 at Airport Lakes Park (*Orange*) 28 Sep (T. Rodriguez).
- NORTHERN HARRIER: 1 at Dayson Basin (*Duval*) 10 Aug (*fide* K. Dailey); 1 at Lake Apopka NSRA 3 Sep (P. Hueber, L. Taylor, B. Taylor, m. obs.); 1 over north St. Petersburg 8 Sep (+J. Clayton).
- SHORT-TAILED HAWK: 1 dark morph at Fellsmere (*Indian River*) 16 Nov (+D. Simpson); 1 light morph at Bay Lake, Walt Disney World (*Orange*) 24 Oct (J. Thomton).
- SWAINSON'S HAWK: 1 at Pensacola (*Escambia*) 11 Oct (C. Brown); 1 at the Okaloosa County STF 29 Oct (M. Swan).
- \*LONG-EARED OWL: 1 at a construction site at Longboat Key (*Manatee*) 14 Oct was taken to a rehab facility where it perished that afternoon (+*fide* S. Wilson).
- SHORT-EARED OWL: 1 at Lake Apopka NSRA 13 Nov (D. Gagne et al.).
- AMERICAN KESTREL: 1 orphaned juvenile taken to a rehab center at north Jacksonville (*Duval*) 1 Aug (*fide* K. Dailey).
- MERLIN: 1 at Fort De Soto Park 30 Aug (+W. Meehan, B. Jenks); 1 at Okeeheelee Park (*Palm Beach*) 31 Aug (D. O'Malley); 1 adult, Black Point Wildlife Drive, Merritt Island NWR (*Brevard*) 30 Sep (J. Eager); 1 at Harry P. Leu Gardens, Orlando (*Orange*) 4 Oct (J. Thomton).
- PEREGRINE FALCON: 1 at Lake Apopka NSRA 3 Sep (+P. Hueber, G. Williams, m. obs.) 1 offshore Ponce de Leon Inlet 25 Sep (M. Brothers et al); 1 adult at Merritt Island NWR 30 Sep (J. Eager); 1 at Mead Botanical Garden, Winter Park (*Orange*) 3 Oct (J. Thomton); 1 adult at Lake Placid (*Highlands*) 7 Oct (J. Eager); 1 at Shands Pier (*Clay*) 11 Oct (S. Raduns).
- COCKATIEL: 1 at Lake Apopka NSRA 29 Aug (H. Robinson).
- WHITE-WINGED PARAKEET: 1 at a north St. Petersburg yard 29 Sep provided the first *Pinellas* record (+J. Clayton).



- BUDGERIGAR: 1 at Lake Hancock Outfall Wetland (*Polk*) 4 Sep (C. Fredricks); 1 at Lake Apopka NSRA 2 Aug (H. Robinson).
- OLIVE-SIDED FLYCATCHER: 1 at Gulf Breeze 26 Aug (B. Duncan).
- EASTERN WOOD-PEWEE: 1-2 at Sawgrass Lake Park 9-10 Aug (+J. Gibson et al.); 17 at Honeymoon Island SP 20 Sep (D. Goebel et al.); 2 at Mead Botanical Garden, Winter Park 29 Oct (J. Thomton); 1 at Evergreen Cemetery (*Broward*) 10 Nov (T. Rodriguez).
- \*YELLOW-BELLIED FLYCATCHER: 1 at Mead Botanical Garden, Winter Park 17-23 Sep (P. Hueber, +G. Williams, m. obs.); 1 "possible" at Fort De Soto Park 30 Sep-1 Oct (D. Gagne, +P. Brannon, et al.); 1 "possible" at Fort De Soto Park 3-10 Oct (*fide* E. Plage, photographed by many, details to FOSRC by R. Smith).
- \*ALDER FLYCATCHER: 1 vocalizing at Lake Apopka NSRA 26 Aug (G. Williams; details to FOSRC); up to 3 at Paynes Prairie Preserve SP 1-30 Sep (M. O'Sullivan, A. Zions et al.); 1 at Tallahassee 13 Sep (+E. Schunke, J. Cavanagh).
- \*WILLOW FLYCATCHER: 1 vocalizing at Lake Apopka NSRA 26 Aug (G. Williams; details to FOSRC); 1 at Reddie Point Preserve (*Duval*) 1 Oct (K. Dailey, D. Foster).
- "TRAILL'S" FLYCATCHER: 1 at Lake Apopka NSRA 15 Sep (H. Robinson); 1 at Shingle Creek Regional Park, Kissimmee (*Osceola*) 30 Sep (C. Newton).
- LEAST FLYCATCHER: 1-2 at Fort De Soto Park 25 Sep-1 Oct (G. Williams et al., +J. Gibson, M. James et al.); 1 at Mead Botanical Gardens, Winter Park 28 Sep (J. Eager).
- \*SAY'S PHOEBE: 1 at Cedar Key (*Levy*) 1 Oct (D. Henderson); 1 at Molino (*Escambia*) 9 Oct (J. Yuhasz).
- VERMILION FLYCATCHER: 1 at Fort Pickens 24 Sep (J. Callaway, B. Callaway); 1 at Gainesville (*Alachua*) 20 Oct (T. Mitchell); up to 3 at Paynes Prairie Preserve SP 11 Nov-EOS (L. Davis et al.); 1 at St. Marks NWR 13 Nov (+A. Kent, G. Kent); 1 at Lake Apopka NSRA 28 Nov (H. Robinson).
- ASH-THROATED FLYCATCHER: 1 at Fort Pickens 21 Oct (M. Brower, C. Brower); 4 at Lake Apopka NSRA 17 Nov (H. Robinson, +P. Hueber); 1 at the Okaloosa County STF 26-28 Nov (B. Stanley et al.).
- \*LA SAGRA'S FLYCATCHER: 1 at Bill Baggs Cape Florida SP (*Miami-Dade*) 2 Nov-EOS (+Ro. Diaz).
- \*SULPHUR-BELLIED FLYCATCHER: 1 at A. D. Barnes Park (*Miami-Dade*) 13 Oct (E. Boenzli, details to FOSRC).
- TROPICAL KINGBIRD: 1 at L-31W Spreader Canal (*Miami-Dade*) 10 Oct-EOS (L. Manfredi); 1 at Tamiami Trail west of Krome Avenue (*Miami-Dade*) 30 Oct-EOS (M. Davis); 1 at STA-2 (*Palm Beach*) 12 Nov-EOS (S. McKemy); 1 at STA 3-4 (*Palm Beach*) 19 Nov-EOS (K. Miller, M. Gomes).
- WESTERN KINGBIRD: 1 at St. George Island SP 9 Oct (J. Stevenson); 3 at Minneola kingbird roost (*Lake*) 6 Nov (J. Stefancic); 1 at St. Cloud (*Osceola*) 1 at Hague (*Alachua*) 14-15 Nov (R. Rowan et al.); 19 Nov (J. Thomton, C. Newton); 1 at Paynes Prairie Preserve SP 21-24 Nov (L. Davis et al.).
- EASTERN KINGBIRD: 36 at Lake Apopka NSRA 29 Aug (H. Robinson); 330 at Newnans Lake 1 Sep (R. Rowan).
- GRAY X TROPICAL KINGBIRD: 1 presumed hybrid photographed at Lake Apopka NSRA 19 Aug (+P. Hueber, +S. Durrance).
- SCISSOR-TAILED FLYCATCHER: 1 at Fort Pickens 24 Sep (J. Callaway, B. Callaway); 1 at the Okaloosa County STF 5 Oct (C. Wiley); 1 at Gulf Breeze 9 Oct (B. Duncan); 4 at Perdido Key (*Escambia*) 22 Oct (J. Schiro).
- \*THICK-BILLED VIREO: 1 at Bill Baggs Cape Florida SP 30 Nov (D. O'Malley, +D. Bernstein).
- PHILADELPHIA VIREO: 1-2 at Fort De Soto Park 30 Sep-3 Oct (+J. Clayton et al.); 1 at Shingle Creek Regional Park, Kissimmee 30 Sep (+C. Newton); 1 at St. George Island SP 9 Oct (+J. Murphy); 1 at Hickory Swamp Preserve (*Lee*) 9 Oct (E. Warren); 1 at Bonner

- Park (*Pinellas*) 9-10 Oct (+T. Kalbach, G. Williams); 1 at Fort De Soto Park 12 Oct (E. Plage); 1 at Lake Woodruff NWR, De Leon Springs (*Volusia*) 13 Oct (M. Brothers).
- PURPLE MARTIN: 5 at Fort De Soto Park 14 Oct (J. Eager).
- TREE SWALLOW: 1 at Lake Apopka NSRA 30 Aug (H. Robinson).
- NORTHERN ROUGH-WINGED SWALLOW: ca. 25 over Lake Maggiore 23 Nov (S. Tavaglione).
- BANK SWALLOW: 29 at Lake Apopka NSRA 9 Aug (H. Robinson); up to 5 at Fort De Soto Park 23-27 Aug (+J. Mangold, M. Burns).
- CLIFF SWALLOW: 2 at Fort De Soto Park 8 Aug (E. Plage); 3 at Lake Apopka NSRA 9 Aug (H. Robinson); 17 at Tierra Verde 4 Oct (E. Plage).
- CAVE SWALLOW: 1 at John Chesnut Park 27 Aug (J. Swenfurth); 1 at Honeymoon Island SP 23 Oct (T. Kalbach); 1 at Fort Pickens 1 Nov (L. Duncan); 1 offshore *Collier* 11 Nov (+T. Marvel).
- BARN SWALLOW: 1 Lake Maggiore 22 Nov (+S. Tavaglione).
- CAROLINA CHICKADEE: 2 at Harry P. Leu Gardens, Orlando 10 Sep and again there 4 Oct (J. Thomton, S. Presutti).
- RED-BREASTED NUTHATCH: 1 at Gulf Breeze 7 Oct (D. Timmons); 4 at Gainesville 9 Oct-23 Nov (R. Terrill, R. Bartlett et al.); 1 at Guana Tolomato Matanzas NERR 23-25 Oct (C. Elder, D. Reed); 1 at Boyd Hill Nature Preserve 13-30 Nov (+S. Tavaglione, R. Harrod); 1 at North Anclote River Park 19-22 Nov (+R. Smith et al.); 2 at Cary SF (*Duval*) 19 Nov (D. Foster); 1 at a Largo backyard 26 Nov (T. Knuth); 1 at Honeymoon Island SP 26 Nov (T. Kalbach); 1 at Tall Timbers Research Station (*Leon*) 28 Nov (D. Gagne, D. Olavarria, D. Fraser).
- WINTER WREN: 4 at St. Marks NWR 27 Nov (D. Gagne, D. Olavarria, D. Fraser).
- GOLDEN-CROWNED KINGLET: 1 at Troy Spring SP (*Lafayette*) 22 Oct (S. Goodman); 3 at Paynes Prairie Preserve SP 23 Oct (A. Zions); 5 at Taye Brown Regional Park (*Duval*) 23 Oct (J. Graham); 3 at Guana River WMA (*St. Johns*) 25 Oct (C. Elder, D. Reed); 4 at Kathryn Abbey Hanna Park 29 Oct (J. Graham, C. Davis); 1 at Taye Brown Regional Park 20 Nov (J. Graham).
- RUBY-CROWNED KINGLET: 1 at Gainesville 20 Sep (B. Tarbox); 1 at Bell Ridge Longleaf WEA (*Gilchrist*) 21 Sep (A. Zions).
- VEERY: 1 at Sawgrass Lake Park 3-4 Sep (+C. Yilmaz et al.).
- SWAINSON'S THRUSH: 1 at Sawgrass Lake Park 4 Sep (+M. Hill, C. Hill).
- WOOD THRUSH: 1 at Eastman/Taminco Sanctuary (*Santa Rosa*) 21 Nov (L. Kelly, B. Furlow, L. Goodman); 1 at Big Talbot Island SP - Spoonbill Pond 27 Nov (+K. Dailey, m. obs.).
- AMERICAN ROBIN: 1 at Sawgrass Lake Park 29 Jul-3 Sep (J. Clayton, +W. Meehan et al.).
- PIN-TAILED WHYDAH: 1 at Pensacola 1 Oct (J. Lloyd).
- RED-CHEEKED CORDONBLEU: 1 coming to a *St. Johns* feeder 20 Sep (W. Patton).
- SCALY-BREASTED MUNIA: 23 at Pace (*Santa Rosa*) 12 Aug (D. Stangeland); 10 at Ascend Chemicals (*Escambia*) 24 Aug (C. Davis); 2 at Gulf Breeze 25 Sep (C. Wiley); 15 at Beulah (*Escambia*) 28 Sep (E. Renfroe); 12 at Hickory Shores (*Santa Rosa*) 30 Sep (P. Bennett); 7 at International Paper Wetlands (*Escambia*) 8 Oct (J. Callaway); 20 at Pensacola 5 Nov (P. Doggrell).
- PINE SISKIN: 1 at San Mateo (*Duval*) 16 Nov (D. Foster); 1 at Fort De Soto Park 25 Nov (+J. Mangold); 1 at Brooker Creek Preserve 26 Nov (J. Wells).
- AMERICAN GOLDFINCH: 1 at The Heather, Weeki Wachee (*Hernando*) 17 Sep (M. Gardler).
- \*LAPLAND LONGSPUR: 1 male at Loop Road (*Monroe*) 29 Oct (+J. Boyd).
- WORM-EATING WARBLER: 1 at Sawgrass Lake Park 7 Aug (J. Clayton, R. Harrod); 1 at Molino 13 Aug (J. Yuhasz).
- NORTHERN WATERTHRUSH: 2 at Lake Apopka NSRA 20 Aug (J. Thomton); 1 at Shell Key 20 Nov (+B. Ahern, E. Plage et al.).
- GOLDEN-WINGED WARBLER: 1 male at Sawgrass Lake Park 5-8 Sep (R. Stewart, M. Daughtrey et al.); 1 male at Philippe Park 6 Sep (S. Aversa, K. Nelson); 1 male at

- Largo Nature Preserve (*Pinellas*) 6 Sep (+K. Duncan); 5 at *Alachua* 17 Sep-8 Oct (M. Manetz, C. Burney et al.); 1 female at Fort De Soto Park 20 Sep (+P. Brannon et al.); 2 males at Fort De Soto Park 29-30 Sep (+B. Landry et al.); 2 at Sawgrass Lake Park 30 Sep (+S. Tavaglione, E. Haney et al.); 1 at Boyd Hill Nature Preserve 30 Sep (D. Goodwin, E. Haney); up to 10 at *Pinellas* 1 Oct (*fide* R. Smith); 1 at Turkey Creek Sanctuary, Palm Bay (*Brevard*) 1 Oct (J. Armstrong); 1 at Enchanted Forest Sanctuary, Titusville (*Brevard*) 2 Oct (L. Lois); 1 at Mead Botanical Garden, Winter Park 2 Oct (T. Yates *fide* B. Taylor); 1 at Corkscrew Swamp Sanctuary (*Collier*) 2 Oct (R. Kaskan); 1 female at Central Winds Park, Winter Springs 3-4 Oct (P. Hueber, L. Mathis, G. Williams); 1 at Six Mile Cypress Slough Preserve, Fort Myers (*Lee*) 5 Oct (M. Rousher); 1 at Theodore Roosevelt Area (*Duval*) 9 Oct (T. Rohtsalu).
- BLUE-WINGED WARBLER: 1 at Six Mile Cypress Slough Preserve, Fort Myers 2 Sep (R. Reppening) and 28-29 Sep (J. Padia-Lopez et al.); 2 adult males at Sawgrass Lake Park 5 Sep (J. Eager); 1 at Eagle Lakes Community Park, Naples (*Collier*) 1 Oct (M. Higgins); 1 at Corkscrew Swamp Sanctuary 1-9 Oct (K. Laakkonen et al.); 1 at Airport Lakes Park, Orlando 3 Oct (T. Rodriguez); 1 at Harry P. Leu Gardens, Orlando 4 Oct (J. Thomton); 1 at Theodore Roosevelt Area 9 Oct (T. Rohtsalu).
- BLUE-WINGED X GOLDEN-WINGED (BREWSTER'S): 1 at Tallahassee 12 Sep (+E. Schunke) was an apparent "Brewster's backcross"; 1 at Tallahassee 16 Sep (+E. Schunke) was an apparent first generation Brewster's; 1 at a *Pinellas* yard 21 Sep (+T. Knuth).
- BLACK-AND-WHITE WARBLER: 1 migrating ca. 64+ km off Ponce de Leon Inlet in Gulf Stream 25 Sep (M. Brothers et al.).
- PROTHONOTARY WARBLER: 1 at Lake Apopka NSRA 20 Aug (J. Thomton).
- SWAINSON'S WARBLER: 1 at Fort De Soto Park 5 Sep (+D. Margeson, R. Smith); 1 at Poe Springs (*Alachua*) 8 Sep (R. Rowan, M. Manetz); 1 at Gainesville 15 Sep (A. Kratter); 1 banded at Tomoka SP (*Volusia*) 16 Sep (M. Wilson); 1 at Atlantic Beach (*Duval*) 22 Sep (D. Pridgen); 1 at McGough Park (*Pinellas*) 29 Sep (+T. Knuth); 2 at Shingle Creek Regional Park, Kissimmee 30 Sep (+ C. Newton); 1 at Fort De Soto Park 1-2 Oct (+G. Williams et al.); 1 at Newnans Lake 20 Oct (M. Manetz).
- TENNESSEE WARBLER: Up to 5 at Lake Apopka NSRA 18 Sep-3 Nov (H. Robinson); 1 at Mead Botanical Garden, Winter Park 3 Oct (J. Thomton); 3 at Harry P. Leu Gardens, Orlando 4 Oct (J. Thomton).
- ORANGE-CROWNED WARBLER: 1 at Airport Lakes Park 3 Oct (T. Rodriguez).
- NASHVILLE WARBLER: 1 at Central Winds Park, Winter Springs 13 Sep (+S. Simmons); 1 at Seminole (*Pinellas*) 26 Sep (+T. Knuth); 1 at Airport Lakes Park 3 Oct (T. Rodriguez); 1 at Gainesville 7 Oct (B. Ewing, S. Ewing); 1 at Reddie Point Preserve 9 Oct (D. Foster et al.); 1 at Guana Tolomato Matanzas NERR 16 Oct (+C. Elder); 1 at Paynes Prairie Preserve SP 16 Oct (A. Kratter); 1 at Possum Branch Preserve 23-24 Oct (C. Yilmaz, R. Smith, L. Smith); 1 at Flagler Hospital (*St. Johns*) 16 Nov (S. Cooper); 1 at Masaryktown (*Hernando*) 26 Nov (D. Love).
- CONNECTICUT WARBLER: 1 adult female at Bills Baggs Cape Florida SP 8 Oct (*fide* Ro. Diaz).
- KENTUCKY WARBLER: 1 at a n St. Petersburg residence 4 Aug (+S. Tavaglione).
- HOODED WARBLER: 1 on a pelagic trip off Ponce de Leon Inlet 25 Sep (M. Brothers et al.); 1 male at Celebration (*Osceola*) 15 Nov (J. Thomton, Viki Krikorian, Cheryl Tybor).
- CAPE MAY WARBLER: 3 at Lake Apopka NSRA 15 Sep (H. Robinson); 9 at *Alachua* 17 Sep-23 Oct (J. Graham, B. Ewing et al.).
- CERULEAN WARBLER: Up to 6 at Sawgrass Lake Park 5-10 Aug (+S. Tavaglione, E. Haney, m. obs.); 1 at Boyd Hill Nature Preserve 6 Aug (R. Smith, S. Tavaglione et al.) and another one there 9 Aug (D. Goodwin); 1 at Central Winds Park, Winter Springs 20 Aug (J. Leavens, S. Simmons); 1 at Lake Apopka NSRA 22 Aug (H. Robinson); up to 5 at Sawgrass Lake Park 3-5 Sep (*fide* R. Smith); 6 at *Alachua* 5-23 Sep (M. Walters, G. Kent et al.).

- NORTHERN PARULA: 1 at Gulf Breeze 28 Nov (M. Brower, C. Brower).
- MAGNOLIA WARBLER: 1 at Mead Botanical Garden, Winter Park 3 Oct (J. Thomton); up to 2 at Harry P. Leu Gardens 3-4 Oct (J. Thomton); up to 2 at Lake Apopka NSRA 3 and 6 Oct (H. Robinson), and another there 4 Nov (+P. Hueber, G. DelPizzo).
- BAY-BREASTED WARBLER: 1 at Captain Forster Hammock Preserve, Vero Beach (*Indian River*) 2 Oct (D. Simpson); 1 at Newton Park, Winter Garden (*Orange*) 8 Oct (J. Thomton); 1 at Cypress Grove Park, Orlando (*Orange*) 10 Oct (J. Thomton); singles at Lake Apopka NSRA 10 Oct and 3 Nov with 2 on 31 Oct (H. Robinson); 1 at Scrub Jay Trail, Clermont (*Lake*) 15 Oct (J. Thomton); 1 at Evergreen Cemetery 10 Nov (T. Rodriguez).
- BLACKBURNIAN WARBLER: Up to 4 at Sawgrass Lake Park 7-10 Aug (+S. Tavaglione); 1 at Celebration 12 Sept (J. Thomton); 1 adult male, Mead Botanical Gardens, Winter Park 28 Sep (J. Eager); 1 adult male at Fort De Soto Park 2 Oct (+J. Eager); 1 at Wadeview Park, Orlando (*Orange*) 2 Oct (J. Thomton); singles at Lake Apopka NSRA 12, 15, 20, 22 Sep and 3 Oct (H. Robinson); 1 at Lake Woodruff NWR, DeLeon Springs 18 Oct (M. Brothers); 1 at Harry P. Leu Gardens 21 Oct (J. Thomton).
- YELLOW WARBLER: 61 at Lake Apopka NSRA 22 and 30 Aug (H. Robinson); 6 at Largo Nature Preserve 30 Aug (R. Cornelius); 1 on a pelagic trip off Ponce de Leon Inlet 25 Sep (M. Brothers et al); 2 at Mead Botanical Gardens 28 Sep (J. Eager); 1 at Newton Park, Winter Garden 8 Oct (J. Thomton); 1 at Lake City Sprayfield 29 Oct (D. Segal); 1 at Henderson Beach (*Okaloosa*) 15 Nov (K. Morales, E. Julson).
- CHESTNUT-SIDED WARBLER: 1 at Celebration 12 Sept (J. Thomton); up to 2 at Lake Apopka NSRA 19 Sep-10 Oct (H. Robinson); 1 at Mead Botanical Gardens 28 Sep (J. Eager).
- BLACKPOLL WARBLER: Up to 7 at Lake Apopka NSRA 10-27 Oct (H. Robinson); up to 3 at Guana Tolomato Matanzas NERR 13-18 Oct (+C. Elder); 2 at Kathryn Abbey Hanna Park 29 Oct (J. Graham, C. Davis).
- YELLOW-RUMPED WARBLER: 3 at Lake Seminole Park (*Pinellas*) 30 Sep (M. Hughes); 8 at *Alachua* 9 Oct (J. Broadhead, F. Lee et al.).
- \*YELLOW-RUMPED WARBLER (AUDUBON'S): 1 at St. Joseph Peninsula SP (*Gulf*) 12 Nov (D. Morrow, A. Morrow, J. Walthall, D. Legare).
- PRAIRIE WARBLER: 1 on a pelagic trip off Ponce de Leon Inlet 25 Sep (M. Brothers et al); 1 at Eastport Wastelands (*Duval*) 26 Nov (+K. Dailey, M. Dailey).
- \*BLACK-THROATED GRAY WARBLER: 1 adult male, Evergreen Cemetery 16 Oct-EOS (A. Seelye-James, +M. Avello, m. obs.).
- BLACK-THROATED GREEN WARBLER: 1 at Fort De Soto Park 20 Sep (P. Brannon, E. Plage); 1 at Sawgrass Lake Park 19 Nov (+S. Tavaglione); 1 at Cypress Grove Park 10 Oct (J. Thomton); 1 at Reddie Point Preserve 5 Nov (T. Rohtsalu); singles at Lake Apopka NSRA 10 and 17 Oct (H. Robinson).
- CANADA WARBLER: 1 at Sawgrass Lake Park 3-4 Sep (+S. Tavaglione et al.); 1 immature at Sawgrass Lake Park 7-11 Sep (+D. True, M. Burns et al.); 1 at Newnans Lake 19-26 Sep (M. O'Sullivan et al.); 1 at Six Mile Cypress Slough Preserve 24-30 Sep (C. Ewell et al.); 1 at Crayton Pocket Park (*Collier*) 25 Sep (K. Laakkonen); 1 at Sawgrass Lake Park 30 Sep (K. Duncan); 1 at Gainesville 7-8 Oct (B. Ewing, S. Ewing); 1 at Newnans Lake 8 Oct (S. Goodman, T. Goodman, G. Israel); 1 at St. George Island SP 8 Oct (J. Stevenson, J. Cavanagh).
- WILSON'S WARBLER: Single females at Mead Botanical Garden 17-19 Sep (P. Hueber, +G. Williams, m. obs.), and 15-17 Oct (P. Hueber, +F. Salmon, m. obs.); 1 at Central Winds Park 22-23 Sep (+S. Simmons et al., J. Eager); 1 male at Fort De Soto Park 29 Sep (B. Landry, R. Smith); 1 at Gainesville 3 Oct (A. Zions); 1 at Paynes Prairie Preserve SP 3-22 Oct (M. O'Sullivan et al.); 1 at Lake Apopka NSRA 13 Oct (H. Robinson); 1 female at Carillon Business District (*Pinellas*) 13 Nov (+L. Margeson, D. Margeson); 1 at Fort Pickens 27 Nov (A. Holzinger).

- YELLOW-BREASTED CHAT: 1 at Sugden Regional Park, Naples (*Collier*) 30 Aug (K. Laakkonen); 1 at Six Mile Cypress Slough Preserve 21 Sep (M. Rousher); 1 at Shands Pier 11 Oct (S. Raduns); 1 at Eastport Wastelands 8-10 Nov (D. Foster, K. Dailey).
- \*WESTERN SPINDALIS: 1 male at Charles Deering Estate (*Miami-Dade*) 19 Nov-EOS (+Ra. Diaz).
- CHIPPING SPARROW: 1 at Hickory Mound WMA (*Taylor*) 20 Aug (D. Asbell).
- CLAY-COLORED SPARROW: 1 at Bald Point SP 4 Oct (J. Murphy); 1 at Fred W. Coyle Freedom Park, Naples (*Collier*) 11 Oct (+J. Hall et al.); 1 at Lake Apopka NSRA 30 Oct-6 Nov (+P. Hueber, m. obs.); 1 at Brooker Creek Preserve 24-30 Nov (+T. Mast, m. obs.).
- LARK SPARROW: 1 at Gulf Breeze 26 Aug (B. Duncan, L. Duncan); 1 at Canaveral National Seashore, Apollo Beach (*Volusia*) 13 Sep (D. LaGrange); 1 adult at Largo Nature Preserve 16 Sep (+K. Duncan); 1 adult at Fort De Soto Park 24 Sep (+K. McKinney) and another one there 29 Sep-4 Oct (S. McNemar); 1 at St. George Island SP 11 Oct (+J. Stevenson, J. Cavanagh); 1 at Lake Apopka NSRA 4-5 Nov (+P. Hueber, L. Folts); 1 at Fort De Soto Park 8 Nov (E. Plage).
- SAVANNAH SPARROW: 1 at Sweetwater Wetlands Park 3 Oct (D. Rohan).
- NELSON'S SPARROW: Up to 7 at Estero Bay Preserve SP (*Lee*) 13 Nov-EOS (D. McQuade, +J. Haas et al.); 2 were mist-netted at Shell Key (*Pinellas*) 20 Nov with 1 having been previously banded at the site 16 Feb 2014 (L. Deaner, J. Greenlaw et al.).
- SALTMARSH SPARROW: Up to 2 at Fort De Soto Park 23-30 Oct (+R. Smith, R. Harrod); 1 at St. Marks NWR 10 Nov (J. Cavanagh); up to 2 at Estero Bay Preserve SP (*Lee*) 13 Nov-EOS (D. McQuade, +J. Haas et al.); 1 at San Carlos Bay/Bunche Beach Preserve (*Lee*) 26 Nov-EOS (M. Rousher et al.).
- SEASIDE SPARROW: 1 juvenile at Fort De Soto Park 17-21 Sep (+K. Mason, E. Plage); 1 hatch-year at Evergreen Cemetery 7 Oct (+M. Berney).
- LINCOLN'S SPARROW: 1 at Guana Tolomato Matanzas NERR - Six Mile Landing 7 Nov (D. Reed, C. Elder); 1 at Guana River WMA 17 Nov (D. Reed, C. Elder); 1 at Boyd Hill Nature Preserve 25 Nov (+S. Tavaglione).
- WHITE-CROWNED SPARROW: 1 at Paynes Prairie Preserve SP 9 Oct (G. Kent, A. Kent, C. Faulhaber); 1 juvenile at Fort De Soto Park 29 Oct-7 Nov (P. Plage, +R. Smith, R. Harrod, S. Tavaglione).
- SUMMER Tanager: 14 at Honeymoon Island SP 20 Sep (+S. Goebel).
- WESTERN Tanager: 1 male at Miami-Dade Community College (*Miami-Dade*) 25-27 Nov (S. Paez, +N. Frade); 1 at Gulf Breeze 26 Nov (L. Duncan).
- ROSE-BREASTED GROSBEAK: 1 at Harry P. Leu Gardens 11 Oct (J. Thomton).
- BLUE GROSBEAK: 1 at St. Marks NWR 13 Nov (+A. Kent, G. Kent).
- PAINTED BUNTING: Up to 3 at Lake Apopka NSRA 20-25 Aug (J. Thomton, H. Robinson); 1 adult male and 1 in female plumage at Lake Apopka NSRA 27 Aug (J. Eager).
- DICKCISSEL: 2 at Gulf Breeze 23 Aug and 21 Sep (B. Duncan, L. Duncan); 1 at Lake Apopka NSRA 15 Sep (H. Robinson); 1 at Paynes Prairie Preserve SP 20 Oct (J. Mays); 1 at Sweetwater Wetlands Park 4 Nov (J. Mays); 1 at Lake Florence (*Polk*) 25 Oct (J. Yarnell).
- BOBOLINK: 1 at St. Marks NWR 13 Nov (R. Christen).
- EASTERN MEADOWLARK: 1 at Fort De Soto Park 25 Nov (+J. Mangold).
- YELLOW-HEADED BLACKBIRD: 1 at Alligator Point 9 Sep (+J. Murphy); 1 female at Cedar Key 11 Sep (D. Henderson); 1 at Gainesville 6 Nov (E. Anderson, W. Wilbur).
- RUSTY BLACKBIRD: 29 at International Paper Wetlands 20 Nov (J. Callaway, B. Callaway); 5 at Gulf Breeze 20 Nov (B. Duncan); 4 at Tall Timbers Research Station 28 Nov (D. Gagne, D. Olavarria, D. Fraser).
- BREWER'S BLACKBIRD: 1 female returned to Bayport for the sixth winter 1 Nov, identified by unique white pigmentation in the right eye (J. McKay); 1 adult female, Jenkins Landing Park, Weeki Watchee (*Hernando*) 15 Nov (+J. Eager).

SHINY COWBIRD: 2 males at Eastman/Taminco Sanctuary 10 Oct (L. Kelly, B. Furlow, L. Goodman).

BRONZED COWBIRD: 1 at Hague 22 Oct-3 Dec (M. Manetz, S. Wade et al.); 1 at St. Marks NWR 17 Nov (J. Cavanagh); 1 at Sumterville (*Sumter*) 20 Nov. (S. Collins).

ORCHARD ORIOLE: 1 at Clam Bayou Nature Preserve (*Pinellas*) 12 Aug (+W. Meehan); 1 at Joe's Creek Greenway (*Pinellas*) 14 Aug (+W. Meehan); 1 at Eagle Lake Park 18 Aug (+B. Cochrane); 1 at Fort De Soto Park 3 Oct (D. Gagne et al.).

**Contributors:** Eric Anderson, Jim Armstrong, Daphne Asbell, Miriam Avello, Steve Aversa, Richard Bartlett, Fred Bassett, Craig Bateman, Richard Becker, Paul Bennett, Mark Berney, David Bernstein, Paul Bithorn, Erich Boenzli, John Boyd, Peter Brannon, Jordan Broadhead, Michael Brothers, Cathy Brower, Michael Brower, Cecil Brown, Pam Brown, Matt Bruce, Chris Burney, Mark Burns, Brenda Callaway, Jerry Callaway, Bob Carroll, Jim Cavanagh, Marie Chappell, Ron Christen, Kevin Christman, JoAnna Clayton, Bruce Cochrane, Steve Collins, Sam Cooper, Roger Cornelius, Colleen Cowdery, Brinda Curran, Dalcio Dacol, Kevin Dailey, Marie Dailey, David Darrell-Lambert, Mary Daughtrey, Candice Davis, Chris Davis, Michelle Davis, B. DeArman, Gigi DelPizzo, Chip Deutsch, Rangel Diaz, Robin Diaz, James Dinsmore, Perry Doggrell, Jennifer Donsky, Bob Duncan, Kathy Duncan, Lucy Duncan, Sonia Durrance, Jim Eager, Cynthia Elder, Margaret England, David Essian, Daniel Estabrooks, Charlie Ewell, Ben Ewing, Sam Ewing, Craig Faulhaber, Linda Fell, Jeff Fisher, Graham Floyd, Linda Folts, David Foster, Noah Frade, Don Frazer, Cole Fredricks, Bruce Furlow, David Gagne, Murray Gardler, Reinhart Geisler, Jerry Gibson, Dale Goebel, Marcello Gomes, Larry Goodman, Steve Goodman, Ted Goodman, Dave Goodwin, Jeffrey Graham, Cindy Groff, Mark Haas, Jean Hall, Karen Hamblett, Erik Haney, Al Hansen, Bev Hansen, Randy Harrod, Dale Henderson, Monica Higgins, Chad Hill, Marla Hill, Marlo Hill, Kirsten Hines, John Hintermister, Linda Holt, Andrew Holzinger, Chris Hooker, Alice Horst, Paul Hueber, Glenn Israel, Bonnie Jenks, Smith Juan, Eric Julson, Tim Kalbach, Richard Kasken, Kay Keigley, Les Kelly, Adam Kent, Gina Kent, Sheila Klink, Tammy Knuth, Andy Kratter, James Kushlan, Keith Laakkonen, David LaGrange, Lucille Lane, Robert Lane, Patrick Leary, Janet Leavens, Felicia Lee, Donna Legare, Lori Losi, Darcy Love, Robert Lovestrand, Mike Manetz, Larry Manfredi, John Mangold, Jane Mann, Stephen Mann, Don Margeson, Lorraine Margeson, John Martin, Tom Marvel, Kathy Mason, Tom Mast, Lori Mathis, Jonathan Mays, Jim McKay, Susan McKemy, Kevin McKinney, Shelby McNemar, David McQuade, Wendy Meehan, Pam Meharg, Kenny Miller, Kent Miller, Travis Mitchell, Kathy Morales, Ann Morrow, Don Morrow, Sue Murasko, John Murphy, Kris Nelson, Christian Newton, Wade Nolan, Jeff O'Connell, Debbie Olavarria, Sig Olsen, Dan O'Malley, Matt O'Sullivan, Jose Padilla-Lopez, Stephen Paez, Breanna Perry, Gail Pfoh, Eric Plage, Pete Plage, Denise Ploger, Troy Ploger, Mario Porcelli, Bill Pranty, Laura Predny, Stephen Presutti, Donald Pridgen, Bruce Purdy, Steve Raduns, Brian Rapoza, Steve Reardon, Diane Reed, Erin Renfroe, Robert Repenning, Douglas Richard, Harry Robinson, Scott Robinson, Tom Rodriguez, Danny Rohan, Thomas Rohtsalu, Meg Rousher, Rex Rowan, Frank Salmon, Carlos Sanchez, Kevin Sarsfield, Elliot Schunke, Alan Seelye-James, Debbie Segal, Barbara Shea, Julie Shiro, Bob Showler, Scott Simmons, David Simpson, Lori Smith, Marvin Smith, Ron Smith, Daniel Stangeland, Bill Stanley, Joyce Stefancic, Jim Stevenson, Robert Stewart, John Strohsahl, Malcolm Swan, Bryan Tarbox, Sue Tavaglione, Barbara Taylor, Larry Taylor, Ryan Terrill, Dana Timmons, Tom Tompkins, Roberto Torres, David True, Sidney Wade, Mitch Walters, Jody Walthall, Amy Washuta, Jim Wells, Wendy Wilbur, Chris Wiley, Graham Williams, Meret Wilson, Stu Wilson, Doug

Yarbrough, Jess Yarnell, Ted Yates, Culeyt Yilmaz, Danny Young, Susan Young, John Yuhasz, and Adam Zions.

**Summer 2016 report not published previously:** Franklin's Gull: 1 at Tallahassee 30 Jun–5 Jul (J. O'Connell, +E. Schunke).

Report prepared by **Kevin E. Dailey**, state compiler (6661 Beatrix Drive, Jacksonville, Florida 32226, <kedailey@yahoo.com>). Regional compilers are **Bruce H. Anderson** (2917 Scarlet Road, Winter Park, Florida 32792, <scizortail@aol.com>), **Robin Diaz** (200 Ocean Lane Drive #PB-1, Key Biscayne, Florida 33149, <rd4birds@bellsouth.net>), **Bob and Lucy Duncan** (614 Fairpoint Drive, Gulf Breeze, Florida 32561, <Town\_Point@bellsouth.net>), **Charlie Ewell** (115 SW 51st Terrace, Cape Coral, Florida 33991, <anhinga42@comcast.net>), **Bev Hansen** (6573 Pine Meadows Drive, Spring Hill, Florida 34606, <bevalhansen@gmail.com>), **John Murphy** (766 Alligator Drive, Alligator Point, Florida 32346, <southmoonunder@mchsi.com>), and **Ron Smith** (1500 85th Avenue North, St. Petersburg, Florida 33702, <rsmithbirds@gmail.com>).

**CORRECTION: FORAGING BEHAVIOR OF THE  
VARIEGATED FLYCATCHER (*Empidonomus varius*) AT  
TWO NORTH AMERICAN VAGRANCY SITES IN THE  
CONTEXT OF FORAGING IN ITS NATIVE RANGE**

JON S. GREENLAW  
*10503 Mistflower Lane, Tampa, Florida 33647*

My recent article on flycatcher foraging (Greenlaw 2017), should have stated that Diane Reed discovered Florida's first Variegated Flycatcher (*Empidonomus varius*), on 5 June 2013 in St. Augustine. It also should have noted that Marie Dailey made the video recording of this bird, which includes footage of hawking behavior that provided valuable information for my article.

The Acknowledgments should reflect these changes. The sentence on page 11 beginning with "I am grateful" should read: "I am grateful to Diane Reed and Marie Dailey for making the videotape of hawking behavior by the St. Johns County bird available to the Florida Ornithological Society Records Committee. The author apologizes for these errors and thanks Kevin Dailey for pointing them out."

LITERATURE CITED

GREENLAW, J. S. 2017. Foraging behavior of the Variegated Flycatcher (*Empidonomus varius*) at two North American vagrancy sites in the context of foraging in its native range. Florida Field Naturalist 45:1-13.



## **OUR FOS FIELD OBSERVATIONS COMMITTEE NEEDS YOUR SKILLS**

The FOS Field Observations Committee seeks volunteers interested in joining the committee as regional compilers for counties that are currently uncovered. The first region would include *Suwannee*, *Columbia*, *Gilchrist*, *Union*, and *Bradford* Counties. A second region could be covered by one or several interested individuals: *Polk*, *Osceola*, *Hardee*, *De Soto*, *Glades*, and *Okeechobee* Counties. Responsibilities would include soliciting and compiling notable field observations for these counties at the end of each season, to be included in the report. Interested individuals should contact the state compiler listed at the end of the Field Observations report in this issue.

## BE A FRIEND OF FFN

*Florida Field Naturalist* is the journal of FOS, an important communication vehicle for the Florida scientific and birding community. Increasing costs need to be offset with a combination of member dues and contributions.

Please consider a donation of \$50, \$100, \$200 or more to FRIENDS OF FFN. Your gift will allow FFN to improve its artwork, including four-color photographs of rarities similar to the one of the state's first Varied Bunting, published in the February 2006 issue, and other improvements in the content and appearance of our journal.

Contributions to FRIENDS OF FFN will be added to a special endowment of FOS, the interest of which will be used to improve the journal. Please write a check payable to the Florida Ornithological Society and specify that the gift is for FOS Friends of FFN. Send your check to the Treasurer: Charles H. Fisher, Jr., c/o Reilly, Fisher & Solomon PA, 4950 W. Kennedy Blvd., Ste. 610, Tampa, FL 33609. Email: [chf1shercpa@hotmail.com](mailto:chf1shercpa@hotmail.com)

We thank the following generous donors for contributing to FRIENDS OF FFN:

### 2013

Silvio Crespo, Jr.  
Larry Hribar  
Mary Landsman  
John Murphy  
Robin Diaz  
Andrew Kratter  
Robert & Lucy Duncan  
Michael Brothers  
James E. Cavanagh, Jr.  
Robert Budliger  
Tim Towles  
Nancy Prine

### 2014

Stephen Gross  
William Courser  
David Hartgrove  
John Murphy  
Robin Diaz  
Larry Hribar  
Wilfred Yusek

Silvio Crespo, Jr.  
James E. Cavanagh, Jr.  
Kevin & Marie Dailey  
St Johns River WMD  
(In Memory of Judy Bryan)  
Richard L. West  
Billi Wagner  
William Post  
John L. Wuepper  
Michael Brothers  
Wade Nolan  
Ann Paul  
Anthony White  
Stuart R. Wilson  
James E. Cavanagh, Jr.  
Silvio Crespo, Jr.  
Kevin & Marie Dailey  
Robin Diaz  
Todd Engstrom  
David Hartgrove

Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2015**

James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Hartgrove  
 Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2016**

Michael Brothers  
 James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Bob & Lucy Duncan  
 Todd Engstrom  
 David Goodwin

David Hartgrove  
 Earl & Dorothy Horn  
 Barbara C. Kittleson  
 John Michael Murphy  
 Stephen Nesbitt  
 Will Post  
 Nancy A. Prine  
 Raymond G. Scory  
 Paul Sykes

**2017**

James E. Cavanagh, Jr.  
 Silvio Crespo  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Goodwin  
 David Hartgrove  
 Earl & Dorothy Horn  
 Fred & Charlotte Lohrer  
 Travis & Karen MacClendon  
 Dennis Meritt  
 John Michael Murphy  
 Ann Paul  
 Will Post  
 Dr. Walter K. Taylor

**SPECIAL PUBLICATIONS OF THE  
FLORIDA ORNITHOLOGICAL SOCIETY**

- M. C. BOWMAN. 1978. **Species Index to Florida Bird Records in *Audubon Field Notes* and *American Birds*, Volumes 1-30, 1947-1967.** Florida Ornithological Society Special Publication No. 1. xii + 43 pages. \$4.
- J. A. COX. 1987. **Status and Distribution of the Florida Scrub Jay.** Florida Ornithological Society Special Publication No. 3. vii + 110 pages. \$8.
- R. W. LOFTIN, G. E. WOOLFENDEN, AND J. A. WOOLFENDEN. 1991. **Florida Bird Records in *American Birds* and *Audubon Field Notes* (1947-1989): Species Index and County Gazetteer.** Florida Ornithological Society Special Publication No. 4. xiv + 99 pages. \$8.
- R. W. LOFTIN. 1991. **West Indian Bird Records in *American Birds* and *Audubon Field Notes* (1947-1990): Species Index by Islands.** Florida Ornithological Society Special Publication No. 5. ix + 90 pages. \$8.
- W. B. ROBERTSON, JR. AND G. E. WOOLFENDEN. 1992. **Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 6. ix + 260 pages. FOS members: \$15 soft cover, \$20 hard cover; Non-members: \$18 soft cover, \$23 hard cover.
- G. E. WOOLFENDEN, W. B. ROBERTSON, JR., AND J. COX. 2006. **The Breeding Birds of Florida.** Florida Ornithological Society Special Publication No. 7. ii + 142 pages. \$12.
- J. S. GREENLAW, B. PRANTY, AND R. BOWMAN. 2014. **The Robertson and Woolfenden Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 8. viii + 435 pages. \$24.

**To order Special Publications:** Please send a check payable to the *Florida Ornithological Society* to the Treasurer:

**Charles H. Fisher, Jr.**  
**c/o Reilly, Fisher & Solomon PA**  
**4950 W. Kennedy Blvd., Ste. 610**  
**Tampa, FL 33609**  
**E-mail: chf1shercpa@hotmail.com**

For Special Publication Number 8 only, there is a flat price of \$24, which *includes* tax and shipping.

For all other Special Publications, your check should include the price given in the list above plus tax and shipping as determined here:

**Shipping:** Add \$2 shipping for 1-5 copies; \$4 for 6-10 copies.

**Sales Tax:** Florida residents add the sales tax for the county in which the Special Publications will be delivered. Calculate the sales tax based on the total cost of the special publications plus shipping.

# Florida Field Naturalist

ISSN 0738-999X

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

**EDITOR:** SCOTT ROBINSON, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

**MANAGING/COPY EDITOR:** TOM WEBBER, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. Email: twebber@flmnh.ufl.edu

**ASSOCIATE EDITOR (FOR BIRD DISTRIBUTION):** BRUCE ANDERSON, 2917 Scarlet Road, Winter Park, FL 32792. Email: scizortail@aol.com

## INFORMATION FOR CONTRIBUTORS

*Florida Field Naturalist* is a refereed journal emphasizing biological field studies and observations of vertebrates, especially birds, in or 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/content/ffn-article-submission-guidelines>) for style, noting especially 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 standard English names for all birds, but lower case for English names of other organisms;
- (4) use 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) use active voice where at all possible.

Submit manuscripts, and books for review, to the Editor, Scott Robinson. Field observations should be sent to a regional compiler of the Field Observations Committee (see Field Observations, this issue, and <http://www.fosbirds.org/content/submit-observation>). Reports of birds for which the FOS Records Committee requires documentation (see <http://fosbirds.org/content/records-committee>) should be sent to the Secretary of the Committee, Andrew W. Kratter, Florida Museum of Natural History, P. O. Box 117800, Gainesville, Florida 32611; Email: kratter@flmnh.ufl.edu.

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 2

MAY 2017

PAGES 39-70

---

## CONTENTS

### ARTICLES

- Hatching failure in a Florida population of House Finches (*Haemorhous mexicanus*)  
*Claire Gentile and Christine M. Stracey* ..... 39-44
- Improvised courtship feeding by an Osprey (*Pandion haliaetus*) pair  
*James R. Thomas* ..... 45-49

### NOTES

- Rafinesque's big-eared bat (*Corynorhinus rafinesquii*) in a Florida cave  
in winter  
*Lisa M. Smith, John Mayersky, and Jeffery A. Gore* ..... 50-52

### FIELD OBSERVATIONS

- Fall Report: August-November 2016  
*Kevin E. Dailey* ..... 53-65

### CORRECTIONS

- Correction: Foraging behavior of the Variegated Flycatcher (*Empidonamus varius*)  
*Jon S. Greenlaw* ..... 66

### ANNOUNCEMENTS

- Our Field Observations Committee needs your skills. .... 67
- Friends of FFN. .... 68-69
- FOS Special Publications ..... 70

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

VOL. 45, No. 3

SEPTEMBER 2017

PAGES 71-102



# FLORIDA ORNITHOLOGICAL SOCIETY

FOUNDED 1972

## OFFICERS

**PRESIDENT:** ADAM KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: kestrelkent@yahoo.com

**VICE PRESIDENT:** ANN PAUL, 11586 W Bayshore Drive, Crystal River, FL 34429. Email: apaul@audubon.org

**SECRETARY:** COLE FREDRICKS, 325 Ruby Lake Loop, Winter Haven, FL 33884. Email: cfredricks@tampabay.rr.com

**TREASURER:** CHARLES H. FISHER, Jr., 4806 W Beach Park Drive, Tampa, FL 33609. Email: chflshercpa@hotmail.com

**EDITOR, FLORIDA FIELD NATURALIST:** SCOTT ROBINSON, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

### Directors, Serving Until Spring 2018

TODD ENGSTROM, 309 Carr Lane, Tallahassee, FL 32312. Email: engstrom@bio.fsu.edu

WHITNEY GRAY, 620 S Meridian Street, Tallahassee, FL 32399. Email: whitney.gray@myFWC.com

ERIN RAGHEB, 1105 SW Williston Road, Gainesville, FL 32601. Email: erin.ragheb@myFWC.com

### Directors, Serving Until Spring 2019

JIM EAGER, 350 Fillmore Avenue, Apt. F-18, Cape Canaveral, FL 32920. Email: beachbirder@bellsouth.net

GRAHAM WILLIAMS, 530 Rosedale Avenue, Longwood, FL 32750. Email: grahamevanwilliams@gmail.com

### Directors, Serving Until Spring 2020

CHRISTOPHER FERRO, 2607 Pepper Avenue, Melbourne, FL 32935. Email: lonelybirder43@gmail.com

DAN O'MALLEY, FWC, 8535 Northlake Boulevard, West Palm Beach, FL 33412. Email: Dan.Omalley@myFWC.com

### Honorary Members

SAMUEL A. GRIMES 1979; HELEN G. CRUICKSHANK 1980; OLIVER L. AUSTIN, JR. 1982  
PIERCE BRODKORB 1982; WILLIAM B. ROBERTSON, JR. 1992; GLEN E. WOOLFENDEN 1994  
TED BELOW 1999; FRED E. LOHRER 2009

All persons interested in Florida's natural history, especially its abundant bird life, are invited to join the Florida Ornithological Society by writing to the Treasurer. Annual membership dues are \$25 for individual members, \$30 for a family membership, \$15 for students, \$45 for contributing members, and \$40 for institutional membership; add \$5 for overseas delivery. One-time contributions for life membership are \$400 for individuals and \$500 for families. All members receive *Florida Field Naturalist*.

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.

*Florida Field Naturalist* is published quarterly (March, 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, 1659 Newell Dr., University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at [www.fosbirds.org](http://www.fosbirds.org)

---

THIS PUBLICATION IS PRINTED ON NEUTRAL PH PAPER



# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 3

SEPTEMBER 2017

PAGES 71-102

---

Florida Field Naturalist 45(3):71-78, 2017.

## **FIRST VERIFIED BREEDING RECORD OF THE RUDDY DUCK (*Oxyura jamaicensis*) IN FLORIDA**

LORRAINE MARGESON

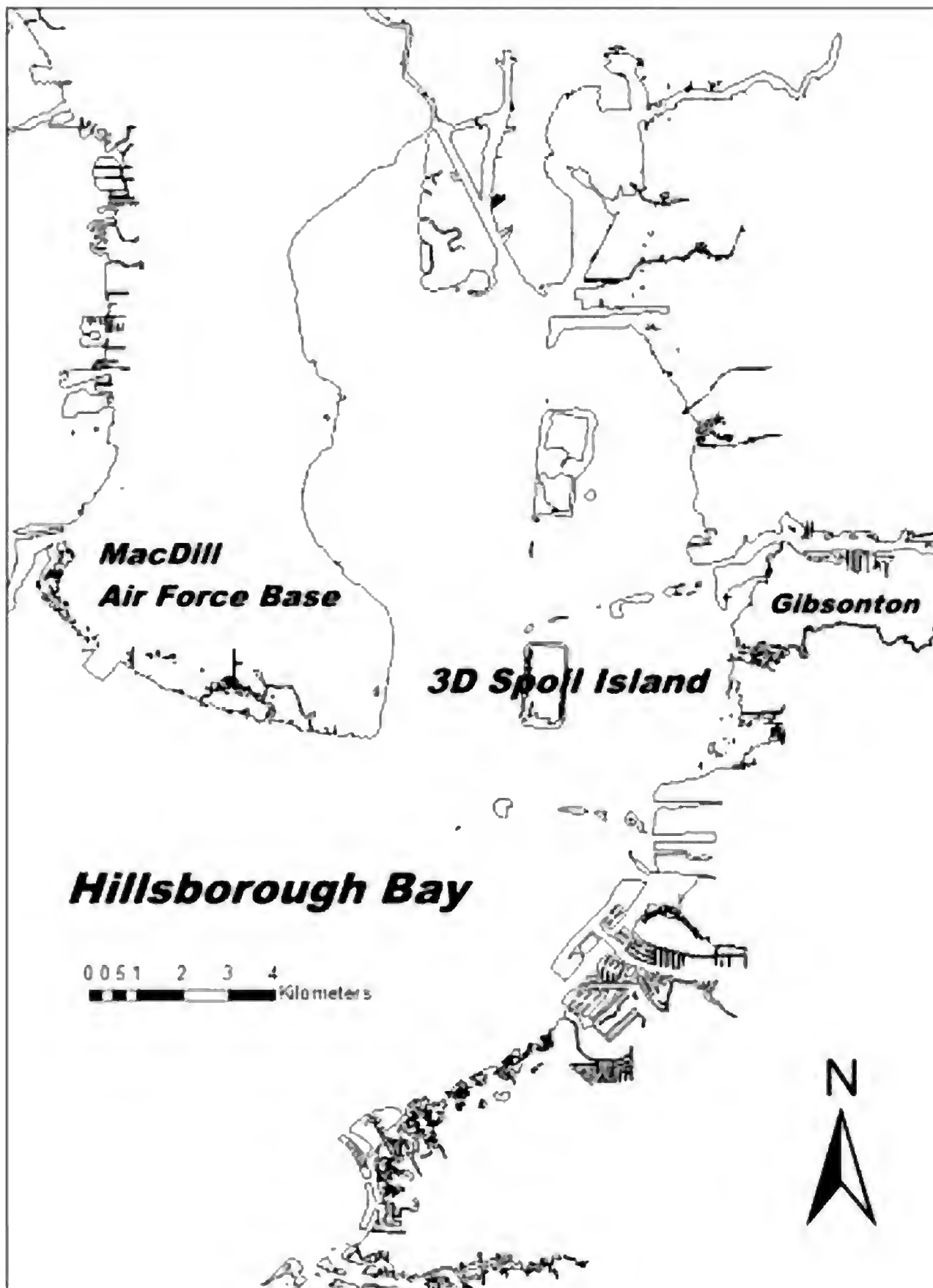
*LG2 Environmental Solutions, 320 62nd Ave. NE,  
St. Petersburg, Florida 33702*

*Email: donlocomm@aol.com*

Ruddy Ducks (*Oxyura jamaicensis*) breed primarily in the prairie pothole region of North America, although small numbers breed or have bred in Mexico, Central America, the West Indies, and southeastern North America (Brua 2002, McNair et al. 2006). Most of the few breeding records from southeastern North America are from inland impoundments and phosphate pits in the north- and central peninsular region of Florida (Menk and Stevenson 1977, Woolfenden and Woolfenden 1984, Brua 2002), though these reports did not include documentation such as still photos, video, or audio recordings (Greenlaw et al. 2014). Here I document with still photos and video the first verified breeding of Ruddy Duck in Florida and the first breeding of that species reported from a Florida coastal island.

### Study Site

The Tampa Harbor Dredged Material Disposal Facility, also known as “3-D” (27.8309, -82.4373) is a 155 ha (384 acre) dredged-material island in Hillsborough Bay, Hillsborough County, Florida (Fig. 1). The U.S. Army Corps of Engineers (USACE) constructed the island for the containment of material dredged from federal channels in Tampa Harbor. 12 m-high dikes contain the dredged material, which is pumped onto the island in a slurry. The interior of the island is topographically varied, with borrow pits and higher elevations. Terrestrial vegetation is sparse to absent. No mangroves grow inside the dikes. About 100 ha (250 acres) is covered by shallow perched brackish water derived from the slurry and rain. Some of the more southerly locations transition to fresh water dominated by broadleaf cattails (*Typha latifolia*). The



**Figure 1. Location of spoil island 3-D in Hillsborough Bay. GIS from Tampa Bay Estuary Program.**

breeding site, in the southern part of the island, was in a 3-4 ha borrow pit, 1.5 m at its deepest point, tenuously connected to the large expanse of more northerly ponds. It was the only area that contained cattails



**Figure 2. Spoil island 3D with the Ruddy Duck nesting pond location marked. Courtesy U.S. Army Corps of Engineers.**

after a dredging project in 2015 and 2016, indicating that the water was relatively fresh. No water testing was done to collect quantitative data on salinity. The extent, depth, and connections of the pond are expected to vary with dredging work.

## Survey Protocol

This area was monitored as part of a dredging contract following a USACE monitoring plan required by the Migratory Bird Treaty Act. David Goodwin and I surveyed the island for all bird species daily throughout the fall of 2016 (10 Oct-9 Dec).

### Chronology of Observations

**10 October 2016.** The first Ruddy Duck recorded in our survey of 3-D was a lone female on the south pond with Pied-Billed Grebe (*Podilymbus podiceps*) adults and young, Common Gallinule (*Gallinula galeata*) adults and young, and American Coots (*Fulica americana*). The water was more fresh than brackish as evidenced by the presence of cattails. The pond was about 0.9 m deep.

**19 October 2016.** I did not see this female again until the 19th, when I found her caring for five downy ducklings (Fig. 3). D. Goodwin and I studied the ducklings with 8X binoculars for about 40 min at distances as close as 15 m, and estimated that they were about one day old. Using the data in Brua (2002), I estimate that the date of first laying was about 22 September 2016.

**18 November 2016.** We saw the female and five young on this date for the first time since 19 October. I estimate that the young were about one month old. Rising water levels from new dredge slurry had



**Figure 3. Female Ruddy Duck with five downy ducklings 19 October 2016.**

widened the channel connecting the southern pond and the larger northern pond. I surmise that the family spent their time since their last appearance in cattails north of the southern pond.

**20 November 2016.** Two days later we first saw a male in breeding plumage in the pond. He escorted the ducklings and performed the “bubbling” display, pounding his chest to make bubbles (Fig. 4), which can be either courtship behavior or an aggressive action (Ladhams 1977). He seemed to be directing the display toward any of the American Coots, Pied-Billed Grebes, and ducks such as Northern Shoveler (*Anas clypeata*), chasing them when they approached the ducklings.

**25 November 2016.** The breeding-plumaged male remained on patrol in the southern pond, constantly guarding the ducklings and bubbling when any other species approached (Fig. 5). We did not see the adult female this day. The pond was now about 1.5 m deep and likely more brackish than in September.

**5 December 2016.** On this day we saw the ducklings flapping their wings. By this date they had about completed the pre-juvinal molt (Brua 2002).

**7 December 2016.** For the first time since 20 November we saw a female Ruddy Duck, presumably the one we had seen previously, with the rest of the family (Fig. 6).

**8 December 2016.** The breeding-plumaged male continued swimming with the juveniles (video clip: <<https://www.youtube.com/>



**Figure 4.** Ruddy Duck male bubbling.



**Figure 5. Ruddy Duck male with a duckling, about to bubble at a Northern Shoveler.**

watch?v=jey9yMm3HPA)>. He performed the bubbling display near one of the juveniles, and the juvenile then bubbled, as though it were learning the display from him (video clip: <<https://www.youtube.com/watch?v=jD7GuIwpfxg>>).

**9 December 2016.** This was the last day of bird monitoring for this dredging project. All five young were now in juvenal plumage (Fig. 6).

#### DISCUSSION

This is the first breeding of Ruddy Ducks in Florida to be verified, with both still photos and video. It also extends the known breeding period for Ruddy Ducks in Florida, from April to mid-August (Greenlaw et al. 2014), to early September. The video recording may be the only one showing a juvenile seeming to learn the bubbling habit from an adult. The male observed with the ducklings was likely one of the parents, although other studies have observed non-related males with young (Ladhams 1977). It was the only male in breeding plumage among the 125 wintering Ruddy Ducks on the island during this breeding event.

This island was created as a working island, but has been well managed for breeding species for the past three years as the Army Corps of Engineers observes provisions of the Migratory Bird Treaty Act, and includes bird monitoring and habitat management in its



**Figure 6. Three Ruddy Duck juveniles with the presumed mother (at left).**

program. The salinity of the water in any given borrow pit can change dramatically depending on the volume of summer rains and the varying placement of the dredge slurry. Breeding sites on St. Croix have been on seasonal salt ponds (McNair et al. 2006), and previous breeding sites in Florida have included managed impoundments, phosphate pits, and an abandoned quarry. The continually changing geography and water content on this island may provide ongoing habitat for Ruddy Duck breeding, especially if bird monitors can help to manage work activities during nesting.

#### ACKNOWLEDGMENTS

I am grateful to Douglas B. McNair for detailed and thoughtful suggestions that improved the manuscript.

#### LITERATURE CITED

- BRUA, R. B. 2002. Ruddy Duck (*Oxyura jamaicensis*), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from The Birds of North America Online: <<https://birdsna.org/Species-Account/bna/species/rudduc>>.
- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. 2014. The Robertson and Woolfenden Florida Bird Species: An Annotated List. Special Publication No. 8, Florida Ornithological Society, Gainesville, Florida.
- LADHAMS, D. E. 1977. Behaviour of Ruddy Ducks in Avon. *British Birds* 70:137-146.

- McNAIR, D. B., L. D. YNTEMA, C. CRAMER-BURKE, AND S. L. FROMER. 2006. Recent breeding records and status review of the Ruddy Duck (*Oxyura jamaicensis*) on St. Croix, U.S. Virgin Islands. *Journal of Caribbean Ornithology* 19:91-96.
- MENK, G. E., AND H. M. STEVENSON. 1977. Second Florida breeding record of the Ruddy Duck. *Florida Field Naturalist* 5:12-13.
- PAUL, R. T., A. F. SCHNAPF, AND M. LOPEZ. 1994. A second Ruddy Duck nests in Hillsborough County. *Florida Field Naturalist* 22:53-43.
- WOOLFENDEN, G. E., AND J. A. WOOLFENDEN. 1984. *Florida Field Naturalist* 12:32-33.



## RECENT OCCURRENCES OF UNUSUALLY PLUMAGED KINGBIRDS (*Tyrannus*) IN FLORIDA: HYBRIDS OR LITTLE-NOTICED NATURAL VARIANTS?

STU WILSON  
*Sarasota, Florida*

*Email: stuwilson@comcast.net*

### INTRODUCTION

In the spring of 2016, two observers at two widely separated locations studied and photographed what appeared to be Gray Kingbirds (*T. dominicensis*) that had a highly unusual extensive yellow wash on the underparts.

On 5 April 2016, experienced Florida birder Carl Goodrich (pers. comm.) noted an odd-looking kingbird on a wire in the company of two Gray Kingbirds at Fort Zachary Taylor Historic State Park (“Fort Zach”) at Key West, Monroe County, Florida. In his first view, without a binocular, the bird struck him as a Western Kingbird (*T. verticalis*) because of the yellow on the underparts. Later the same day, when he was able to photograph the bird and study it in more detail with a binocular, he realized it was not a Western Kingbird. Goodrich has seen “thousands of Gray Kingbirds in the Keys over the last 40 years and none were as yellow as this one” (Fig. 1A). He believes he saw the same bird a week earlier in a gumbo limbo (*Bursera simaruba*) at the same location in the company of a dozen Gray Kingbirds, but was not able to photograph it on that occasion.

On 15 May 2016, Michelle Wilson (pers. comm.) was birding on Lust Road at Lake Apopka North Shore Restoration Area (LANSRA), Orange County, Florida, part of the Lake Apopka Wildlife Drive. There she photographed a kingbird (Fig. 1B) across a small canal, perched atop a dead branch with a few Red-winged Blackbirds (*Agelaius phoeniceus*). The kingbird intrigued her because “... there was a yellow/buttery coloring to the underside...”

Two plausible explanations emerge for explaining these atypical kingbirds: 1) The subject birds are products of Tropical Kingbird (*T. melancholicus*) x Gray Kingbird hybrid nestings such as those documented in Sarasota 2013-2016 (Wilson et al. 2015); or 2) The subject birds represent examples of natural color variation in the underparts of Gray Kingbird. Here I evaluate these two possibilities.



**Figure 1. A) Photograph of first subject kingbird taken by Carl Goodrich at Fort Zachary Taylor Historic State Park at Key West, Monroe County, Florida on 5 April 2016; B) Photograph of second subject kingbird taken by Michelle Wilson on Lust Road at Lake Apopka North Shore Restoration Area, Orange County, Florida on 15 May 2016.**

## DISCUSSION

**Tropical Kingbird x Gray Kingbird hybridization.**—In 2015 Wilson et al. (2015) documented the nesting of a female Tropical Kingbird at St Armands Circle, Sarasota, Sarasota County, Florida, during the spring and summer of 2013. The authors provided strong evidence that the female Tropical Kingbird (“Dot”) mated with a male Gray Kingbird producing four hybrid young which fledged and subsequently dispersed. These events represented not only the first confirmed nesting of Tropical Kingbird east of the Mississippi River, but the first presumed Tropical Kingbird x Gray Kingbird hybridization anywhere (Wilson et al. 2015).

Dot repeated her performance in the springs and summers of 2014, 2015, and 2016, producing three, two, and two fledglings, respectively (S. Wilson, pers. obs.). In those years, it was not known whether she chose the same male Gray Kingbird as her partner, and all eleven offspring looked substantially identical to each other. In 2013, all four nestlings were banded but none of the offspring were banded in subsequent years. Other than presumably providing semen, a Gray Kingbird male parent played no observable role in the nesting process (S. Wilson pers. obs., John Ginaven pers. comm.), quite unlike the male Gray Kingbird studied by Doyle (2013).

The offspring were closely monitored in 2013, but less so in subsequent years. Fledglings were noted to be dependent on their mother for food (almost exclusively flying insects) for one to two weeks after fledging, thereafter feeding on their own. Those fledglings which could be tracked were noted to disappear three to four weeks after fledging. Monitoring the independent fledglings was complicated because they looked so similar to Gray Kingbirds. Several Gray Kingbird nests were noted in the vicinity, and the natal area became a gathering spot for Gray Kingbirds during the fledging period (S. Wilson pers. obs., J. Greenlaw pers. comm.).

The description of the young hybrids that fledged from the Sarasota nest in 2013 is as follows: “Pale underparts with just a faint hint of yellow wash on the belly and slightly deeper yellow on the undertail coverts, gray backs, dark remiges edged in yellow, brown wing coverts edged in light brown, brown rectrices edged in light brown, gray crown, loreal and postocular gray smudge, and long dark bills” (Wilson et al. 2015). The appearance of the young birds that fledged from Dot’s nests in 2014, 2015, and 2016 was consistent with this description (Figs. 2 and 3, S. Wilson pers. obs., J. Greenlaw pers. comm.).



**Figure 2. Photograph of two fledgling kingbirds begging from their mother, taken by Claire Herzog at St Armands Circle, Sarasota, Sarasota County, Florida on 4 July 2014.**



**Figure 3. Photograph of two fledgling kingbirds taken by Claire Herzog at St Armands Circle, Sarasota, Sarasota County, Florida on 15 July 2015.**

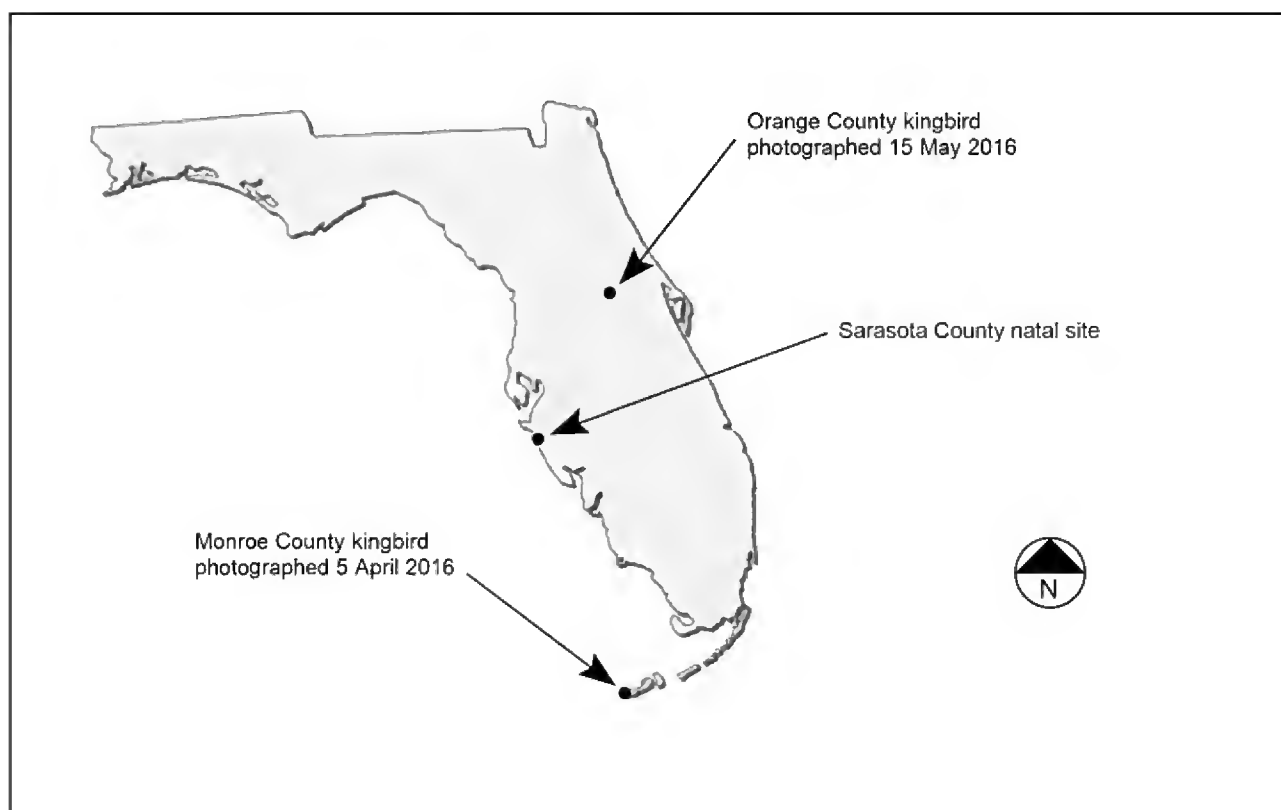
When photographs of the 2016 Monroe and Orange county birds were circulated, two prominent Florida birder/ornithologists, Bruce H. Anderson at Winter Park and Andrew W. Kratter of the Florida Museum of Natural History at Gainesville, commented that the subject birds appeared to be Tropical Kingbird x Gray Kingbird hybrids or perhaps backcrosses of a hybrid with a Gray Kingbird (BHA & AWK pers. comm., 16-17 May 2016).

The Monroe and Orange county photographs each show what appears superficially to be a Gray Kingbird, but with a noticeable amount of yellow wash on the underparts tending to concentrate in the vent/undertail covert area. The description of these individuals closely matches that observed on the fledgling birds at the St Armands Circle natal site. Since no bands were noted on the Monroe (CG pers. comm.) or Orange (see Fig. 1B) county birds, members of Dot's 2013 brood would tend to be eliminated from consideration, as all those fledglings were banded. Since the Monroe and Orange county birds were discovered in April and May of 2016, respectively, they could not have been members of Dot's 2016 brood either.

That the Monroe and Orange county birds came from the Sarasota County nests of 2014 or 2015 cannot be proven. The Monroe County bird was found about 320 km south-southeast, and the Orange County bird about 180 km northeast, of the natal area (Fig. 4).

There is little information available to help predict dispersal movements of the hybrid fledglings from the natal area on St Armands Circle in Sarasota County. There have been no published positive recaptures or resightings of any of the nine fledglings from the nests of 2013 through 2015. Although Dot was reliably present in the St Armands Circle area April through September for at least the last four years, her whereabouts throughout the remainder of the year are unknown. Tropical Kingbird is rare in Florida with barely two dozen confirmed records through 2015. The species has been found in all seasons, as a migrant in summer, fall, and spring, rarely overwintering (Pranty et al. 2016).

Melvin A. Traylor (*vide* B. Anderson), after examining Florida's only Tropical Kingbird specimen (UCF 2082, Palm Beach County), commented that in his opinion the bird was from one of the Mexican populations. Since 2002, there have been reports of Tropical Kingbirds at LANSRA at least four times, occurring in all seasons except summer (Pranty 2002, 2004a, 2004b, 2004c, 2007; Dailey 2016); there are no known published reports of Tropical Kingbird from the Florida Keys (Pranty et al. 2016).



**Figure 4.** Map showing locations of Tropical Kingbird x Gray Kingbird natal site in Sarasota County and locations where Orange and Monroe county atypical kingbirds were photographed.

Florida breeding status and seasonal movements of the possible hybrids' other parental species, Gray Kingbird, are much better documented. Gray Kingbird is a rare to uncommon nesting species throughout the length of Florida, but confined almost exclusively to the coasts (BBAE 2016). There are occasional winter records (Greenlaw et al. 2014), but the majority of Florida breeding birds likely winter in the West Indies (Chesser 1995). Gray Kingbird is a rare visitor to Orange County during spring and fall migration and individuals have occasionally remained at LANSRA into the early summer and early winter (e.g., Pranty 2004b, 2014). Gray Kingbirds are regular breeders in Monroe County (Greenlaw et al. 2014), including at Fort Zach (C. Goodrich pers. comm.).

Therefore, to judge from the described plumages of the known Florida Tropical Kingbird x Gray Kingbird hybrids and the similar plumages observed in the photographed kingbirds at Ft. Zach and LANSRA, as well as what is known of each species' seasonal movements, the origin of the photographed birds could conceivably be the documented hybrid nestings in Sarasota.

At least as plausibly, the Orange and Monroe county birds could have originated from an undocumented pairing of Tropical Kingbird and Gray Kingbird elsewhere in Florida or nearby. The majority of the recent influx of Tropical Kingbird records in Florida are of individual birds (Pranty et al. 2016) and it is reasonable to assume these individuals might resort to a Gray Kingbird mate out of necessity, just as in the Sarasota case.

**Natural color variation in Gray Kingbirds.**—The possibility that the abnormal underpart plumage noted in the Orange and Monroe county birds simply represents natural color variation in Gray Kingbird must also be considered. Documentation of such variation is scarce and inconsistent. Neither Pyle (2002), Sibley (2014), nor Smith and Jackson (2002) make mention of yellow on the ventral plumage of Gray Kingbird of any age or sex (although Sibley's depiction of the juvenile bird seems to show a very faint yellow wash on the lower flanks). Smith and Jackson state without reservation that Gray Kingbird may be distinguished from other kingbirds by "underparts without yellow." J. Jackson (pers. comm.), of Smith and Jackson (2002), indicates that he does not recall observing any Gray Kingbird specimens with a yellow wash.

On the other hand, Ridgway (1907) describes Gray Kingbird with "under tail-coverts usually tinged with pale yellow." Waite (2002) indicates that Gray Kingbird shows "... mostly white underparts with pale yellow wash on belly and undertail coverts." My own observations and those of others involved in the 2013 Sarasota nest-site monitoring (Wilson et al. 2015) revealed that, indeed, the undertail coverts of Gray

Kingbird frequently show a faint yellow wash, perhaps most commonly noted on young birds. However, we did not see an extension of the yellow wash beyond the undertail coverts.

A study of tyrannid phylogeny (Ohlson et al. 2013) reveals a number of close relatives of Gray Kingbird, namely Tropical Kingbird, Couch's Kingbird (*T. couchii*), Cassin's Kingbird (*T. vociferans*), Thick-billed Kingbird (*T. crassirostris*), and Western Kingbird, that show yellow (bright or paler) across portions of the underparts. However, other relatives, namely Eastern Kingbird (*T. tyrannus*), Loggerhead Kingbird (*T. caudifasciatus*), and Fork-tailed Flycatcher (*T. savanna*) show no yellow, just plain white and pale gray. Gray Kingbirds may have a latent ability to express the yellow trait in plumage color of the underparts. Field evidence of such a trait, however, is scant.

#### CONCLUSION

Although uncertainty abounds, in my view the extent of pale yellow on the underparts of the photographed Orange and Monroe county birds (i.e. not limited to undertail coverts but extending through vent and belly to lower abdomen) is more likely explained by the documented precedent of Tropical Kingbird x Gray Kingbird hybridization than by naturally-occurring Gray Kingbird variation, where convincing documentation is lacking. I call upon Florida birders to be on the alert for Tropical Kingbird hybrid nestings, and to scrutinize Gray Kingbird plumages for instances of unusual coloration.

#### ACKNOWLEDGMENTS

I thank John Ginaven for his diligence in steadily monitoring Dot's natal site since 2013; Claire Herzog, Carl Goodrich, and Michelle Wilson for contributing photographs, and the latter two for providing details of their observations; Naomi Deutsch for assisting with graphics; Bill Pranty for allowing me access to the manuscript of his and his colleagues' then-unpublished paper; and Bruce Anderson and Jon Greenlaw for helpfully reviewing early drafts of this manuscript.

#### LITERATURE CITED

- BBAE [Breeding Bird Atlas Explorer] (online resource). 2016. U.S. Geological Survey Patuxent Wildlife Research Center. 1 August 2016. <<http://www.pwrc.usgs.gov/bba>>.
- CHESSER, R. T. 1995. Biogeographic, Ecological, and Evolutionary Aspects of South American Austral Migration, With Special Reference to the Family Tyrannidae. Ph.D. Dissertation, Louisiana State University, Baton Rouge.
- DAILEY, K. 2016. Field observations fall report: August-November 2015. Florida Field Naturalist 44:65-76.
- DOYLE, D. 2013. Observations of Gray Kingbird (*Tyrannus dominicensis*) habits and breeding behavior in St. Johns County, Florida. Florida Field Naturalist 41:117-122.

- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. 2014. The Robertson and Woolfenden Florida Bird Species: An Annotated List. Special Publication No. 8., Florida Ornithological Society, Gainesville.
- OHLSON, J. I., M. IRESTEDT, P. ERICKSON, AND J. FJELDSA. 2013. Phylogeny and classification of the New World suboscines (Aves, Passeriformes). *Zootaxa* 3613:1-35.
- PRANTY, B. 2002. Field observations winter report: December 2001-January 2002. *Florida Field Naturalist* 30:100-112.
- PRANTY, B. 2004a. Field observations fall report: August-November 2003. *Florida Field Naturalist* 32:63-74.
- PRANTY, B. 2004b. Field observations winter report: December 2003-January 2004. *Florida Field Naturalist* 32:117-127.
- PRANTY, B. 2004c. Field observations spring report: March-May 2004. *Florida Field Naturalist* 32:153-162.
- PRANTY, B. 2007. Field observations winter report: December 2006-January 2007. *Florida Field Naturalist* 35:89-102.
- PRANTY, B. 2014. Field observations summer report: June-July 2013. *Florida Field Naturalist* 42:36-47.
- PRANTY B., A. W. KRATTER, AND V. PONZO. 2016. Status and distribution in Florida of Tropical Kingbird (*Tyrannus melancholicus*) and Couch's Kingbird (*Tyrannus couchii*). *Florida Field Naturalist* 44:83-105.
- PYLE, P. 1997. Identification Guide to North American Birds, Part 1: Columbidae to Ploceidae. Slate Creek Press, Bolinas, California.
- RIDGWAY, R. 1907. The Birds of North and Middle America. Bulletin of the United States National Museum, No. 50, Part IV. Washington, D.C.
- SIBLEY, D. A. 2014. The Sibley Guide to Birds. 2nd ed. Alfred A. Knopf, New York.
- SMITH, G. A., AND J. A. JACKSON. 2002. Gray Kingbird (*Tyrannus dominicensis*). The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <<http://bna.birds.cornell.edu/bna/species/668>>
- WAITE, M. 2012. iBird: An Ultimate Interactive Bird Guide <[https://identity.whatbird.com/obj/837/overview/Gray\\_Kingbird.aspx](https://identity.whatbird.com/obj/837/overview/Gray_Kingbird.aspx)>
- WILSON, S., R. E. PEIPERT, J. GINAVEN, AND B. ROSSHEIM. 2015. Nesting and hybridization of a Tropical Kingbird (*Tyrannus melancholicus*) and Gray Kingbird (*T. dominicensis*) in Sarasota, Florida. *Florida Field Naturalist* 43:1-11.



## FIELD OBSERVATIONS

**Winter Report: December 2016-February 2017.**—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Electronic 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 follow this report.

Sight-only observations are termed “reports” while only those observations supported by verifiable evidence (photographs, video or audio recordings, or specimens) are called “records.” Species for which documentation is required by the FOC and by the FOS Records Committee (FOSRC; <fosbirds.org/official-florida-state-bird-list>) 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, AFR = Air Force Range, CA = Conservation Area, EOS = end of season, FLMNH = Florida Museum of Natural History, m. obs. = many observers, NERR = National Estuarine Research Reserve, NP = National Park, NSRA = North Shore Restoration Area, NWR = National Wildlife Refuge, SF = State Forest, SP = State Park, STA = Stormwater Treatment Area, STF = sewage treatment facility, WMA = Wildlife Management Area, WTF = Wastewater 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. Photographs or video- or audio-recordings archived by the FOC are identified by a plus (+).

### SUMMARY OF THE WINTER SEASON

The winter season saw average temperatures that were considerably higher than normal across the entire state, including differences of +5° to +9° F at stations ranging from Pensacola to Jacksonville to Key West. Rainfall totals varied across the state in December and January, and a drier than normal February resulted in 62% of the state being in some level of drought conditions by the end of the season (Stefanova et al. 2016, 2017a, 2017b).

FOSRC review species noted in this report include a pair of Brant, American Black Duck, Common Merganser, Vaux’s Swift, Razorbill, Sabine’s Gull, Black-headed Gull, Thayer’s Gull, Neotropic Cormorant, a Great White Pelican observed in *Lee* for the second winter, La Sagra’s Flycatcher, Thick-billed Vireo, Sprague’s Pipit, Smith’s Longspur, Kirtland’s Warbler, Black-throated Gray Warbler, Western Spindalis, Bananaquit, and Harris’s Sparrow.

The FOC welcomes David Sherer as the compiler for *Highlands*; his contributions will strengthen these seasonal reports. The FOC would also like to express deep appreciation to Bruce H. Anderson who has volunteered his time as the central east coast regional compiler for over 16 years and is now stepping away from the role. Bruce’s regional reports have always been detailed and comprehensive, and have certainly provided high value data.

The FOC is seeking volunteers interested in joining the committee as regional compilers for counties that are currently uncovered. The first region would include

*Suwannee, Columbia, Gilchrist, Union, and Bradford*. A second region could be covered by one or multiple interested individuals: *Polk, Osceola, Hardee, De Soto, Glades, and Okeechobee* Counties. Responsibilities would include soliciting and compiling notable field observations for these counties at the end of each season. Interested individuals should contact the state compiler listed at the end of this report.

## SPECIES ACCOUNTS

- BLACK-BELLIED WHISTLING-DUCK: 32 at Rabon Road (*Jefferson*) 10 Dec (M. Smith).
- FULVOUS WHISTLING-DUCK: 4 at Lake Apopka NSRA (*Orange*) 1 and 12 Dec (H. Robinson).
- GREATER WHITE-FRONTED GOOSE: 4 at Paynes Prairie Preserve SP (*Alachua*) 8-23 Dec (M. Manetz, M. Bruce et al.); 1 at Gulf Breeze (*Santa Rosa*) 24 Dec (J. Stuckey); 3 at Rabon Road 28 Dec (+M. Smith); 1 at International Paper Wetlands (*Escambia*) 30 Dec (J. Callaway, B. Callaway); 2 at Lake Belleview 24 Jan provided the first *Pinellas* record (+B. Cochrane).
- SNOW GOOSE: 1 white morph at Tosohatchee WMA (*Orange*) 20 Dec (D. Simpson); 1 at Lakes Park, Fort Myers (*Lee*) 2 Jan (+D. McQuade, E. Warren); 2 at Rabon Road 8 Jan (M. Smith); 1 at Fort Island Gulf Beach (*Citrus*) 11 Jan (F. Hillman et al.); 1 at west Jacksonville (*Duval*) 18-25 Feb (K. Dailey, D. Foster).
- ROSS'S GOOSE: 1 at N *Escambia* 19 Dec (M. Petosky); 4 at the Okaloosa County STF (*Okaaloosa*) 17-19 Feb (M. Swan); 3 at N *Escambia* 27 Feb (B. Duncan, L. Duncan).
- \*BRANT: 2 at Bunche Beach, Fort Myers (*Lee*) 17 Dec-21 Jan (T. Olkowski, +C. Ewell, et al.); details to FOSRC; 2 at Canaveral NS are believed to be the same birds (*Volusia*) 2 Feb-EOS (J. Hughes, m. obs.).
- CANADA GOOSE: Up to 275 at Perdue Pond Wildlife Area (*Duval*) through 8 Dec (D. Foster); 27 at Largo Nature Reserve (*Pinellas*) 7 Jan (K. Duncan).
- EGYPTIAN GOOSE: 4 adults with 8 downy goslings at Sebastian (*Indian River*) 2 Jan (J. Baker, +G. Harber).
- GADWALL: 103 at Lake Apopka NSRA 1 Dec (H. Robinson); 1 at Orlando Wetlands Park (*Orange*) 20 Dec (P. Hueber, B. Anderson et al.); 1 male at St. Johns River south of SR46 (*Seminole*) 26 Dec (D. Simpson).
- \*AMERICAN BLACK DUCK: Up to 4 continued at Perdue Pond Wildlife Area through 28 Feb (m. obs.); 1 at St. Marks NWR (*Wakulla*) 10 Dec (M. Smith).
- NORTHERN PINTAIL: 5 at Orlando Wetlands Park 20 Dec (P. Hueber, B. Anderson et al.); 1 at Lake Apopka NSRA 6 Feb (H. Robinson).
- CANVASBACK: 2 males at Orlando Wetlands Park 20 Dec (+P. Hueber, B. Anderson et al.); 1 male at Perdue Pond Wildlife Area 1 Jan-EOS (D. Foster, m. obs.).
- REDHEAD: 1 female at Lake Apopka NSRA 15 Dec-27 Feb (H. Robinson).
- RING-NECKED DUCK: 3500 at a retention pond in The Villages (*Sumter*) 22 Dec (J. Dinsmore).
- GREATER SCAUP: 1 at Spring Hill (*Hernando*) 7 Dec (A. Hansen, B. Hansen et al.); 1 at Orlando Wetlands Park 20 Dec (P. Hueber, B. Anderson et al.); 2 at Dunn WTF (*Pinellas*) 31 Dec-13 Feb (+C. Yilmaz, T. Kalbach).
- LESSER SCAUP: ca. **550,000** on Banana River at Cocoa Beach (*Brevard*) 17 Dec (J. Eager, T. Ledford; 3 waves of ducks streamed through 180° from south to north for 20 minutes).
- COMMON EIDER: 1 immature male at Black Point Marina jetty (*Miami-Dade*) 18 Dec (+N. Frade, m. obs.); 1 immature male at Juno Beach Park and Pier (*Palm Beach*) 23 Dec (+D. O'Malley); 1 female at Lighthouse Point Park, Ponce Inlet (*Volusia*) 24 Dec (+M. Bruce); 1 female at Jetty Park, Cape Canaveral (*Brevard*) 24 Jan-14 Feb (m. obs.); 1 immature male at Crandon Marina, Crandon Park (*Miami-Dade*) 10-26 Jan (+M. Avello); 1 immature male at Dr. Von D. Mizell-Eula Johnson SP (*Broward*) 25 Feb (+M. Berney).

- SURF SCOTER:** 9 at Tomoka Basin, Tomoka SP (*Volusia*) 5 Jan (M. Brothers); 1 at Carabelle Beach (*Franklin*) 11 Feb (R. Cassidy); 4 at Pensacola Beach (*Escambia*) 4–14 Feb (D. Muth, B. Duncan, L. Duncan); 35 at Fort Pickens (*Escambia*) 21 Feb (D. Stangeland).
- WHITE-WINGED SCOTER:** 1 at Fort Clinch SP (*Nassau*) 11 Dec (D. Gagne et al.); 2 at Tomoka Basin, Tomoka SP 5 Jan (M. Brothers); 1 at St. Marks NWR 12 Jan (J. Cavanagh).
- BLACK SCOTER:** 20 at Tomoka Basin, Tomoka SP 5 Jan (M. Brothers).
- LONG-TAILED DUCK:** 1 at J. N. Ding Darling NWR (*Lee*) 26 Nov (+D. Richard); 2 at Shired Island (*Dixie*) 5 Dec (D. Wassmer, L. Saul); 1 female at Rodney Ketcham Park, Cape Canaveral (*Brevard*) 3-30 Jan (m. obs.); 5 at Veterans Memorial Park (*Okaloosa*) 7-8 Feb (C. Crawford, B. Duncan, L. Duncan).
- BUFFLEHEAD:** 8 at Lake Apopka NSRA 1 Dec (H. Robinson); 38 at Courtney Campbell Causeway (*Pinellas*) 12 Dec (+R. Lane, D. Lane); 77 (8 adult males) at a retention pond just north of The Villages at Summerfield (*Marion*) 13 Dec (J. Dinsmore); 1 at Orlando Wetlands Park 20 Dec (+P. Hueber, B. Anderson et al.); 30 at Dunn WTF 31 Dec (+C. Yilmaz); 10 at Shell Key Preserve (*Pinellas*) 1 Jan (E. Plage, P. Plage); 45 at a retention pond at The Villages 26 Feb (L. Felker); 24 near the Courtney Campbell Causeway 28 Feb (+B. Lane).
- COMMON GOLDENEYE:** 1 female at Melbourne (*Brevard*) throughout the season (m. obs.); 1 at Spring Hill 4 Dec and 8 Jan-19 Feb (A. Hansen, B. Hansen); 1 at Wildwood (*Sumter*) 13-14 Dec (P. Stafford, G. DelPizzo, D. Richard); 1 female at Lake Maggiore (*Pinellas*) 16-17 Dec (R. Smith et al.); 1 near Sanford (*Seminole*) 17 and 22 Dec for the third consecutive winter (+G. Williams, +K. Schmidt); 1 at Gainesville (*Alachua*) 18 Dec-4 Feb (J. Martin, S. Robinson, A. Kratter et al.); 1 off Heckscher Drive (*Duval*) 23 Dec-4 Feb when it was found dead and salvaged (D. Foster, m. obs., specimen to FLMNH); 1 at Seven Springs WTF (*Pasco*) 28 Dec (D. Goodwin, E. Haney); 1 at Lake Apopka NSRA 29 Dec (H. Robinson); 1 female at Dunn WTF 22-30 Jan (T. Kalbach, +B. Cochrane, m. obs.).
- \*COMMON MERGANSER:** 1 at Seven Springs WTF 28 Dec (D. Goodwin, E. Haney).
- RED-BREASTED MERGANSER:** 1 female at Lake Apopka NSRA 4 Dec (P. Hueber, T. Boorstin); 1 at Wildwood 31 Dec (S. Stafford).
- RUDDY DUCK:** 1,000+ at Sand Beach Road (*Franklin*) 29 Jan (J. Murphy).
- HORNED GREBE:** Up to 2 at Lake Apopka NSRA 5 and 15 Dec (H. Robinson).
- WHITE-WINGED DOVE:** 81 roosting at NE St. Petersburg (*Pinellas*) 1 Jan (+R. Smith).
- SMOOTH-BILLED ANI:** 2 at Loggerhead and Bush Key, Dry Tortugas NP (*Monroe*) 14 Dec (*fide* R. Diaz); 1 at Loxahatchee NWR (*Palm Beach*) 1 Dec-EOS (m. obs.); 1 at Fort De Soto Park (*Pinellas*) 2-17 Jan (+D. Kulp, m. obs.); 1 at South Dade, SR 9336 (*Miami-Dade*) 4 Jan-14 Feb (C. Sanchez, m. obs.); 1 adult at South Central Regional WTF, Russ Grissom Memorial Wetlands, Viera (*Brevard*) 5 Jan-1 Feb (m. obs.); 1 at Markham Park (*Broward*) 12-30 Jan (M. Berney); 1 adult at STA 5, Clewiston (*Hendry*) 14 Jan (J. Eager).
- GROOVE-BILLED ANI:** 1 at Lake Apopka NSRA 1 Dec (H. Robinson); 2 at Clay Island (*Lake*) from fall 2016-EOS (m. obs.); 1 at Black Creek Trail – C-1W (*Miami-Dade*) 24 Dec-EOS (+N. Frade, m. obs.).
- LESSER NIGHTHAWK:** 1 at Garcon Point (*Santa Rosa*) 17 Dec (A. Knothe, D. Robbins, B. Almario).
- CHUCK-WILL'S-WIDOW:** 1 at Sebastian 2 Jan (G. Harber); 1 at Cape San Blas (*Gulf*) 11 Jan was taken to a rehab clinic where it died (+J. Rinehart); 1 at Archbold Biological Station (*Highlands*) 28 Feb (D. Sherer).
- EASTERN WHIP-POOR-WILL:** 1 at Scarborough Ranch (*Highlands*) 30 Dec (D. Goodwin, E. Haney, R. Webb); 3 at Fort George Island (*Duval*) 1 Jan (K. Dailey); up to 3 at Archbold Biological Station 5 Feb-EOS (D. Sherer, R. Windsor, J. Greer).

- CHIMNEY SWIFT: 3 at Eastman/Taminco Sanctuary (*Santa Rosa*) 22 Feb (L. Kelly, B. Furlow); 8 at the University of West Florida (*Escambia*) 27 Feb (A. Holzinger).
- \*VAUX'S SWIFT: 5 at Gainesville throughout the season (A. Kratter et al.).
- RUBY-THROATED HUMMINGBIRD: 3 at Ormond Beach (*Volusia*) 1 Dec-28 Feb (M. Wilson).
- BLACK-CHINNED HUMMINGBIRD: 1 at *Alachua* through 7 Feb (P. Stine, F. Bassett).
- RUFIOUS HUMMINGBIRD: 1 female and 1 immature male at Castellow Hammock Park (*Miami-Dade*) 1 Dec-EOS (m. obs.); 1 at a Winter Park feeder (*Orange*) 5-6 Jan for the fifth season (K. Hamblett, S. Simmons, R. Merrigan); 1 at *Polk* 18 Feb (*vide* K. Dailey).
- BUFF-BELLIED HUMMINGBIRD: Up to 2 at Castellow Hammock Park 1 Dec-EOS (m. obs.); 1 at a Pensacola residence (*Escambia*) 21 Dec-24 Jan (D. Timmons, K. Keigley).
- KING RAIL: 2 at International Paper Wetlands 30 Dec (J. Callaway, B. Callaway).
- VIRGINIA RAIL: 2 at Okeeheepkee Prairie Park (*Leon*) 20 Feb (R. Cassidy).
- SORA: 3 at New World Avenue (*Duval*) 7-21 Jan (K. Dailey, D. Foster).
- PURPLE SWAMPHEN: Singles at Lake Apopka NSRA through 10 Dec, 14-16 Jan (+A. Horst, D. Miller), and 23 Feb (H. Robinson); 1 at Paynes Prairie Preserve SP 28-31 Jan (L. Davis et al.).
- LIMPKIN: 1 at Lake Ford (*Flagler*) 1 Jan (A. Bobbitt).
- SANDHILL CRANE: Up to 10,700 at Paynes Prairie Preserve SP throughout the season (D. Ewing, B. Ewing, S. Ewing et al.); 2 at New World Avenue 7 Jan (K. Dailey, D. Foster); 420 (in 10 flocks moving north in 1.5 hours) at The Villages 7 Feb (J. Dinsmore); 1 at Mayo Clinic (*Duval*) 20-24 Feb (M. Weeks, K. Dailey).
- WHOOPIING CRANE: 1 at Paynes Prairie Preserve SP throughout the season (M. Manetz et al.); 1 at Micanopy (*Alachua*) throughout the season (A. Zions, A. Lamoreaux, M. Manetz); 1 adult at Ellie Schiller Homosassa Springs Wildlife SP, Homosassa Springs (*Citrus*) 13 Dec (D. Hewitt); 1 immature southeast of Inverness 19 Dec (K. Spilios), this same crane was with two adults east of Inverness 12 Jan-EOS (C. Nelson, K. Spilios); 1 adult at Double C Bar Ranch, Kenansville (*Osceola*) 25 and 27 Jan (J. Eager).
- BLACK-NECKED STILT: 1 at Orlando Wetlands Park 20 Dec (+P. Hueber, B. Anderson et al.); 1 at Scarborough Ranch 30 Dec (D. Goodwin, E. Haney, R. Webb); 3 at Lake Apopka NSRA (*Lake*) 27 Jan (P. Hueber, R. Mulholland).
- AMERICAN AVOCET: 8 at CR 721 Teal Pond (*Highlands*) 1 Dec (D. Simpson); up to 3 at Paynes Prairie Preserve SP through 8 Dec (M. Manetz et al.); 7 at Fred Howard Park (*Pinellas*) 13 Dec (+K. Spilios); 1 at Lady Lake (*Lake*) 15 Dec (L. Felker); 1 at Weedon Island's Duke Energy ponds (*Pinellas*) 17 Dec (+M. Burns et al.); 17 at Scarborough Ranch 30 Dec (+D. Goodwin, E. Haney, R. Webb); 1 at The Villages 3-5 Jan (S. McMarlin, A. Horst); up to 24 at White Shell Bay (*Duval*) 21 Jan (K. Dailey).
- AMERICAN OYSTERCATCHER: 48 at Little Tiger Island (*Nassau*) 7 Dec (P. Leary).
- BLACK-BELLIED PLOVER: 1 at Lake Apopka NSRA 15 Dec (H. Robinson); 1 at Scarborough Ranch 30 Dec (+D. Goodwin, E. Haney, R. Webb).
- AMERICAN GOLDEN-PLOVER: 1 at the Okaloosa County STF 26-27 Feb (S. McNemar, M. Swan et al.).
- PIPING PLOVER: 16 at Big Bird Island (*Duval*) 17 Dec (P. Leary).
- WHIMBREL: Up to 6 at Fred Howard Park 17-24 Jan (+B. Lane).
- LONG-BILLED CURLEW: 1 at Lake Ingraham, Everglades NP (*Monroe*) 12 Jan-13 Feb (+D. Tufty); 1 at Flag Island (*Franklin*) 1 Feb (J. Murphy).
- RED KNOT: 98 at Big Bird Island 17 Dec (P. Leary).
- STILT SANDPIPER: Up to 4 at Paynes Prairie Preserve SP throughout the season (M. Manetz, A. Lamoreaux et al.).
- DUNLIN: Up to 3 at Paynes Prairie Preserve SP throughout the season (M. Wilson, A. Lamoreaux et al.); 2 at Tallahassee (*Leon*) 10 Dec (R. Cassidy).
- PURPLE SANDPIPER: 2 at Huguenot Memorial Park (*Duval*) 16 Dec (*vide* K. Dailey); 1 at Fort Pierce Inlet SP jetty (*Indian River*) 17 Dec (+E. Bowles et al.); 4 at Ponce de

- Leon Inlet 14 Dec (M. Brothers); 1 at Jetty Park, Cape Canaveral 30 Jan-14 Feb (T. Ledford).
- PECTORAL SANDPIPER: Up to 4 at Paynes Prairie Preserve SP 22 Dec-27 Feb (D. Ewing, S. Ewing, B. Ewing et al.); 1 at the Okaloosa County STF 18 Feb (M. Swan); 38 at N *Escambia* 27 Feb (B. Duncan, L. Duncan).
- SEMIPALMATED SANDPIPER: 1 at Crandon Park Beach (*Miami-Dade*) 2 Dec-EOS (+S. Juan; m. obs.).
- SPOTTED SANDPIPER: 1 at West Regional WTF, Vero Beach (*Indian River*) 12 Feb (T. Ledford).
- RED PHALAROPE: 1 at Green Cay Wetlands (*Palm Beach*) 23 Dec (+B. Ladd); 1 at Anastasia SP (*St. Johns*) 1 Jan (L. Flesher); 1 at Cape San Blas (*Gulf*) 22 Feb was taken to a rehab clinic where it died (B. Eells).
- POMARINE JAEGER: 1 at Alligator Point (*Franklin*) 14 Dec (J. Murphy); 1 at Little Talbot Island SP (*Duval*) 22 Jan (K. Dailey).
- PARASITIC JAEGER: 2 at Little Talbot Island SP 22 Jan (K. Dailey); 1 first-cycle on beach at Daytona Beach Shores (*Volusia*) 13 Feb (+M. Brothers).
- \*RAZORBILL: 1 moribund individual collected at Guana Tolomato Matanzas NERR - North Beach (*St. Johns*) 22 Feb (D. Reed), specimen to FLMNH.
- \*SABINE'S GULL: 1 first-winter at Sebastian Inlet SP (*Brevard/Indian River*) 23 Dec-27 Jan (+A. Chan, J. Eager, m. obs.).
- \*BLACK-HEADED GULL: 1 first-cycle at Daytona Beach Shores 18 Dec (+M. Brothers).
- FRANKLIN'S GULL: 1 first-cycle at Daytona Beach Shores 7 Dec and 2 Jan (+M. Brothers); 1 at St. Marks NWR 10 Dec (M. Smith); 1 first-cycle at Tomoka Landfill, Daytona Beach (*Volusia*) 14 Dec (M. Brothers); 1 second-cycle at Daytona Beach Shores 2 Jan-21 Feb (+M. Brothers et al.).
- RING-BILLED GULL: 1 banded adult at Playalinda Beach, Canaveral NS (*Brevard*) Dec 2016 was banded near Montreal, Quebec, and has been recorded at Playalinda each winter since it was banded in 2013 (B. Siculo *vide* Jean-François Giroux).
- \*"EUROPEAN" HERRING GULL: 1 first-cycle at Daytona Beach Shores 11 Jan (+M. Brothers; details to FOSRC).
- HERRING GULL x LESSER BLACK-BACKED GULL: 1 adult at Daytona Beach Shores 7 Dec (M. Brothers); 1 second-cycle at Daytona Beach Shores 21 Feb (M. Brothers).
- \*"VEGA" HERRING GULL: 1 adult at Daytona Beach Shores 23 Feb (+M. Brothers; details to FOSRC).
- HERRING GULL x GLAUCOUS GULL: 1 first-cycle "Nelson's Gull" at Daytona Beach Shores 23 Feb (+M. Brothers).
- \*THAYER'S GULL: 1 at Daytona Beach Shores 7 Dec, 21 Dec, and 27 Feb (M. Brothers et al.).
- ICELAND GULL: 1 at Flagler Beach (*Flagler*) 4 Feb (J. Giraulo et al.); single first-cycle birds at Ponce Inlet 13 and 14 Feb (M. Brothers).
- LESSER BLACK-BACKED GULL: 1 at Fort Island Gulf Beach (*Citrus*) 5 Jan (+M. Gardler, P. Bazany et al.); 1-2 at Fort Pickens 20 Jan-14 Feb (L. Goodman, A. Holzinger et al.).
- \*SLATY-BACKED GULL: 1 first-cycle at Daytona Beach Shores 23 Feb (+M. Brothers; details to FOSRC).
- GLAUCOUS GULL: 1 first-cycle at Daytona Beach Shores 7 Dec and 21, 23, and 27 Feb (+M. Brothers et al.); 1 at Pass-A-Grille Beach (*Pinellas*) 25 Jan-7 Feb (+S. Davis, E. Plage); 1 first-cycle at Ponce Inlet 14 Feb (M. Brothers); 1 at Guana Tolomato Matanzas NERR (*St. Johns*) 28 Feb (+D. Reed).
- GULL-BILLED TERN: 1 at Pine Island (*Hernando*) 28-29 Jan (+D. Love, A. Hansen, B. Hansen).
- COMMON TERN: 12 at John's Pass (*Pinellas*) 9 Dec (P. Plage); 1 at Newnans Lake 11 Dec-4 Jan (M. O'Sullivan et al.); 4 at Treasure Island Beach (*Pinellas*) 17 Dec (+B. Jenks, W. Meehan); 1 at Fred Howard Park 27 Dec (+R. Smith, J. Gibbons); 1 at Outback Key (*Pinellas*) 7 Feb (E. Plage); 178 at St. Vincent NWR (*Franklin*) 8 Feb (+J. Murphy).

- ROYAL TERN: 2 at Paynes Prairie Preserve SP 18 Dec (C. Bateman).
- RED-THROATED LOON: 19 at Alligator Point 22 Dec (J. Murphy).
- CORY'S SHEARWATER: 3 offshore Naples (*Collier*) 7 Dec (T. Marvel); 1 at South Pointe Pier (*Miami-Dade*) 11-18 Dec (C. Sanchez; m. obs.); 1 at Honeymoon Island SP 17 Jan provided the first winter *Pinellas* record (+E. Plage).
- AUDUBON'S SHEARWATER: 1 at Cape San Blas 24 Jan (+E. Thompson).
- MAGNIFICENT FRIGATEBIRD: 10 at Fort Pickens 4 Dec (W. Butler); 43 at St. Petersburg 17 Dec (*fide* R. Smith); up to 2 adult males at New Smyrna Beach (*Volusia*) 2 Feb (J. Kendall) and 6 Feb (M. Cain *fide* L. Malo); 3 females or immature over Halifax River, South Daytona Beach (*Volusia*) 7 Feb (M. Cain, K. Cain *fide* L. Malo); 1 at Fernandina Beach (*Nassau*) 21 Feb (B. Stambaugh).
- BROWN BOOBY: 1 at John U. Lloyd Beach SP, Dania (*Broward*) 12 Jan (J. Eager); up to 13 at upper Tampa Bay (*Pinellas*) thru 22 Feb (*fide* K. Rieker); 1 immature at Ponce de Leon Inlet 23 Feb (M. Brothers).
- \*NEOTROPIC CORMORANT: Up to 2 nesting adults at Wakodahatchee Wetlands (*Palm Beach*) 11 Dec-EOS (J. Eager, m. obs.); 1 at Topeekeegee Yugnee Park (*Broward*) 1 Dec-EOS (A. Schefflow, m. obs.).
- DOUBLE-CRESTED CORMORANT: 6 pairs were on nests at Lake Apopka NSRA (*Orange*) in Jan with a 7th pair joining them in Feb, a first for that location (H. Robinson), and only the second confirmed nesting location for that species in *Orange* (B. Anderson).
- ANHINGA: 1 at International Paper Wetlands 11 Jan-4 Feb (J. Callaway, B. Callaway); 1 at Pensacola 17 Dec (C. Brown, P. McCleod).
- \*GREAT WHITE PELICAN: 1 at J. N. Ding Darling NWR 29 Jan-1 Feb (J. Davis, +P. Huntington et al.).
- AMERICAN BITTERN: 1 at Ringhaver Park (*Duval*) 18 Dec (E. Gilley); 1 at Little Talbot Island SP (*Duval*) 24 Dec (+K. Dailey).
- REDDISH EGRET: 2 at Dog Island (*Franklin*) 3 Jan (E. Thompson, J. Murphy).
- WHITE-FACED IBIS: 1 at St. Marks NWR 28 Dec (M. Smith); 1 adult at Lake Apopka NSRA 24 Jan-9 Feb (H. Robinson, +P. Hueber, L. Mathis).
- TURKEY VULTURE: 450 migrating south ahead of a cold front in N *Escambia* 27 Feb (B. Duncan, L. Duncan).
- SWALLOW-TAILED KITE: 10 at Tate's Hell SF (*Franklin*) 21 Feb (P. Wharton); 1 at Ocala 26 Feb (D. Mickelson); 2 at Fort De Soto Park 27 Feb (P. Mundus); 3 at Archer (*Alachua*) 28 Feb (P. Sandlin).
- WHITE-TAILED KITE: 2 at Avon Park AFR (*Highlands*) 20 Dec (E. Angell); 1 at Kissimmee Prairie campground (*Okeechobee*) 2 Jan (J. Mileyka).
- SNAIL KITE: 2 female/juvenile on St. Johns River near Wekiva River (*Seminole*) 17 Dec (+M. Acken et al.); 1 female-plumaged at Lake Apopka NSRA 27 Feb (H. Robinson).
- BALD EAGLE: 28 on the Choctawhatchee CBC (*Okaloosa*) 19 Dec (*fide* B. Duncan).
- BROAD-WINGED HAWK: 1 adult at Fort De Soto Park 3 Jan-18 Feb (E. Plage); 1 immature at Sanibel Island (*Lee*) 1 Feb-EOS (D. Stokes, L. Stokes, +E. Warren); 1 adult at downtown St. Petersburg 25 Feb (+R. Smith); 1 light morph at Masaryktown (*Hernando*) 27 Feb (+D. Love).
- SHORT-TAILED HAWK: 1 dark morph at Walt Disney World (*Orange*) 14 Dec (J. Thomton); 1 light morph near Chuluota (*Seminole*) 26 Dec (B. Sicolo, C. Lahy) may have been same individual that was seen at Orlando Wetlands Park and Seminole Ranch WMA; 1 light morph at Orlando Wetlands Park and Seminole Ranch WMA throughout season (+P. Hueber, B. Anderson, m. obs.); 1 east of Brooksville 10 Jan (J. Mann, S. Mann); 1 dark morph at Lake Jackson Boat Ramp in Prairie Lakes Unit of Three Lakes WMA, Kenansville (*Osceola*) 27 Jan (J. Eager, B. Anderson et al.); 1 light morph at Lake Marian Paradise Marina, Kenansville (*Osceola*) 27 Jan (B. Anderson, J. Eager); 2 (one dark, one light) at Withlacoochee River southeast of Dunnellon near site where a pair attempted a nest in 2016 (J. Lewis).

- SWAINSON'S HAWK: 1 at the Okaloosa County STF 25 Feb (M. Swan); 1 at N *Escambia* 27 Feb (B. Duncan, L. Duncan).
- RED-TAILED HAWK: 1 "Krider's" at Brown's Farm Road (*Palm Beach*) 24 Dec (+S. Young); 1 second-year, rufous *B. j. albieticola* or *B. j. umbrinus* at North Duda Farms (*Palm Beach*) 2 Jan (+A. Lamoreaux); 1 "Krider's" at St. Marks NWR 10 Jan (J. Cavanagh).
- SHORT-EARED OWL: 1 being chased by Fish Crows at Fred Howard Park 13 Dec (+K. Spili-os, C. Nelson); 1 at Fort Island Gulf Beach 5 Jan (M. Gardler, P. Bazany et al.).
- RED-HEADED WOODPECKER: 1 juvenile at Palm Harbor (*Pinellas*) 29 Dec (C. Burkard).
- HAIRY WOODPECKER: 1 at Gold Head Branch SP (*Clay*) 16 Jan (J. Graham); 1 adult female, St. Sebastian River Preserve SP Yellow Trail, Fellsmere (*Brevard*) 27 Feb (J. Eager).
- PEREGRINE FALCON: 1 at Bystre Lake (*Hernando*) through 29 Jan (J. Mann et al.); 1 at Gainesville 18 Dec (R. Rowan et al.); 1 at Paynes Prairie Preserve SP 18 Dec-EOS (M. Smith, L. Davis et al.).
- LEAST FLYCATCHER: 1 at Paynes Prairie Preserve SP 18 Dec (S. Collins, J. Mays); 1 near Black Hammock Marina, Oviedo (*Seminole*) 26 Dec (P. Hueber, B. Anderson); 1 east of Lake Jesup Park (*Seminole*) 26 Dec (S. Simmons); 1 at Lake Apopka NSRA (*Orange*) 5 and 26 Jan (H. Robinson).
- VERMILION FLYCATCHER: 1 adult female at Lake Apopka NSRA from fall 2016-5 Dec (H. Robinson); 1 adult female on St. Johns River south of SR 46 bridge 26 Dec (D. Simpson et al.); up to 2 at Paynes Prairie Preserve SP throughout the season (L. Davis et al.); 1 at International Paper Wetlands 11 Dec-4 Feb (J. Callaway, B. Callaway); 1 adult male at Orlando/Apopka Airpark, Zellwood (*Orange*) 15 Dec (G. Quigley); 1 at St. Marks NWR 28 Dec (M. Smith); 1 at County Road 304 (*Flagler*) 7-15 Jan (M. Wilson).
- ASH-THROATED FLYCATCHER: 1 at Moccasin Island, River Lakes CA, Viera from fall 2016-EOS (m. obs.); up to 8 at Lake Apopka NSRA in Dec with at least 4 there in Jan and 2 in Feb (H. Robinson) including 2 at the Lust Gate entrance 27 Nov 2016-EOS (+P. Hueber, m. obs.); up to 3 at Paynes Prairie Preserve SP 5 Dec-28 Feb (M. Manetz, E. Scales et al.); 1 at the Okaloosa County STF 19-27 Dec (B. Duncan, L. Duncan, C. Brown, M. Swan, m. obs.); 1 at Minneola (*Lake*) 30 Dec (J. Thomton); 1 at Hastings (*St. Johns*) 22 Jan (J. Graham, C. Davis).
- \*LA SAGRA'S FLYCATCHER: 1 at Bill Baggs Cape Florida SP (*Miami-Dade*) 1 Dec (m. obs.).
- TROPICAL KINGBIRD: 1 at STA 2 (*Palm Beach*) 11 Dec-EOS (m. obs.); 1 at Gate 15 - Royal Palm, ENP (*Miami-Dade*) 2-19 Dec (K. Hamblett); 1 at Francis Taylor WMA (*Miami-Dade*) 1 Dec-EOS (m. obs.); 1 adult at STA 5, Clewiston (*Hendry*) 14 Jan (J. Eager).
- WESTERN KINGBIRD: 1 at Fort De Soto Park 1 Dec (+R. Smith); 2 at Gulf Breeze 4-7 Dec (B. Duncan, L. Duncan); 1 at Lakeside Marina (*Duval*) 22 Dec (B. Richter); 1 at Guana River WMA (*St. Johns*) 27 Dec (C. Elder, J. Wheat); 1 at Oldsmar (*Pinellas*) 8 Jan-11 Feb (B. Lane, +J. Clayton); 1 at Melbourne (*Brevard*) 18 Jan-EOS (m. obs.); 2 at Lake Apopka NSRA 6 Jan (+P. Hueber).
- GRAY KINGBIRD: 1 at Bunche Beach, Fort Myers 5 Dec (+D. Paulson); 1 adult at STA 5, Clewiston 14 Jan (J. Eager).
- SCISSOR-TAILED FLYCATCHER: 1 at Newberry (*Alachua*) 2 Dec-25 Jan (L. Holt, B. Stewman et al.); 1-2 at Fort De Soto Park 26 Dec-16 Jan (D. Clark, +M. Burns et al.); 1 female, Space Coast Regional Airport, Titusville (*Brevard*) 27 Dec-EOS (m. obs.); 1 adult at Fort De Soto Park 22-23 Feb (+P. Clark).
- LOGGERHEAD SHRIKE: 1 at St. George Island SP (*Franklin*) 11 Feb (R. Cassidy).
- \*THICK-BILLED VIREO: 1 at Bill Baggs Cape Florida SP 1 Dec-16 Feb (D. O'Malley, m. obs.).
- BELL'S VIREO: 1 at West Miramar Water Conservation Area (*Broward*) 1 Dec-EOS (K. Schneider).
- YELLOW-THROATED VIREO: 1 at Winter Springs (*Seminole*) 17 Dec (+B. Sicolo); 1 at Econlockhatchee River, Little Big Econ SF (*Seminole*) 25 Jan (C. Bethancourt *vide* L. Malo); 1 singing at John Chesnut Park (*Pinellas*) 23 Feb (+T. Mast).

- WARBLING VIREO: 1 at a South Miami residential area (*Miami-Dade*) 24 Dec-22 Jan (+J. Kaufman, m. obs.).
- HORNED LARK: 2 at Concord Rd, Bascom (*Jackson*) 12 Dec (+R. Geisler); 8 at Greenwood (*Jackson*) 7 Jan (K. Nelson).
- PURPLE MARTIN: 1 male at John Taylor Park (*Pinellas*) 5 Jan (+J. Clayton, S. Tavaglione); 1 at Gainesville 13 Jan (A. Kratter); 1 at Gulf Breeze 26 Jan (B. Duncan).
- NORTHERN ROUGH-WINGED SWALLOW: 4 at Lake Maggiore 17 Dec (I. Gibbons et al.); 1 at Safety Harbor (*Pinellas*) 25-27 Dec (+L. Roy); 2 at Tallahassee 19 Jan (R. Cassidy); 2 at Lake Seminole Park 10 Feb (S. Aversa); 1 at Lake Belleview 11 Feb (+T. Leukering); 4 at Taylor Park (*Pinellas*) 16 Feb (C. Gjervold); 6 at N St. Petersburg 22 Feb (R. Smith).
- BANK SWALLOW: 1 at Sweetwater Wetlands Park (*Alachua*) 23 Feb (S. Wade).
- BARN SWALLOW: 1 at Lake Apopka NSRA 5 Dec (H. Robinson); 1 at Okaloosa County STF 7 Dec (B. Purdy); 1 at Sand Key Park 27 Feb (*Pinellas*) (T. Young).
- RED-BREASTED NUTHATCH: 1 continued from 13 Nov at Boyd Hill Nature Preserve (*Pinellas*) 3-11 Dec (R. Smith et al.); 5 at Garcon Point 17 Dec (B. Duncan, L. Duncan, L. Goodman, L. Langston); 1 at Taylor Park 3 Jan-Feb 19 (S. Aversa, +J. Clayton, m. obs.); 2 at North Anclote River Nature Park (*Pinellas*) 11 Feb (+R. Smith et al.); 1 at Cary SF (*Duval*) 11 Feb (D. Foster); 1 at Guana Tolomato Matanzas NERR 14 Feb (C. Elder).
- BROWN CREEPER: 2 at Florida Caverns SP (*Jackson*) 12 Dec (R. Geisler).
- WINTER WREN: 1 at Tallahassee 1 Dec-28 Feb (F. Rutkovsky).
- RED-WHISKERED BULBUL: 6 adults at SW 85 St in Snapper Creek Park subdivision, Miami (*Miami-Dade*) 10 Dec (J. Eager).
- GOLDEN-CROWNED KINGLET: 1 at Lake Lotus Park, Altamonte Springs (*Seminole*) 2 Dec-12 Jan (+P. Hueber); 1 at Boca Ciega Millennium Park (*Pinellas*) 27-29 Dec (+T. Pipkin, J. Clayton); 1 at Gator Creek Reserve (*Polk*) 2 Jan (C. Fredricks); 11 at Greenwood 3 Jan (M. Miller, J. Murphy); up to 3 at Oakland Nature Preserve (*Orange*) 29 Jan-EOS (+P. Hueber, P. Meharg, m. obs.); 2 at Cary SF 19 Feb (K. Dailey, D. Foster).
- SWAINSON'S THRUSH: 1 at Alligator Point 11 Dec (+J. Murphy); 1 at Flamingo area of Everglades NP (*Monroe*) 27 Dec (A. Kearns).
- WOOD THRUSH: 1 continued at Big Talbot Island SP - Spoonbill Pond (*Duval*) from 27 Nov through 3 Dec (+S. Raduns); 1 at Wekiva River, Lower Wekiva River Preserve SP (*Seminole*) 10 Dec (L. Malo, C. Palmer).
- HILL MYNA: 1 at Circle B Bar Reserve (*Polk*) 16 Dec-15 Jan (C. Fredricks et al.).
- SCALY-BREASTED MUNIA: 70 at Pace (*Santa Rosa*) 6 Dec (D. Stangeland); 8 at W Pensacola 30 Dec (J. Lloyd); 20 at Big Lagoon SP (*Escambia*) 9 Jan (C. Tebay); 20 at W Pensacola 8 Jan (C. Coster); 11 at Gonzalez (*Escambia*) 19 Jan (P. Doggrell); 15 at E Gulf Breeze 28 Feb (T. Shultz).
- \*SPRAGUE'S PIPIT: 6 at Apalachicola airport (*Franklin*) 28 Dec (B. Kinzie, et al.).
- PURPLE FINCH: 1 at Carrabelle Beach 6 Dec (R. Cassidy); 1 at Alligator Point 11 Dec (J. Murphy); 3 at Tallahassee 12 Dec-28 Feb (F. Rutkovsky); 6 at Cantonment 6 Jan-16 Feb (J. Callaway, B. Callaway, J. Yuhasz).
- PINE SISKIN: 1 at Gainesville 23 Feb-EOS (S. Robinson).
- \*SMITH'S LONGSPUR: 1 at Flamingo (*Monroe*) 24 Dec (+M. Stickel) would provide the first state record pending FOSRC acceptance.
- LOUISIANA WATERTHRUSH: 1 at Lake Apopka NSRA 9 Dec (A. Horst); 1 at Dunedin Hammock Park (*Pinellas*) 28 Feb (J. Wells).
- NORTHERN WATERTHRUSH: Up to 7 at Lake Apopka NSRA in Jan (H. Robinson).
- BLUE-WINGED WARBLER: 1 male at Deering Estate (*Miami-Dade*) 19 Dec-EOS (Ra. Diaz).
- TENNESSEE WARBLER: 1 at Sawgrass Lake Park 12-17 Dec (+S. Tavaglione, m. obs.)
- NASHVILLE WARBLER: Up to 3 at Gainesville 5 Dec-EOS (G. Kent, A. Kent, B. Ewing, L. Davis et al.); 1 in Gulf Breeze 16 Jan-24 Feb (B. Duncan, L. Duncan); 1 at Bystre Lake 11 Feb (A. Lamoreaux, M. Mizak); 1 at Largo Nature Reserve 25 Feb (T. Leukering).



- HOODED WARBLER: 1 male at Kendalwood Park (*Miami-Dade*) 1 Dec-EOS (S. Paez, m. obs.); 1 male at Richardson Historic Park and Nature Preserve (*Broward*) 1 Dec-EOS (J. Eager, m. obs.).
- AMERICAN REDSTART: 1 at Highlands Hammock SP (*Highlands*) 2 Jan (B. Onley); 1 at CR 29 (*Highlands*) 30 Dec (S. Mills, D. Simpson).
- \*KIRTLAND'S WARBLER: 1 at Bill Baggs Cape Florida SP 11-16 Feb (C. Borre, m. obs.).
- CAPE MAY WARBLER: 1 at Nombre De Dios Grounds (*St. Johns*) 20-21 Dec (*fide* D. Reed et al.); 1 female at Sebastian 1 Jan (G. Harber); 1 male at Melbourne 16 Jan (R. Paxton).
- NORTHERN PARULA: 1 at Lonnie Wurn Boat Ramp (*Duval*) 26 Dec (C. Bailey-White); 1 in Odom's Mill (*St. Johns*) 29 Dec (*fide* K. Dailey); 1 at Westside Industrial Park (*Duval*) 2 Jan (*fide* K. Dailey); 1 at Fort Pickens 22 Jan (A. Holzinger).
- YELLOW WARBLER: 1 at Gulf Breeze 8-21 Dec (M. Brower, C. Brower); 1 male at Walt Disney World 16 Dec (D. Krikorian); 1 at Westside Industrial Park 8 Jan provided the first winter *Duval* record (+J. Graham); 1 on St. Johns River at C. S. Lee Park (*Seminole*) 27 Jan (G. Armistead et al. *fide* L. Malo).
- BLACK-THROATED BLUE WARBLER: 1 at Gainesville 2 Dec-EOS (E. Scales).
- YELLOW-RUMPED WARBLER: Up to 1,800 at Sheffield Regional Park (*Duval*) 8 Jan (K. Dailey).
- PRAIRIE WARBLER: 1 at Fort Pickens 14 Jan (A. Holzinger).
- \*BLACK-THROATED GRAY WARBLER: 1 male at Evergreen Cemetery, Ft. Lauderdale (*Broward*) 1 Dec-EOS (m. obs.).
- BLACK-THROATED GREEN WARBLER: 1-4 at Sawgrass Lake Park 6 Dec-19 Feb (J. Clayton, S. Tavaglione, m. obs.); 1 at Boca Ciega Millennium Park 10 Dec-4 Feb (R. Harrod, +R. Smith, S. Fears); 1 at Gainesville 12 Feb-EOS (A. Zions).
- WILSON'S WARBLER: 1 at Tallahassee 2 Dec-28 Feb (+F. Rutkovsky).
- YELLOW-BREASTED CHAT: 1 at Lake Apopka NSRA throughout the season (m. obs.); 1 at Tallahassee 14 Dec (G. Griffin).
- \*WESTERN SPINDALIS: 1 female at Bill Baggs Cape Florida SP 1 Dec-EOS (+Ro. Diaz, m. obs.); 1 notably different female at Bill Baggs Cape Florida SP 2-14 Dec (+N. Frade, m. obs.); 1 male "Bahamas Black-backed" at Deering Estate 1 Dec (Ra. Diaz); 1 female at Crandon Park 9 Jan-7 Feb (S. Runyon, m. obs.).
- \*BANANAQUIT: 1 adult at Richardson Historic Park and Nature Preserve 31 Dec-13 Feb (+M. Pearson, m. obs.).
- BACHMAN'S SPARROW: 1 at Gold Head Branch SP (*Clay*) 22 Jan (J. Graham).
- CLAY-COLORED SPARROW: 1 at Brooker Creek Preserve (first found 24 Nov 2016) was still present to 31 Dec (+T. Mast, m. obs.); 1 at Weedon Island Preserve (*Pinellas*) 17 Dec (+M. Burns); 1 at Paynes Prairie Preserve SP 18 Dec (D. Segal); 1 at Helen and Allan Cruickshank Sanctuary, Rockledge (*Brevard*) 19 Feb (+C. Ferro).
- FIELD SPARROW: 1 at Canal St., Oviedo (*Seminole*) 29 Dec-2 Jan (+K. Schmidt, P. Hueber).
- LARK SPARROW: 1 adult at Fort De Soto Park 7 Jan-27 Feb (T. Young, +W. Tallyn, m. obs.); 1 at N *Santa Rosa* 11 Jan (T. True).
- GRASSHOPPER SPARROW: 1 at Fort De Soto Park 27 Dec-20 Feb (+J. Mangold, R. Smith).
- HENSLOW'S SPARROW: 1 at Apalachicola National Forest (*Liberty*) 5 Dec (E. Orf).
- NELSON'S SPARROW: 1 *A. n. subvirgatus* at Big Talbot Island SP - Spoonbill Pond 11 Jan (K. Dailey).
- FOX SPARROW: Up to 5 at *Alachua* 8-30 Dec (M. Manetz, A. Kratter et al.); 1 at Blackwater River SF (*Santa Rosa*) 11 Dec (D. Stangland); 2 at Concord Road, Bascom 12 Dec (R. Geisler); 1 at the Okaloosa County STF 19 Dec (B. Duncan, L. Duncan, C. Brown); 1 at Cantonment (*Escambia*) 7 Jan-16 Feb (J. Yuhasz).
- SONG SPARROW: 1 at Possum Branch Preserve 2 Dec (+T. Mast); 1 at Lake Seminole Park 17 Dec (J. Fisher); 1 at Lake Belleview 10-20 Feb (+K. Duncan, m. obs.).
- LINCOLN'S SPARROW: Up to 7 at *Alachua* throughout the season (S. Wade, L. Davis et al.); 1 at Canal St., Oviedo 29 Nov-27 Feb (+S. Simmons, +S. Brown); 1 at Guana River WMA 13 Dec (D. Reed, C. Elder); 1 at Lake Apopka NSRA (*Lake*) 15 Dec (+G. Wil-

- liams, P. Hueber); at least 1 at Tosohatchee WMA 20 Dec (D. Simpson); 1 at Black Creek Ravines CA (*Clay*) 31 Dec (J. Graham, C. Davis) and there 12 Jan (S. Raduns).
- \*HARRIS'S SPARROW: 1 adult male east of Brooksville (*Hernando*) 4 Jan-EOS (+M. Gardler, m. obs.).
- WHITE-CROWNED SPARROW: 1 at St. Marks NWR 10 Jan (J. Cavanagh).
- DARK-EYED JUNCO: 1 at Gainesville 17 Jan-28 Feb (M. Manetz et al.); 1 near Dade City (*Pasco*) 27 Jan-EOS (H. Baal et al.).
- SUMMER TANAGER: 1 male Lake Apopka NSRA 15 Dec (+E. Horn, S. Simmons); 1 female at Merritt Island NWR 19 Dec (D. Simpson); 1 at Pensacola 19 Dec (J. Cobb); 1 at Penney Farms (*Clay*) 28 Dec (*vide* K. Dailey); 1 at W Pensacola 3 Jan-24 Feb (J. Lloyd); 1 at W Pensacola 8 Jan (C. Coster); 1 male at Sawgrass Lake Park 14 Jan-18 Feb (+S. Fears, M. Casey); 1 at W Pensacola 19 Feb (C. Hevshohn).
- WESTERN TANAGER: 2 at a private residence in Mandarin (*Duval*) 11 Dec-18 Feb (*vide* K. Dailey); 1 female at Lake Apopka NSRA 10 and 17 Jan (H. Robinson); 1 at Gulf Breeze 3-5 Jan (B. Duncan); 1 at Fort Walton Beach (*Okaloosa*) 18 Jan (K. Jones); 1 female at Cedar Key 26 Jan-25 Feb (D. Henderson); 1 at Richardson Historic Park and Nature Preserve 13 Feb (+P. Hueber, L. Mathis, m. obs.).
- ROSE-BREASTED GROSBEAK: 1 at Cantonment 2 Dec (J. Callaway, B. Callaway); up to 4 at Gainesville 3 Dec-EOS (E. Martin, K. Brown, A. Kratter, B. Palmer); 1 at Telegraph Creek Preserve (*Lee*) 4 Dec (+R. Kaskan); 1 at Gulf Breeze 10 Dec (D. Timmons); 1 male at Fort Myers (*Lee*) 24 Dec-EOS (D. McQuade, T. McQuade).
- BLUE GROSBEAK: 1 at Gulf Breeze 9 Dec (R. Ludlow); 1 at Canal St., Oviedo 1 Jan (+K. Schmidt); 1 at Lake Apopka NSRA 10 Jan (H. Robinson); 1 at Fort Pickens 19 Feb (P. Doggrell).
- INDIGO BUNTING: 1 at Gulf Breeze 3-8 Dec (B. Duncan, L. Duncan); 1 male at N St. Petersburg 25-29 Jan (J. Clayton); 1 at Largo Nature Preserve 24 Jan (S. Aversa); 1 male at Boyd Hill Nature Preserve 28 Jan (P. Waton).
- PAINTED BUNTING: 3 at Ormond Beach throughout the season (M. Wilson); 1 female at Sawgrass Lake Park 7 Dec (S. Tavaglione, J. Clayton); 2-3 at Boyd Hill NP 17 Dec-28 Jan (R. Smith, J. Gibbons, +P. Waton); 1 at Apalachicola (*Franklin*) 28 Dec (S. Jones, et al.); 3 at an E Clearwater yard 1 Jan (R. Lane); 1 female at Fort De Soto Park 1 Jan (T. Leukering); 2 at Eagle Lake Park (*Pinellas*) 5 Jan (S. Tavaglione, +J. Clayton); 1 female at a Palm Harbor yard feeder 9 Jan (J. Wells); 1 female at a backyard feeder at Bardmoor (*Pinellas*) 16 Jan (W. Scott); 1-3 at Possum Branch Preserve (*Pinellas*) 15-21 Jan (K. Duncan, +J. Clayton et al.); 1 female at Sand Key Park 6 Feb (+K. Duncan); 2 at Largo Nature Reserve 5 Jan-25 Feb (+J. Clayton, S. Tavaglione); up to 16 individuals reported at various locations throughout *Pinellas* 1 Dec-EOS (*vide* R. Smith).
- DICKCISSEL: 1 SE of Brooksville 4 Dec (S. Spenceley); 1 at Paynes Prairie Preserve SP 10 Dec-4 Feb (A. Zions et al.).
- EASTERN MEADOWLARK: 8 at Brooker Creek Preserve 31 Dec (E. Plage et al.).
- YELLOW-HEADED BLACKBIRD: 1 male in Ibis Cove, Fleming Island (*Clay*) 5 Dec (S. Raduns); 80 at Sem-Chi Rice Plant (*Palm Beach*) 2 Jan (+A. Lamoreaux).
- RUSTY BLACKBIRD: Up to 5 at Sheffield Regional Park 10-18 Dec (S. Raduns, m. obs.); singles at Lake Jesup CA, Marl Bed Flats Tract 16 (G. Williams) and 26 (S. Collins) Dec and 3 Jan (+S. Simmons); up to 74 at Gainesville 18 Dec-EOS (D. Richard, L. Davis et al.); 90 at International Paper Wetlands 30 Dec (J. Callaway, B. Callaway).
- BREWER'S BLACKBIRD: 1 female at Bayport (*Hernando*) throughout season (J. McKay et al.).
- BOAT-TAILED GRACKLE: 11 at Floridatown (*Santa Rosa*) 24 Dec (D. Stangeland) and 37 there 14 Jan (B. Duncan, L. Duncan); 1 *westoni* at Huguenot Memorial Park 5 Feb (+K. Dailey).
- ORCHARD ORIOLE: 1 adult male at Gemini Springs SP (*Seminole*) 17 Dec (G. Bretz, S. Simmons).

BALTIMORE ORIOLE: 1 at Weedon Island Preserve 17 Dec (+J. Swenfurth); up to 14 SE of Brooksville 17 Dec-21 Jan (D. Grimes, C. Cock).

#### LITERATURE CITED

- STEFANOVA, L., D. BROUILLETTE, AND D. ZIERDEN. 2016. CLIMATE SUMMARY FOR FLORIDA – DECEMBER 2016. FLORIDA CLIMATE CENTER, FLORIDA STATE UNIVERSITY, TALLAHASSEE.
- STEFANOVA, L., D. BROUILLETTE, AND D. ZIERDEN. 2017A. CLIMATE SUMMARY FOR FLORIDA – JANUARY 2017. FLORIDA CLIMATE CENTER, FLORIDA STATE UNIVERSITY, TALLAHASSEE.
- STEFANOVA, L., D. BROUILLETTE, AND D. ZIERDEN. 2017B. CLIMATE SUMMARY FOR FLORIDA – FEBRUARY 2017. FLORIDA CLIMATE CENTER. FLORIDA STATE UNIVERSITY, TALLAHASSEE.

#### ACKNOWLEDGMENTS

This report is dedicated to Murray Gardler who passed away 6 April 2017. Murray was a long-time member of the FOS who not only volunteered his time serving various roles over the years, but also contributed countless observations to these seasonal reports. Murray found and reported the Harris's Sparrow included in this report; that bird caused a stir and was enjoyed by dozens of people.

**Contributors:** Mary Acken, Barbara Almario, Bruce Anderson, Emily Angell, George Armistead, Miriam Avello, Steve Aversa, Harold Baal, Carol Bailey-White, Juanita Baker, Fred Bassett, Craig Bateman, Pat Bazany, Mark Berney, Carlos Bethancourt, Amber Bobbitt, Tamar Boorstin, Cara Borre, Greg Bretz, Cathy Brower, Michael Brower, Cecil Brown, Karen Brown, Sherri Brown, Matt Bruce, Carol Burkhard, Mark Burns, Will Butler, Kirra Cain, Melanie Cain, Brenda Callaway, Jerry Callaway, Meeghan Casey, Rodney Cassidy, Jim Cavanaugh, Avery Chan, David Clark, Peter Clark, JoAnna Clayton, Bruce Cochrane, Chris Cock, Steve Collins, Cindy Coster, Charles Crawford, Kevin Dailey, Candice Davis, Judy Davis, Lloyd Davis, Steve Davis, Gigi DelPizzo, Rangel Diaz, Robin Diaz, Jim Dinsmore, Perry Doggrell, Bob Duncan, Lucy Duncan, Jim Eager, Barbara Eells, Cynthia Elder, Charlie Ewell, Ben Ewing, Dean Ewing, Sam Ewing, Susan Fears, Linda Felker, Christopher Ferro, Judy Fisher, Lauren Flesher, David Foster, Noah Frade, Cole Fredricks, Bruce Furlow, David Gagne, Murray Gardler, Reinhard Geisler, Ivy Gibbons, John Gibbons, Earline Gilley, Jason Giraulo, Colin Gjervold, Larry Goodman, David Goodwin, Jeffrey Graham, Jessica Greer, Gary Griffin, Debbie Grimes, Karen Hamblett, Erik Haney, Al Hansen, Bev Hansen, Greg Harber, Randy Harrod, Dale Henderson, Carol Heushohn, Dianne Hewitt, Fred Hillman, Linda Holt, Andrew Holzinger, Earl Horn, Alice Horst, Paul Hueber, Jim Hughes, Polly Huntington, Bonnie Jenks, Kelly Jones, Steve Jones, Smith Juan, Richard Kaskan, Jeanne Kaufman, Amy Kearns, Kay Keigley, Les Kelly, John Kendall, Adam Kent, Gina Kent, Barry Kinzie, Alan Knothe, Andy Kratter, David Krikorian, David Kulp, B. J. Ladd, Alex Lamoreaux, Bob Lane, Denise Lane, Liz Langston, Patrick Leary, Tom Ledford, Tony Leukering, Joyce Lewis, Jan Lloyd, Darcy Love, Robert Ludlow, Lorne Malo, Mike Manetz, Larry Manfredi, John Mangold, Jane Mann, Steve Mann, Len Manning, Elizabeth Martin, John Martin, Tom Marvel, Tom Mast, Lori Mathis, Jonathan Mays, Jim McKay, Shelby McLemar, Powers McLeod, Susan McMarlin, David McQuade, Tammy McQuade, Wendy Meehan, Pam Meharg, Richard Merrigan, Deena Mickelson, Joseph Miley, Diana Miller, Mike Miller, Susan Mills, Mark Mizak, Rosi Mullholland, Patrick Mundus, John Murphy, David Muth, Charlene Nelson, Kris Nelson, Tom Olkowski, Dan O'Malley, Brooks Onley, Earl Orf, Matt O'Sullivan, Stephen Paez, Bob Palmer, Carol Palmer, Dennis Paulson, Robert Paxton, Meghan Pearson, Mitchell Petosky, Tal Pipkin, Eric Plage, Pete Plage, Bruce Purdy, Gallus Quigley, Steve Raduns, Diane Reed, Doug Richard, Bob Richter,

Kenneth Rieker, Janna Rinehart, Dottie Robbins, Harry Robinson, Scott Robinson, Rex Rowan, Louise Roy, Shane Runyon, Fran Rutkovsky, Carlos Sanchez, Phil Sandlin, Lillian Saul, Earl Scales, Jr., Allison Schefflow, Ken Schmidt, Ken Schneider, William Scott, Debbie Segal, David Sherer, Thomas Shultz, Bob Sicolo, Scott Simmons, David Simpson, Marvin Smith, Ron Smith, Steve Spenceley, Ken Spilios, Pete Stafford, Scott Stafford, Bruce Stambaugh, Daniel Stangeland, Barbara Stewman, Monte Stickel, Pan Stine, Don Stokes, Lillian Stokes, Joe Stuckey, Malcolm Swan, John Swenfurth, Wes Tallyn, Sue Tavaglione, Carol Tebay, Ezra Thompson, Dana Timmons, John Thomson, Tom True, Duke Tufty, Sidney Wade, Eary Warren, Doug Wassmer, Paul Waton, Ray Webb, Marsha Weeks, Jim Wells, Paul Wharton, James Wheat, Graham Williams, Meret Wilson, Rebecca Windsor, Danny Young, Sue Young, Travis Young, John Yuhasz, Adam Zions, Steve Zoellner.

Report prepared by **Kevin E. Dailey**, state compiler (6661 Beatrix Drive, Jacksonville, Florida 32226, <kedailey@yahoo.com>). Regional compilers are **Bruce H. Anderson** (2917 Scarlet Road, Winter Park, Florida 32792, <scizortail@aol.com>), **Robin Diaz** (200 Ocean Lane Drive #PB-1, Key Biscayne, Florida 33149, <rd4birds@bellsouth.net>), **Bob and Lucy Duncan** (614 Fairpoint Drive, Gulf Breeze, Florida 32561, <Town\_Point@bellsouth.net>), **Charlie Ewell** (115 SW 51st Terrace, Cape Coral, Florida 33991, <anhinga42@comcast.net>), **Bev Hansen** (6573 Pine Meadows Drive, Spring Hill, Florida 34606, <bevalhansen@gmail.com>), **John Murphy** (766 Alligator Drive, Alligator Point, Florida 32346, <southmoonunder@mchsi.com>), **David Sherer** (123 Main Drive, Venus, FL 33960, <dlsherer@gmail.com>), and **Ron Smith** (1500 85th Avenue North, St. Petersburg, Florida 33702, <rsmithbirds@gmail.com>).

## **OUR FOS FIELD OBSERVATIONS COMMITTEE NEEDS YOUR SKILLS**

The FOS Field Observations Committee seeks volunteers interested in joining the committee as regional compilers for counties that are currently uncovered. The first region would include *Suwannee*, *Columbia*, *Gilchrist*, *Union*, and *Bradford* counties. A second region could be covered by one or several interested individuals: *Polk*, *Osceola*, *Hardee*, *De Soto*, *Glades*, and *Okeechobee* counties. Responsibilities would include soliciting and compiling notable field observations for these counties at the end of each season. Interested individuals should contact the state compiler listed at the end of the Field Observations report in this issue.

## BE A FRIEND OF FFN

*Florida Field Naturalist* is the journal of FOS, an important communication vehicle for the Florida scientific and birding community. Increasing costs need to be offset with a combination of member dues and contributions.

Please consider a donation of \$50, \$100, \$200 or more to FRIENDS OF FFN. Your gift will allow FFN to improve its artwork, including four-color photographs of rarities similar to the one of the state's first Varied Bunting, published in the February 2006 issue, and other improvements in the content and appearance of our journal.

Contributions to FRIENDS OF FFN will be added to a special endowment of FOS, the interest of which will be used to improve the journal. Please write a check payable to the Florida Ornithological Society and specify that the gift is for FOS Friends of FFN. Send your check to the Treasurer: Charles H. Fisher, Jr., c/o Reilly, Fisher & Solomon PA, 4950 W. Kennedy Blvd., Ste. 610, Tampa, FL 33609. Email: chf1shercpa@hotmail.com

We thank the following generous donors for contributing to FRIENDS OF FFN:

### 2013

Silvio Crespo, Jr.  
Larry Hribar  
Mary Landsman  
John Murphy  
Robin Diaz  
Andrew Kratter  
Robert & Lucy Duncan  
Michael Brothers  
James E. Cavanagh, Jr.  
Robert Budliger  
Tim Towles  
Nancy Prine

### 2014

Stephen Gross  
William Courser  
David Hartgrove  
John Murphy  
Robin Diaz

Larry Hribar  
Wilfred Yusek  
Silvio Crespo, Jr.  
James E. Cavanagh, Jr.  
Kevin & Marie Dailey  
St Johns River WMD  
(In Memory of Judy Bryan)  
Richard L. West  
Billi Wagner  
William Post  
John L. Wuepper  
Michael Brothers  
Wade Nolan  
Ann Paul  
Anthony White  
Stuart R. Wilson  
James E. Cavanagh, Jr.  
Silvio Crespo, Jr.  
Kevin & Marie Dailey  
Robin Diaz

Todd Engstrom  
 David Hartgrove  
 Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2015**

James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Hartgrove  
 Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2016**

Michael Brothers  
 James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Bob & Lucy Duncan  
 Todd Engstrom  
 David Goodwin

David Hartgrove  
 Earl & Dorothy Horn  
 Barbara C. Kittleson  
 John Michael Murphy  
 Stephen Nesbitt  
 Will Post  
 Nancy A. Prine  
 Raymond G. Scory  
 Paul Sykes

**2017**

Michael Brothers  
 James E. Cavanagh, Jr.  
 Silvio Crespo  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Goodwin  
 David Hartgrove  
 Earl & Dorothy Horn  
 Fred & Charlotte Lohrer  
 Travis & Karen MacClendon  
 Dennis Meritt  
 John Michael Murphy  
 Ann Paul  
 Will Post  
 Walter K. Taylor

**SPECIAL PUBLICATIONS OF THE  
FLORIDA ORNITHOLOGICAL SOCIETY**

- M. C. BOWMAN. 1978. **Species Index to Florida Bird Records in *Audubon Field Notes* and *American Birds*, Volumes 1-30, 1947-1967.** Florida Ornithological Society Special Publication No. 1. xii + 43 pages. \$4.
- J. A. COX. 1987. **Status and Distribution of the Florida Scrub Jay.** Florida Ornithological Society Special Publication No. 3. vii + 110 pages. \$8.
- R. W. LOFTIN, G. E. WOOLFENDEN, AND J. A. WOOLFENDEN. 1991. **Florida Bird Records in *American Birds* and *Audubon Field Notes* (1947-1989): Species Index and County Gazetteer.** Florida Ornithological Society Special Publication No. 4. xiv + 99 pages. \$8.
- R. W. LOFTIN. 1991. **West Indian Bird Records in *American Birds* and *Audubon Field Notes* (1947-1990): Species Index by Islands.** Florida Ornithological Society Special Publication No. 5. ix + 90 pages. \$8.
- W. B. ROBERTSON, JR. AND G. E. WOOLFENDEN. 1992. **Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 6. ix + 260 pages. FOS members: \$15 soft cover, \$20 hard cover; Non-members: \$18 soft cover, \$23 hard cover.
- G. E. WOOLFENDEN, W. B. ROBERTSON, JR., AND J. COX. 2006. **The Breeding Birds of Florida.** Florida Ornithological Society Special Publication No. 7. ii + 142 pages. \$12.
- J. S. GREENLAW, B. PRANTY, AND R. BOWMAN. 2014. **The Robertson and Woolfenden Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 8. viii + 435 pages. \$24.

**To order Special Publications:** Please send a check payable to the *Florida Ornithological Society* to the Treasurer:

**Charles H. Fisher, Jr.**  
**c/o Reilly, Fisher & Solomon PA**  
**4950 W. Kennedy Blvd., Ste. 610**  
**Tampa, FL 33609**  
**E-mail: chf1shercpa@hotmail.com**

For Special Publication Number 8 only, there is a flat price of \$24, which *includes* tax and shipping.

For all other Special Publications, your check should include the price given in the list above plus tax and shipping as determined here:

**Shipping:** Add \$2 shipping for 1-5 copies; \$4 for 6-10 copies.

**Sales Tax:** Florida residents add the sales tax for the county in which the Special Publications will be delivered. Calculate the sales tax based on the total cost of the special publications plus shipping.



# Florida Field Naturalist

ISSN 0738-999X

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

**Editor:** SCOTT ROBINSON, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

**Managing/Copy Editor:** TOM WEBBER, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. Email: twebber@flmnh.ufl.edu

**ASSOCIATE EDITOR (FOR BIRD DISTRIBUTION):** BRUCE ANDERSON, 2917 SCARLET ROAD, WINTER PARK, FL 32792. EMAIL: scizortail@aol.com

## INFORMATION FOR CONTRIBUTORS

*Florida Field Naturalist* is a refereed journal emphasizing biological field studies and observations of vertebrates, especially birds, in or 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/content/ffn-article-submission-guidelines>) for style, noting especially that manuscripts should:

- (1) be double-spaced throughout, including table- and figure captions;
- (2) include the scientific name at the first mention of each species;
- (3) include capitalized standard English names for all birds, but lower case for English names of other organisms;
- (4) use 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) use active voice where at all possible.

Submit manuscripts, and books for review, to the Editor, Scott Robinson. Field observations should be sent to a regional compiler of the Field Observations Committee (see Field Observations, this issue, and <http://www.fosbirds.org/content/submit-observation>). Reports of birds for which the FOS Records Committee requires documentation (see <http://fosbirds.org/content/records-committee>) should be sent to the Secretary of the Committee, Andrew W. Kratter, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800; Email: kratter@flmnh.ufl.edu.

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 3

SEPTEMBER 2017

PAGES 71-102

---

## CONTENTS

### ARTICLES

- First verified breeding record of the Ruddy Duck (*Oxyura jamaicensis*)  
in Florida  
*Lorraine Margeson* ..... 71-78
- Recent occurrences of unusually plumaged kingbirds (*Tyrannus*) in  
Florida: Hybrids or little-noticed natural variants?  
*Stu Wilson* ..... 79-86

### FIELD OBSERVATIONS

- Winter Report: December 2016-February 2017  
*Kevin E. Dailey* ..... 87-98

### ANNOUNCEMENTS

- Our Field Observations Committee needs your skills. .... 99
- Friends of FFN. .... 100-101
- FOS Special Publications ..... 102

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 4

NOVEMBER 2017

PAGES 103-125

---



# FLORIDA ORNITHOLOGICAL SOCIETY

FOUNDED 1972

## OFFICERS

**PRESIDENT:** ADAM KENT, 222 SE 12th Street, Gainesville, FL 32641. Email: kestrelkent@yahoo.com

**VICE PRESIDENT:** ANN PAUL, 11586 W Bayshore Drive, Crystal River, FL 34429. Email: apaul@audubon.org

**SECRETARY:** COLE FREDRICKS, 325 Ruby Lake Loop, Winter Haven, FL 33884. Email: cfredricks@tampabay.rr.com

**TREASURER:** CHARLES H. FISHER, Jr., 4806 W Beach Park Drive, Tampa, FL 33609. Email: chflshercpa@hotmail.com

**EDITOR, FLORIDA FIELD NATURALIST:** SCOTT ROBINSON, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

### Directors, Serving Until Spring 2018

TODD ENGSTROM, 309 Carr Lane, Tallahassee, FL 32312. Email: engstrom@bio.fsu.edu

WHITNEY GRAY, 620 S Meridian Street, Tallahassee, FL 32399. Email: whitney.gray@myFWC.com

ERIN RAGHEB, 1105 SW Williston Road, Gainesville, FL 32601. Email: erin.ragheb@myFWC.com

### Directors, Serving Until Spring 2019

JIM EAGER, 350 Fillmore Avenue, Apt. F-18, Cape Canaveral, FL 32920. Email: beachbirder@bellsouth.net

GRAHAM WILLIAMS, 530 Rosedale Avenue, Longwood, FL 32750. Email: grahamevanwilliams@gmail.com

### Directors, Serving Until Spring 2020

CHRISTOPHER FERRO, 2607 Pepper Avenue, Melbourne, FL 32935. Email: lonelybirder43@gmail.com

DAN O'MALLEY, FWC, 8535 Northlake Boulevard, West Palm Beach, FL 33412. Email: Dan.Omalley@myFWC.com

### Honorary Members

SAMUEL A. GRIMES 1979; HELEN G. CRUICKSHANK 1980; OLIVER L. AUSTIN, JR. 1982  
PIERCE BRODKORB 1982; WILLIAM B. ROBERTSON, JR. 1992; GLEN E. WOOLFENDEN 1994  
TED BELOW 1999; FRED E. LOHRER 2009

All persons interested in Florida's natural history, especially its abundant bird life, are invited to join the Florida Ornithological Society by writing to the Treasurer. Annual membership dues are \$25 for individual members, \$30 for a family membership, \$15 for students, \$45 for contributing members, and \$40 for institutional membership; add \$5 for overseas delivery. One-time contributions for life membership are \$400 for individuals and \$500 for families. All members receive *Florida Field Naturalist*.

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.

*Florida Field Naturalist* is published quarterly (March, 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, 1659 Newell Dr., University of Florida, Gainesville, FL 32611. The Florida Ornithological Society web site is at [www.fosbirds.org](http://www.fosbirds.org)

---

THIS PUBLICATION IS PRINTED ON NEUTRAL PH PAPER

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 4

NOVEMBER 2017

PAGES 103-125

---

Florida Field Naturalist 45(4):103-109, 2017.

## ELEVEN RECENT ADDITIONS TO THE EXOTIC AVIFAUNA OF FLORIDA

BILL PRANTY<sup>1</sup> AND VALERI PONZO<sup>2</sup>

<sup>1</sup>8515 Village Mill Row, Bayonet Point, Florida 34667

*Email: billpranty@hotmail.com*

<sup>2</sup>725 Center Road, Sarasota, Florida 34240

*Email: anibirdbrain@gmail.com*

Greenlaw et al. (2014) list 161 species of birds of exotic or unknown provenance that had been recorded in Florida via photographic and/or specimen evidence through June 2013. Between July 2013 and December 2016, 11 new exotic species have been documented in the state. Here, we provide details on these new species. BPA data refer to files in the Bill Pranty Archive, Pranty's collection of ornithologically significant photographs and video-recordings.

**Common Emu** (*Dromaius novaehollandiae*): one found free-roaming near Fruitville Road and Interstate 75 in the Deer Hollow area of Sarasota, Sarasota County, 23 October 2013, was featured in an article in a local newspaper (Anonymous 2013; BPA 6110–d, photographer uncredited). The emu was captured and taken into captivity by Sarasota County Animal Services; we do not know its final disposition. There is one previous report of the species in Florida but no previous record (Greenlaw et al. 2014). Common Emu is endemic to Australia.

**Magpie Goose** (*Anseranas semipalmata*): two unbanded adults in the Edgewater area, Volusia County, in July-August 2014 (BPA 8542a–c, M. Brothers, 15 July 2014; BPA 8543, B. Pranty, 19 July 2014, Fig. 1) were featured in an article in a local newspaper (Pulver 2014; BPA 8544a–c, photographs by J. Tiller). The geese frequented the Hacienda del Rio retirement community in Edgewater, where



**Figure 1. Two Magpie Geese (*Anseranas semipalmata*) at the Hacienda del Rio retirement community, Edgewater, Volusia County, Florida, 19 July 2014. Photograph by Bill Pranty.**

one of the geese, tamer than the other, often joined residents in the community swimming pool! On 19 July, BP transcribed the vocalization as a high-pitched, quiet *hoot*. Presumably it was these same two individuals who were photographed on the New Smyrna River off Edgewater, 22 July 2014 (BPA 8982, E. Atkins), where they landed on a boat and rode it to shore. The geese were so tame that they were picked up by hand and moved off the boat (E. Atkins in litt.). Due to fears from some Hacienda del Rio residents about catching a disease from the geese, the tame goose reportedly was captured by an employee of the retirement community and transported to Merritt Island National Wildlife Refuge, where it was then (illegally!) released. However, the goose had returned to Hacienda del Rio the following day, after presumably having flown from the refuge. The non-tame goose eventually disappeared (E. Gudalewicz in litt.) and the remaining, tame goose was captured and was placed in captivity at East Coast Wildlife Rehabilitation Center at Port Orange; we do not know its final disposition. This was the first report and record of the species in Florida (Greenlaw et al. 2014). Magpie Goose is native to New Guinea and Australia.

**Blue-winged Goose (*Cyanochen cyanoptera*):** one tame, unbanded adult was discovered in early 2012 in a residential area at Stuart, Martin County (BPA 8959a–d, L. Wishney, 8 January 2015; BPA 8946a–d, B. Pranty, Fig. 2, 16 April 2015; P. Procko in litt.). The goose



**Figure 2.** Blue-winged Goose (*Cyanochen cyanoptera*) at Stuart, Martin County, Florida, 16 April 2015. Photograph by Bill Pranty.

was pinioned, with the distal end of its right wing missing (BP and VP pers. obs.). It survived at least through August 2016 (P. Procko in litt.). This is the first report and record of the species in Florida (Greenlaw et al. 2014). Blue-winged Goose is endemic to Ethiopia.

**California Quail** (*Callipepla californica*): one male photographed at Loxahatchee, Palm Beach County, 28 February 2015 (BPA 8751, L. Leon) was not seen again. This was the first report and record of the species in Florida (Greenlaw et al. 2014). California Quail is native from southwestern British Columbia and Utah south to Baja California.

**Great White Pelican** (*Pelecanus onocrotalus*): one unbanded individual was photographed among a flock of American White Pelicans (*P. occidentalis*) along the wildlife drive at J. N. “Ding” Darling National Wildlife Refuge, Sanibel Island, Lee County, Florida, 28 February-1 March 2016 (BPA 8980a-i, T. McQuade, 28 February 2016; BPA 8981a-c, B. Hill, 1 March 2016); presumably this same individual reportedly was observed at the refuge on 1 February 2017 (eBird data). There is one previous report of the species in Florida but no previous record (Greenlaw et al. 2014). Great White Pelican breeds locally in southwestern Asia and much of Africa. Northern populations migrate to winter farther south.

Although the Florida Ornithological Society Records Committee is reviewing this record (A. W. Kratter in litt.) as a potential natural vagrant based on vagrancy to Europe (Jigeut et al. 2008), we consider this individual to be an escapee from a private collection. The record of an unbanded Pink-backed Pelican (*P. rufescens*) photographed at Marco Island, Collier County, Florida, 29 December 2001—an individual presumed to have wandered from its private “owner” at Fort Lauderdale, Broward County, Florida (Bowman 2004, Greenlaw et al. 2014)—perhaps is instructive.

***Onychognathus* species:** one individual, either a **Red-winged Starling** (*O. morio*) or a **Tristram’s Starling** (*O. tristramii*), was photographed at Brickell Key, Miami, Miami-Dade County, 8 June 2014 (BPA 8801a–b, L. Siqueira). The images are of low resolution (taken with a cell phone camera) and the specific identification cannot be made with certainty. There is one previous report of Red-winged Starling in Florida but no previous report of Tristram’s Starling (Greenlaw et al. 2014). Red-winged Starling is resident in central and southern Africa, while Tristram’s Starling is endemic to the Sinai and Arabian peninsulas.

**Silver-beaked Tanager** (*Ramphocelus carbo*): one unbanded male at Boyd Hill Nature Preserve, St. Petersburg, Pinellas County,



Figure 3. Silver-beaked Tanager (*Ramphocelus carbo*) at Boyd Hill Nature Preserve, St. Petersburg, Pinellas County, Florida, 30 August 2015. Photograph by Valeri Ponzio.



29-30 August 2015, discovered by JoAnna Clayton, was seen by dozens of observers, including both of us (BPA 8976a–b, 30 August 2015, V. Ponzo, Fig. 3). The tanager was very vocal, uttering a single, sharp, metallic *whit!* call; several calls were captured in a video recording (BPA 8975, 30 August 2015, B. Pranty). Although it usually remained hidden in thick vegetation, the tanager flew toward us, perched conspicuously, and called repeatedly when we played back the recording of its own calls. The tanager fed on fruits of firebush (*Hamelia patens*) and beautyberry (*Callicarpa americana*; BP and VP pers. obs.) and once captured and swallowed a dragonfly (E. Plage in litt.). This was the first report and record of the species in Florida (Greenlaw et al. 2014). Silver-beaked Tanager is resident over much of the northern half of South America.

**Gouldian Finch** (*Erythrura gouldiae*): one avicultural morph (having green upperparts, a white breast, and a yellow belly) was found ill or injured at Port St. Lucie, St. Lucie County, 14 May 2013. Taken to Treasure Coast Wildlife Hospital, the bird succumbed and its carcass was donated to the Florida Museum of Natural History (UF 50182, specimen; BPA 7932a–b, A. W. Kratter, are photographs of the specimen). There is one previous report of the species in Florida but no previous record (Greenlaw et al. 2014). Gouldian Finch is endemic to northern Australia.

**Saffron Finch** (*Sicalis flaveola*): singles have been found at four locations recently, at St. Petersburg, Pinellas County, 26 April 2015 (BPA 8905a–b, M. Burns) and 7 February 2016 (BPA 8977a–c, R. Smith); at Fort De Soto Park, Pinellas County, 20 April 2016 (BPA 8978a–b, J. Clayton); and at Kissimmee Lakefront Park, Osceola County, 6 August 2016 (BPA 8979a–c, B. Lupa). There are three previous reports of the species in Florida but no previous record (Greenlaw et al. 2014). Saffron Finch is native to the northern half of South America; an exotic population is found in Jamaica.

**Black-rumped Waxbill** (*Estrilda troglodytes*): one was photographed at Leffis Key Preserve, Manatee County, 26–29 August 2013 (BPA 6147a–c, S. Wilson, 29 August 2013). This is the first report and record of the species in Florida (Greenlaw et al. 2014). Black-rumped Waxbill is native to sub-Saharan Africa; exotic populations are breeding in Puerto Rico and Guadeloupe.

**Red-collared Widowbird** (*Euplectes ardens*): one male in alternate plumage was found dead along SW 187th Street, Miami, Miami-Dade County, 2 December 2015 (BPA 8974, R. Goldenstar). The carcass was supposed to be donated to the Florida Museum of Natural History but it never arrived (A. W. Kratter in litt.). There is one previous report of the species in Florida but no previous record

**Table 1. Continent(s) of origin of birds of exotic and unknown provenance that have been recorded in Florida ( $n = 171$  species). Percentages exceed 100% because some species are native to more than one continent. Sources: Greenlaw et al. (2014) and this paper.**

Continent	# of Species	% of Species
Eurasia	55	32
Africa	50	29
South America	46	26
North America	40	23
Australia	20	11
Antarctica	0	0

(Greenlaw et al. 2014). Red-collared Widowbird is resident in central and southern Africa.

Greenlaw et al. (2014) provide information on 161 species of exotic or unknown provenance recorded in Florida, as follows: 139 exotics (14 species in the Main List, 124 [not 125] species in Appendix B, Part I, and one species-pair in Appendix B, Part I); 18 species of unknown provenance (Appendix A, Part I); and four exotics from Crandon Park, Miami-Dade that were only briefly mentioned because they were considered “personal property” (Appendix B, 264-265). This paper describes documentation gathered for 11 additional exotic species between mid-2013 and 2016, for a total of 172 species of birds of exotic or unknown provenance that have been verifiably recorded outside of captivity in Florida. The trend of ca. four new exotic species being recorded in Florida each year (Pranty 2004) seems to continue. With literally hundreds of species found in captivity in the United States (e.g., Banks and Clapp 1972; Greenlaw et al. 2014, Appendix B, Part II; <softbillsforsale.com>), the pool of additional exotic birds available to escape or be released in Florida is quite large, extending well beyond the expected families such as waterfowl, gamebirds, parrots, and “finches.” Geographically, Florida’s verifiable exotic avifauna originates worldwide, with all continents except Antarctica being represented (Table 1).

#### ACKNOWLEDGMENTS

We thank Eric Atkins, Robin Diaz, Jon Greenlaw, Elsie Gudalewicz, Andrew Kratter, Larry Manfredi, Eric Plage, Paula Procko, Ron Smith, Roberto Torres, and Linda Wishney for providing photographs or other information. Ed and Elsie Gudalewicz graciously showed us and Brian Ahern the Magpie Geese and provided information on their history at Edgewater. Paula Procko graciously hosted us and provided the history of the Blue-winged Goose at Stuart. Ron Smith and Eric Plage assisted us in observing the Silver-beaked Tanager at St. Petersburg. Brian Ahern and Eva Dupuis kindly loaned their cameras to BP to help document some of these species. Bruce H. Anderson and Kevin Dailey improved drafts of this paper.

## LITERATURE CITED

- ANONYMOUS. 2013. Sarasota sheriff seeks wandering Emu's owner. Tampa Bay Online, 23 October 2013. <[tbo.com/news/florida/sarasota-sheriff-seeks-owner-of-wandering-emu-20131023](http://tbo.com/news/florida/sarasota-sheriff-seeks-owner-of-wandering-emu-20131023)>.
- BANKS, R. C., AND R. B. CLAPP. 1972. Birds Imported into the United States in 1969. Special Scientific Report—Wildlife No. 148. U. S. Fish and Wildlife Service, Washington, D. C.
- BOWMAN, R. 2004. Fourteenth report of the Florida Ornithological Society Records Committee: 2001-2002. *Florida Field Naturalist* 32:7-33.
- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. 2014. The Robertson and Woolfenden Florida Bird Species: An Annotated List. Special Publication No. 8, Florida Ornithological Society, Gainesville.
- JIGUET, F., A. DOXA, AND A. ROBERT. 2008. The origin of out-of-range pelicans in Europe: wild bird dispersal or zoo escapes? *Ibis* 150:606-618.
- PRANTY, B. 2004. Florida's exotic avifauna: A preliminary list. *Birding* 36:362-372.

**RED-EYED VIREO (*Vireo olivaceus*) PLUNGES INTO  
POND IN APPARENT FORAGING MANEUVER**

KEN F. TRACEY

*5662 Fieldspring Ave., New Port Richey, Florida 34655*

*Email: kftracey@verizon.net*

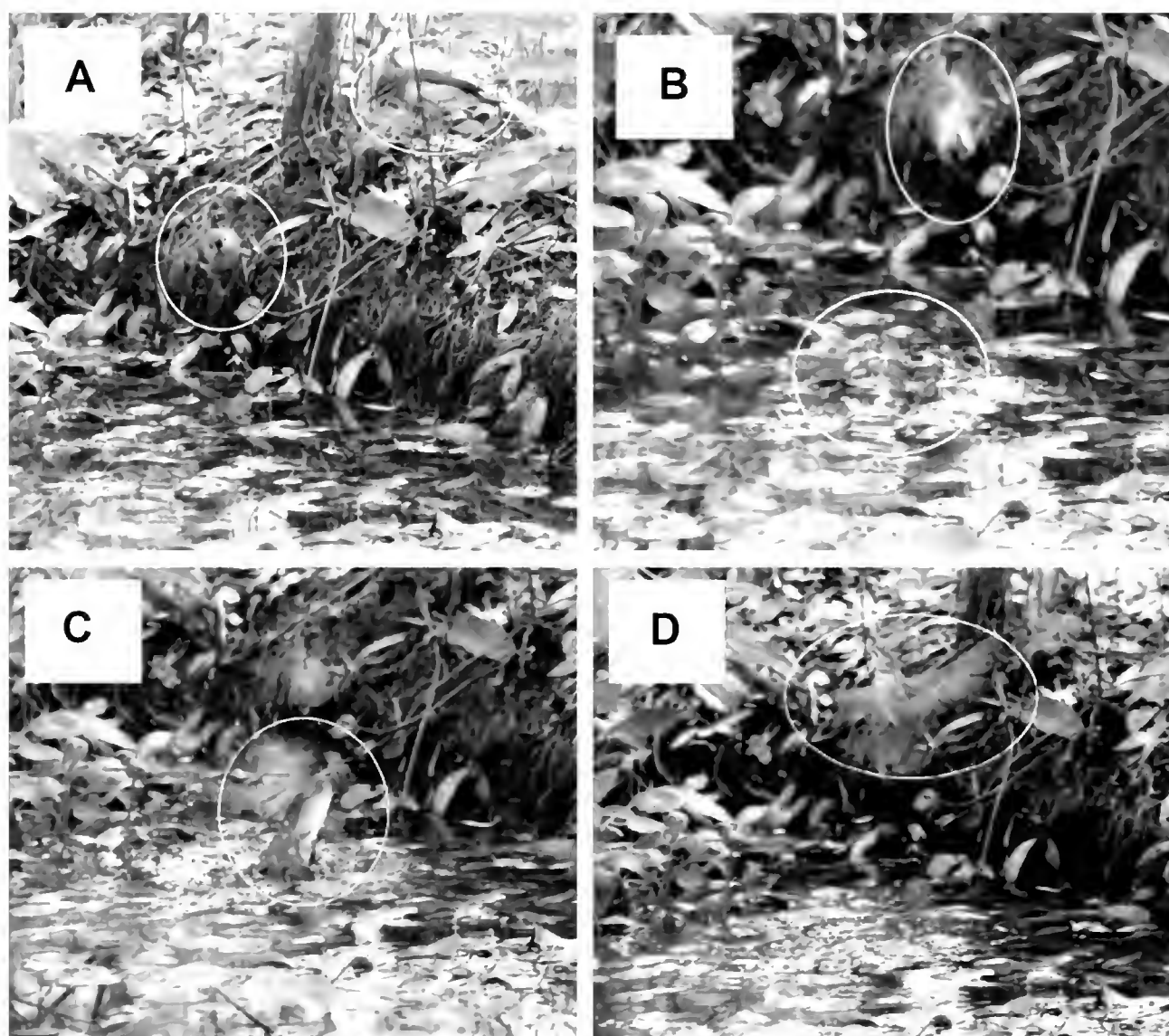
JON S. GREENLAW

*10503 Mistflower Lane, Tampa, Florida 33647*

On 30 April 2017, KFT visited the Brooker Creek Preserve & Environmental Education Center, Tarpon Springs, Pinellas County, Florida. There is a small woodland pond and a walkway between two of the nature center buildings. At 12:30pm four Tufted Titmice (*Baeolophus bicolor*) were flying near and along the pond edge and landed in some low brush on the pond bank. KFT focused a Canon EOS Rebel T5 digital camera with a 300 mm lens on a titmouse perched low on the pond bank. As he watched through the viewfinder a Red-eyed Vireo flew into the camera's field of view and perched low on a small branch. As KFT took photographs it peered intently at the pond, dove head first into the water (Fig. 1A) and completely submerged (Fig. 1B). It then appeared at the surface (Fig. 1C) and flew away (Fig. 1D). This small pond had numerous whirligig beetles (Gyrinidae) of unknown species on its surface. The assumption is that the Red-eyed Vireo and the Tufted Titmice were attracted to the pond by this prey opportunity. After the Red-eyed Vireo flew off, two Tufted Titmice settled on a perch beside the spot where the vireo dove into the water. A titmouse was leaning from a perch on the bank watching the activity (Fig. 1 A, B, C). The titmice did not try to capture the beetles while under observation. Although it was assumed that the Red-eyed Vireo was diving for prey, the photographs do not confirm that any prey was captured by the bird.

A similar observation of a Red-eyed Vireo diving into a woodland brook was reported by Arthur B. Williams on 16 July 1934, in Ohio (Williams 1940). Apart from his vireo repeatedly diving several times into the water, his description of the diving vireo in Ohio is very similar to observations reported here. He wrote, "The bird would work down a small branch overhanging the pool until it was about eight inches [20 cm] above the water. Here attention was fixed at a certain spot in the water below, and shortly the bird would dive in head first as a kingfisher does." Williams (1940) reported watching the vireo he observed eating something apparently captured from the water. Evidently the vireo in Ohio nearly submerged during one of its dives, implying that in the other instances, it remained mostly at the surface. Instead, one of KFT's photographs (Fig. 1B) shows that the bird was entirely submerged from the momentum of the plunge.

A recent life history review of the Red-eyed Vireo (Cimprich et al. 1996) mentioned Williams' report and treated it as an "apparent" case of diving into water after prey. As noted, the individual in Ohio was observed eating items after diving. Thus, we assume that potential prey was the stimulus that elicited the behavior in both cases; if not, then the behavior represents equally unusual bathing behavior in the species. The behavior better fits foraging in Red-eyed Vireos (see below) than species-typical bathing. The behavior of these two individual vireos resemble a form of plunge-diving that is practiced routinely during foraging by some kingfishers (Alcedinidae). What is surprising is that the behavior occurred at all. The titmice in the present case appeared to be intently interested in the insect activity on the surface of the pool, but they did nothing to take



**Figure 1. Red-eyed Vireo (*Vireo olivaceus*) at Brooker Creek Preserve, 30 April 2017. (A) The vireo lands on a twig and watches the pond along with a Tufted Titmouse (*Baeolophus bicolor*) on the bank. (B) The vireo has plunged into pond with a titmouse intently watching and leaning down from its perch. The swirl in the photograph indicates where it is completely submerged. (C) The vireo emerges from the pond. (D) The vireo flies away.**

advantage of the opportunity. Evidently, the vireo arrived after a titmouse was already watching the pool at the same site, and reacting to an apparent foraging opportunity, plunged directly into the water from a pool-side perch (Fig. 1).

Red-eyed Vireos chiefly are foliage-searching insectivores that specialize on seeking food in a distinct arboreal, structural compartment, the outer small branch/foilage zone of broad-leaved dominated forests of eastern and north-central North America (James 1976, Holmes et al. 1979, Cimprich et al. 2000). They commonly forage in mid- to upper levels of canopy tree crowns in a forest, but they also come down into the subcanopy and understory layers less frequently where similar food resources are exploited in smaller broad-leaved, woody species (James 1976, Robinson 1981, Cimprich et al. 2000). Low foraging of this sort is especially notable at forest edges and internal canopy breaks formed by tree-fall gaps, stream or pool margins, and margins of logging road corridors (JSG, unpubl. data, northern Maine). This vireo is noteworthy among most foliage insectivores in its distributional range in that it often practices sally-hover maneuvers to capture stationary prey on foliage that lies beyond reach (Robinson and Holmes 1982). Sally-hover maneuvers, as an aerial tactic to access and capture prey, predominate in this species, and in Philadelphia Vireos (*V. philadelphicus*), in northern forests where

they breed (Holmes et al. 1979, Robinson and Holmes 1982; JSG pers. obs.). As variable-distance searchers, Red-eyed Vireos commonly sally to foliage 1 m or less away from a perch, but less frequently up to about 2 m (Robinson and Holmes 1982). We suggest the sallying food-capture maneuvers that Red-eyed Vireos commonly practice, coupled with an absence of fear about entering water (perhaps due to bathing experience), may explain the seemingly odd aquatic plunging behavior as an opportunistic foraging tactic initiated by an individual bird. The sallying maneuver is species-typical, and perhaps quite old in an evolutionary sense in the genus; only the aquatic substrate at which the behavior was directed is surprisingly unusual. The titmice, which sally-hover only occasionally (JSG pers. obs.), merely behaved as watchers.

## LITERATURE CITED

- CIMPRICH, D. A., F. R. MOORE, AND M. P. GUILFOYLE. 2000. Red-eyed Vireo (*Vireo olivaceus*). In *Birds of North America*, No. 527 (A. Poole and F. Gill, eds). The Birds of North America, Inc. Philadelphia.
- HOLMES, R. T., R. E. BONNEY, JR., AND S. W. PACALA. 1979. Guild structure of the Hubbard Brook bird community: a multivariate approach. *Ecology* 60:512-520.
- JAMES, R. D. 1976. Foraging behavior and habitat selection of three species of vireos in southern Ontario. *Wilson Bulletin* 88:62-75.
- ROBINSON, S. K. 1981. Ecological relations and social interactions of Philadelphia and Red-eyed vireos. *Condor* 83:16-26.
- ROBINSON, S. K., AND R. T. HOLMES. 1982. Foraging behavior of forest birds: the relationships among search tactics, diet, and habitat structure. *Ecology* 63:1918-1931.
- WILLIAMS, A. B. 1940. Red-eyed Vireo captures food under water. *Auk* 57:114.

## FIELD OBSERVATIONS

**Spring Report: March-May 2017.**—This report consists of significant bird observations compiled by the Field Observations Committee (FOC). Electronic 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 follow this report.

Sight-only observations are considered “reports” while only those observations supported by verifiable evidence (photographs, video or audio recordings, or specimens) are called “records.” Species for which documentation is required by the FOC and by the FOS Records Committee (FOSRC; <fosbirds.org/official-florida-state-bird-list>) 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, AFR = Air Force Range, EOS = end of season, MCSF-BI = Marine Corps Support Facility-Blount Island, m. obs. = many observers, NERR = National Estuarine Research Reserve, NP = National Park, NSRA = North Shore Restoration Area, 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 numbers. +Photographs or video- or audio-recordings archived by the FOC are identified by a plus (+).

### SUMMARY OF THE SPRING SEASON

The 2017 spring season will perhaps be best remembered by an unprecedented number of Caribbean vagrants, most of which are listed as State review species. FOSRC review species noted in this report include a continuing pair of Brants, American Black Duck, two Harlequin Ducks in different locations, Common Merganser, Least Grebe, Inca Dove, Vaux’s Swifts, Bahama Woodstar, Hudsonian Godwit, two Ruffs, Long-tailed Jaeger, Thayer’s Gull, Elegant Tern, Red-billed Tropicbird, Pacific Loon, Red-footed Booby, Neotropic Cormorant, Great Cormorant, two Cuban Pewees, Yellow-bellied Flycatcher, Say’s Phoebe, LaSagra’s Flycatcher, Loggerhead Kingbird, three Fork-tailed Flycatchers, Thick-billed Vireo, Cuban Vireo, Yellow-green Vireo, Bicknell’s Thrush, at least five different Bahama Mockingbirds, Lapland Longspur, Kirtland’s Warbler, at least fourteen Western Spindalis, five Bananaquits, American Tree Sparrow, and Harris’s Sparrow.

### SPECIES ACCOUNTS

BLACK-BELLIED WHISTLING-DUCK: 107 at Rabon Road (*Jefferson*) 25 Mar (M. Smith, R. Emond); 60 at Lake Jackson (*Leon*) 2 May (R. Cassidy); 101 at four *Escambia* and *Santa Rosa* locations (m. obs.); 83 at Brooker Creek Preserve (*Pinellas*) 17 May (+J. Clayton).  
GREATER WHITE-FRONTED GOOSE: 1 at Walnut Hill (*Escambia*) 16 Mar (J. Yuhasz).  
SNOW GOOSE: 2 at Rabon Road 6-19 Mar (C. Miller).  
ROSS’S GOOSE: 1 at Carrabelle (*Franklin*) 5-8 Mar (+J. Murphy); 1 at the Okaloosa County Water and STF (*Okaloosa*) 11 Mar (M. Swan, B. Duncan, L. Duncan); 1 at St. Marks NWR (*Wakulla*) 11 Mar (J. Cavanagh).

- \*BRANT: 2 continued at Canaveral National Seashore, Apollo Beach (*Volusia*) through 6 Mar (m. obs.).
- CANADA GOOSE: 1 at Newnans Lake (*Alachua*) 8 Apr (L. Gaudette); 2 at Newnans Lake 6 May (K. Miller).
- GADWALL: 2 at Perdue Pond Wildlife Area (*Duval*) through 27 Mar (D. Foster).
- AMERICAN WIGEON: 2 at Lake Tohopekaliga, Brinson Park (*Osceola*) 7 May (C. Fredricks).
- \*AMERICAN BLACK DUCK: Up to 3 continued at Perdue Pond Wildlife Area through 5 Mar (D. Foster, m. obs.).
- NORTHERN SHOVELER: 250 at MCSF-BI Dayson Basin (*Duval*) 7 Apr (K. Dailey et al.); 20 at Carrabelle Beach (*Franklin*) 23 Apr (R. Cassidy).
- CANVASBACK: 1 continued at Perdue Pond Wildlife Area through 5 Mar (D. Foster, m. obs.).
- COMMON EIDER: 1 at Ketcham Park (*Brevard*) 25 Mar (A. Stutz); 1 at Huguenot Memorial Park (*Duval*) and later 1 mile up river 6 May-EOS (R. Rowan, L. Royce, +K. Dailey, m. obs.); 1 at Snook Islands Natural Area (*Palm Beach*) 29 May (L. Quinlan).
- \*HARLEQUIN DUCK: 1 at Squid Lips Bar and Grill (*Indian River*) through 14 Mar (P. Mansfield); 1 male at Fernandina Beach marina (*Nassau*) 21 May-EOS (+C. Sasser, m. obs.).
- SURF SCOTER: 1 at Vilano Boat Ramp (*St. Johns*) 26 Apr (J. Marchionno); 1 at Gulf Breeze (*Santa Rosa*) 6 May (B. Duncan, L. Duncan); 1 at St. Marks NWR 22 May (D. Morrow).
- WHITE-WINGED SCOTER: 1 at Ponte Vedra Beach (*St. Johns*) 2 Mar (T. Rodriguez); 1 at St. Vincent NWR (*Franklin*) 8 May (+J. Murphy).
- BLACK SCOTER: 1 at Huguenot Memorial Park 1 Apr (K. Dailey); 1 at Vilano Boat Ramp 26 Apr (J. Marchionno); 1 at Guana Tolomato Matanzas NERR (*St. Johns*) 23 May (D. Reed, C. Elder); 1 at Fort Pickens (*Escambia*) 24-31 May (C. DiSalvo, P. DiSalvo, M. Brower).
- BUFFLEHEAD: 1 female at The Villages (*Sumter*) 9-16 Apr (L. Felker); 1 at Newnans Lake 14-15 May (L. Davis, M. Manetz, et al.).
- \*COMMON MERGANSER: 1 at Okaloosa Veterans Park (*Okaloosa*) 26 Mar (+B. Purdy).
- \*LEAST GREBE: 1 at Yamato Scrub Natural Area (*Palm Beach*) 1 Apr-EOS (V. Schwartz, C. Weber; + B. Trentler).
- \*INCA DOVE: 1 at Gulf Breeze 9-13 May (B. Duncan, +L. Duncan, + M. Brower, P. Sykes).
- BLACK-BILLED CUCKOO: 1 at St. George Island SP (*Franklin*) 24 Apr (L. Gridley, J. Cavanagh); 1 at Molino (*Escambia*) 10 May (J. Yuhasz).
- SMOOTH-BILLED ANI: 2 at Adams Key, Biscayne NP (*Miami-Dade*) 23 May (L. Manfredi).
- GROOVE-BILLED ANI: 1 at Black Creek Trail – C-1W (*Miami-Dade*) 1-21 Mar (m. obs.); up to 2 at Lake Apopka NSRA (*Lake*) 3 Mar-14 Apr (m. obs.); 1 at Fort Pickens 26 Mar-12 Apr (K. Herriger, A. Herriger, D. Stangeland, m. obs.).
- CHUCK-WILL'S-WIDOW: 20 at Eglin AFB (*Okaloosa*) 14 Apr (G. Floyd).
- EASTERN WHIP-POOR-WILL: Up to 5 at Archbold Biological Station (*Highlands*) 4-12 and 25 Mar (D. Sherer); 1 at Fort George Island (*Duval*) 12 Mar (K. Dailey, M. Dailey); 1 at Alligator Point (*Franklin*) 17 Mar (J. Murphy); 1 at Weedon Island Preserve (*Pinellas*) 23-25 Mar (M. Burns, E. Plage).
- \*VAUX'S SWIFT: Up to 4 at Gainesville (*Alachua*) through 9 Mar (A. Lamoreaux et al.).
- \*BAHAMA WOODSTAR: 1 at Maritime Hammock Sanctuary (*Brevard*) 14-18 May (+M. Harris, m. obs.).
- KING RAIL: 2 off Heckscher Drive (*Duval*) 12-18, 26 Mar (M. Dailey, K. Dailey).
- SORA: 1 at Possum Branch Preserve (*Pinellas*) 14 May (+R. Smith).
- PURPLE GALLINULE: 2 discovered 21 Feb still present with two young at Lake Seminole (*Pinellas*) 21 May (+J. & I. Gibbons, C. Yilmaz); 1 at Seminole Woods (*Flagler*) 7-8 Apr (m. obs.); 2 adults with 4 downy young at Eastman/Taminco Sanctuary 24 Apr (L. Kelly, B. Fulow); 1 at Taylor Park (*Pinellas*) 12 Mar-23 May (K. Nelson et al.); 1 found deceased at Three Rooker Bar (*Pinellas*) 13 May (C. Yilmaz et al.); 1 at Lake



- Bellevue (*Pinellas*) 19 May (+K. Duncan); 1 at Largo Nature Reserve (*Pinellas*) 25-29 May (+K. Duncan); 1 at Eastport Wastelands (*Duval*) 29 May provided just the second county record in over thirty years (+K. Dailey).
- SANDHILL CRANE: 4 (2 adults with 2 colts) at Gate Parkway and Baymeadows Road (*Duval*) 4 May (+B. Loyacano) provided just the second Duval breeding record; 8 at New World Avenue (*Duval*) 24 May (C. Davis).
- WHOOPING CRANE: 1 at Paynes Prairie Preserve SP (*Alachua*) through 14 Apr (K. Pochy, et al.).
- AMERICAN AVOCET: 67 at MCSF-BI Dayson Basin 24 Mar (J. Martin) and 350 there 7 Apr (K. Dailey, et al.); 18 at W Pensacola 23 Apr (A. Forster); 6 at Opal Beach (*Escambia*) 6 May (M. Brower).
- AMERICAN GOLDEN-PLOVER: 1 at Route 305 sod fields (*Flagler*) 5 Mar (+M. Brothers); 1 at MCSF-BI Dayson Basin 24 Mar (J. Martin); 1 at Merritt Island NWR (*Brevard*) 6 Apr (A. Whitlock); 5 at County Road 305 (*Flagler*) 3 May (R. Wallace).
- SEMIPALMATED PLOVER: 650 at MCSF-BI Dayson Basin 7 Apr (K. Dailey, et al.); up to 6 at Paynes Prairie Preserve SP 19 Apr-13 May (J. Donsky et al.); up to 3 at Newnans Lake 4-24 May (R. Rowan et al.).
- UPLAND SANDPIPER: 2 at Canoe Creek Road sod fields (*Osceola*) 16 Apr (T. Donovan).
- WHIMBREL: Up to 4 at Fred Howard Park (*Pinellas*) through 13 Mar (+P. Graber, L. Gomez); 1 at Moore Haven, Lake Okeechobee (*Glades*) 28 Mar (D. Essian); 4 at Fort De Soto Park (*Pinellas*) 18 Apr (+K. Duncan).
- LONG-BILLED CURLEW: Up to 2 at 2-D Spoil Island area (*Hillsborough*) 1-23 Mar (E. Plage); 1 at Flag Island (*Franklin*) 20 Mar (J. Murphy).
- \*HUDSONIAN GODWIT: 1 at St. Marks NWR 23 May (D. Morrow).
- MARBLED GODWIT: 4 adults at East Gator Creek Rd., Merritt Island NWR, Titusville (*Brevard*) 9 Mar (J. Eager); 1 at Huguenot Memorial Park 25-26 Mar (+K. Dailey); 12 at W Pensacola (*Escambia*) 23 Apr (A. Forster).
- RUDDY TURNSTONE: 1 at Newnans Lake 12 May (L. Davis, R. Rowan, M. Manetz).
- \*RUFF: 1 at Newnans Lake 21-27 Apr (R. Rowan, M. Bruce, et al.); 1 at Circle B Bar Reserve (*Polk*) 14-17 May (C. Fredricks, m. obs.).
- STILT SANDPIPER: Up to 38 at Newnans Lake 1 Apr-14 May (M. Bruce, R. Terrill, et al.); 18 at MCSF-BI Dayson Basin 7 Apr (K. Dailey, et al.); 6 at Six Mile Landing (*St. Johns*) 23 Apr (+K. Dailey); 3 at MCSF-BI Dayson Basin 15 May (K. Dailey, et al.).
- DUNLIN: 1 at Scarborough Ranch (*Highlands*) 7 Mar (J. Carlisle, S. Mackenzie); up to 2 at Paynes Prairie Preserve SP through 30 Mar (M. Manetz, et al.).
- PURPLE SANDPIPER: 1 remained at Lighthouse Point Park (*Volusia*) through 26 May (M. Brothers, m. obs.).
- LEAST SANDPIPER: 1250 at MCSF-BI Dayson Basin 7 Apr (K. Dailey, et al.).
- WHITE-RUMPED SANDPIPER: 1 at Paynes Prairie Preserve SP 21 Apr (M. Manetz); up to 16 at Newnans Lake 22 Apr-24 May (B. Tarbox, R. Terrill et al.); up to 4 at Big Talbot Island SP - Spoonbill Pond 6-27 May (+K. Dailey); 4 at Fort George Island 14 May (+K. Dailey); 3 at Heritage River Road Wetlands (*Duval*) 14-18 May (K. Dailey); 6 at MCSF-BI Dayson Basin 15 May (K. Dailey, et al.); 6 at Fort De Soto Park (+B. Ahern, R. Harrod); 8 at Fort De Soto Park 25 May (+R. Smith); 9 at Carrabelle Beach 28 May (R. Cassidy); 2 at the Pinellas County Dump 29 May (+R. Smith, et al.).
- BUFF-BREASTED SANDPIPER: 1 at the Okaloosa County Water and STF 23 Apr (B. Purdy); 1 at River Lakes Conservation Area, Moccasin Island (*Brevard*) 9 May (P. Marvin).
- PECTORAL SANDPIPER: 1 at Hague (*Alachua*) 18 Mar (G. Israel); 1 at Kathryn Abbey Hanna Park (*Duval*) 2-9 Apr (+K. Dailey, m. obs.); up to 2 at Paynes Prairie Preserve SP 19 Apr-3 May (J. Donsky, et al.); 1 at Lake Maggiore (*Pinellas*) 6 May (+R. Smith); 14 at Tom Renick County Park (*Volusia*) 23 May (H. Robinson).
- SEMIPALMATED SANDPIPER: Up to 65 at Newnans Lake 21 Apr-24 May (R. Rowan, M. Bruce, et al.).

- LONG-BILLED DOWITCHER: Up to 440 at Newnans Lake 1 Apr-14 May (M. Bruce, J. Mays, et al.); 350 at MCSF-BI Dayson Basin 7 Apr (K. Dailey, et al.).
- AMERICAN WOODCOCK: 1 at Carrabelle 7 May (R. Cassidy).
- SOLITARY SANDPIPER: 2 at Jefferson County Recycling Center (*Jefferson*) 22 Apr (M. Smith, R. Emond).
- LESSER YELLOWLEGS: Up to 107 at Newnans Lake 1 Apr-15 May (M. Bruce, et al.).
- WILSON'S PHALAROPE: 1 at the Okaloosa County Water and STF 6 May (B. Purdy); 1 at Circle B Bar Reserve 15 May (C. Terry).
- RED-NECKED PHALAROPE: 3 at 3-D Spoil Island (*Hillsborough*) 15 May (E. Plage); 2 offshore *Lee* 27 May (D. McQuade, T. McQuade, E. Warren).
- PARASITIC JAEGER: 1 offshore *Lee* 27 May (D. McQuade, T. McQuade, E. Warren).
- \*LONG-TAILED JAEGER: 1 offshore *Lee* 27 May (D. McQuade, +T. McQuade, E. Warren).
- LAUGHING GULL: 5 at Lake Placid (*Highlands*) 17 May (F. Lohrer).
- \*THAYER'S GULL: Up to 2 at Daytona Beach Shores (*Volusia*) 1-16 Mar (m. obs.).
- GLAUCOUS GULL: 1 at Frank Rendon Park (*Volusia*) 1-28 Mar (m. obs.); presumably the same bird seen since mid-October 2016 was at Sunset Beach (*Pinellas*) 5 Mar (+P. Waton), at Indian Shores (*Pinellas*) 20 Mar (+W. Meehan) and at Dunedin Causeway (*Pinellas*) 24 May (+B. Cochrane); 1 first-cycle at Daytona Beach Shores (*Volusia*) 15 Mar-6 Apr (+M. Brothers, m. obs.); 1 at Helen Cooper Floyd Park (*Duval*) 8 Mar-14 Apr (D. Pridgen, K. Dailey, m. obs.); then a different one at nearby Huguenot Memorial Park 15 Apr (+K. Dailey).
- "NELSON'S" GULL (HERRING X GLAUCOUS): 1 first-cycle at Daytona Beach Shores 15 Mar (M. Brothers).
- BROWN NODDY: 1 at Jetty Park (*Brevard*) 4 May (M. Harris, et al.).
- BLACK NODDY: 1 at Garden Key, Dry Tortugas NP (*Monroe*) 9-27 Apr (M. Maerz, S. Wilson; m. obs.); 1 at Garden Key, Dry Tortugas NP 14 May (D. Simpson).
- SOOTY TERN: An adult first reported at Dunedin Causeway 23 Feb was probably the same bird at Honeymoon Island SP (*Pinellas*) 7 Mar (+P. Brady); 1 at St. George Sound (*Franklin*) 9 Apr (E. Thompson); 233 offshore *Lee* 27 May (D. McQuade, T. McQuade, E. Warren).
- BRIDLED TERN: 8 offshore *Lee* 27 May (D. McQuade, T. McQuade, E. Warren).
- LEAST TERN: 2 at Huguenot Memorial Park 25 Mar (+K. Dailey).
- GULL-BILLED TERN: 2 adults at East Gator Creek Rd., Merritt island NWR, Titusville 9 Mar (J. Eager); 1 at Fort De Soto Park 6 Apr (+K. Duncan); 1 at Huguenot Memorial Park 8 Apr (+K. Dailey); 3 at MCSF-BI Dayson Basin 15 May (K. Dailey); 2 at Heritage River Road Wetlands 14-27 May (K. Dailey); 2 at Gandy Beach (*Pinellas*) 31 May (+J. Clayton).
- CASPIAN TERN: 1 at Newnans Lake 25 May (L. Davis).
- BLACK TERN: 12 at four S *Pinellas* locations 6 May (+R. Smith).
- ROSEATE TERN: Singles at Tom Renick County Park 2 and 20 May (H. Robinson).
- COMMON TERN: 1 at Huguenot Memorial Park 1 Apr (+K. Dailey); 4 adults at Outback Key (*Pinellas*) 26 Apr (+E. Plage); 25 at Three Rooker Bar 13 May (+C. Yilmaz); 1 at Newnans Lake 14 May (L. Davis).
- ARCTIC TERN: 1 at Boynton Beach Inlet Park (*Palm Beach*) 15 Apr (K. Miller, M. Gomes); 1 at Ponce de Leon Inlet (*Volusia*) 17 Apr (+M. Brothers); 1 at Juno Beach Park (*Palm Beach*) 20 Apr (L. Gardenhire); 2 at C-102 Canal "Quarry Lake" (*Miami-Dade*) 22-23 Apr (R. Torres, m. obs.); 1 at Dr. Von D. Mizell-Eula Johnson SP (*Broward*) 22 Apr (M. Berney); 1 at Cutler Wetlands (*Miami-Dade*) 23 Apr (N. Frade, m. obs.); 1 at Guana Tolomato Matanzas NERR 2 May (+C. Elder); 1 at Dr. Von D. Mizell-Eula Johnson SP 2 May (J. Lagan, D. Lagan); up to 4 at Jetty Park 3-5 May (M. Harris et al.); 1 at Bathtub Beach (*Martin*) 18 May (R. Netherton); 1 at Tom Renick County Park 20 May (H. Robinson); 1 at Boynton Beach Inlet Park 22 May (D. Essian); 2 at Lighthouse Point Park 22-25 May (M. Brothers, m. obs.).

- SANDWICH TERN: 250 at St. George Island 9 Apr (R. Cassidy); 1 at Newnans Lake 14 May (L. Davis).
- \*ELEGANT TERN: 1 at Fort De Soto Park 7 Mar (+D. Olsen, C. Olsen).
- \*RED-BILLED TROPICBIRD: 1 at Gulf Breeze 18 Mar-EOS (C. Wheeler, +K. Lewis, +L. Duncan, +L. Goodman, m. obs.)
- \*PACIFIC LOON: 1 at Fort Pickens 23 Mar-28 May (+ P. Doggrell, D. Stangeland, J. Yuhasz, m. obs.); 1 at Gulf Breeze 15 May (B. Duncan).
- COMMON LOON: 1 at Lake Placid 12-16 Mar (+L. Manning); 1 at Westside Industrial Park (*Duval*) 14 May (D. Foster); 1 at Fort Island Gulf Beach (*Citrus*) 14 May (G. Leavens, J. Leavens).
- SOOTY SHEARWATER: 1 at Playalinda Beach (*Brevard*) 17 May (+M. Harris).
- STORM-PETREL SP.: 1 offshore *Lee* 27 May had no banding on the rump and was noted as a possible Swinhoe's (D. McQuade, T. McQuade, E. Warren).
- BROWN BOOBY: 1 at Castaway Cove (*Indian River*) 1 Apr (W. Johnson); up to 16 at Philippe Park (*Pinellas*) 16 May (B. Lane, m. obs.); singles at Tom Renick County Park 6, 20, and 24 May (H. Robinson).
- \*RED-FOOTED BOOBY: 1 immature at Long Key, Dry Tortugas NP (*Monroe*) 14 May (D. Simpson).
- \*NEOTROPIC CORMORANT: 1 at Topeekeegee Yugnee Park (*Broward*) 1 Mar-EOS (m. obs.); 1 at Wakodahatchee Wetlands (*Palm Beach*) 1 Mar-EOS (m. obs.).
- \*GREAT CORMORANT: 1 at Gulf Harbors (*Pasco*) 8 Apr (B. Pranty).
- AMERICAN WHITE PELICAN: 108 at MCSF-BI Dayson Basin 7 Apr (K. Dailey).
- BROWN PELICAN: 3 at Gainesville 14 Apr (M. Bruce, T. Anderson, B. Shea); 21 at Lake Istokpoga (*Highlands*) 21 Apr (M. McMillian); 1 at Newnans Lake 5-7 May (L. Gaudette, D. Segal).
- AMERICAN BITTERN: 1 at Taye Brown Regional Park (*Duval*) 29 Mar (J. Graham, C. Davis); 1 at Fort De Soto Park 15 Apr (+J. Clayton et al.); 1 juvenile at Orlando Wetlands Park (*Orange*) 26 May (J. Eager).
- LEAST BITTERN: 1 at Imeson Center (*Duval*) 19 May (+K. Dailey, M. Dailey).
- GREAT BLUE HERON: 1 killed 2 others at Sweetwater Wetlands Park (*Alachua*) 20 May (K. Chaney, B. Price).
- GREAT BLUE HERON (WHITE MORPH): 1 at Cross Creek (*Alachua*) 4 May (A. Keitt).
- YELLOW-CROWNED NIGHT-HERON: 1 at Fort Pickens 5 Mar (D. Stangeland).
- GLOSSY IBIS: 1 at Eastman/Taminco Sanctuary (*Santa Rosa*) 27 Mar-7 Apr (L. Kelly, B. Furlow, L. Goodman); 1 at Kathryn Abbey Hanna Park 2 Apr (*fide* K. Dailey).
- WHITE-FACED IBIS: 1 at Circle B Bar Reserve (*Polk*) 6 Mar (P. Brannon); 1 at Lake City spray fields (*Columbia*) 13 Apr (J. Hintermister, et al.); 1 at Winding Waters Natural Area (*Palm Beach*) 15 May (+M. Ely); 1 at Lake Apopka NSRA (*Orange*) 28-29 May (m. obs.).
- ROSEATE SPOONBILL: 1 at Sweetwater Wetlands Park 15 Mar (J. Russo); 1 at *Escambia* 9 Apr (D. Brand, K. Brand); 1 juvenile at Lake Istokpoga 21 Apr (M. McMillian); 1 at Paynes Prairie Preserve SP 25 Apr-3 May (R. Rowan, et al.); up to 4 at Newnans Lake 5-27 May (J. Hintermister, et al.).
- SWALLOW-TAILED KITE: 59 at *Escambia*, *Santa Rosa*, and *Okaloosa* counties 6-11 Mar (m. obs.).
- WHITE-TAILED KITE: 2 at Avon Park AFR (*Highlands*) 26 Mar (+H. Folmar); 1 at Buck Island Ranch (*Highlands*) 11 Apr (J. Fitzpatrick).
- SNAIL KITE: 1 east of Inverness (*Citrus*) 6 May (J. Hoch); 1 at St. Johns River Road (*Volusia*) 20 May (+R. Armaly).
- MISSISSIPPI KITE: A pair returned to site of last year's nest at NW *Citrus* 4 May (S. Levins).
- BALD EAGLE: 6 at MCSF-BI Dayson Basin 7 Apr (K. Dailey).
- SHARP-SHINNED HAWK: 1 at Gulf Breeze 8 May (M. Brower).
- SHORT-TAILED HAWK: 4 at Taylor Park (*Pinellas*) 6 Mar (+T. Leukering, et al.); 3 pairs confirmed nesting in *Pinellas* late March 2017 (*fide* R. Smith); up to 3 at Newnans Lake

- 31 Mar-30 Apr (H. Adams, et al.); 1 at Intracoastal Waterway near 202 (*St. Johns*) 1 Apr (+M. Harrell).
- SWAINSON'S HAWK: 1 at Archbold Biological Station 22 Mar (R. Bowman).
- BELTED KINGFISHER: 1 adult male at Big Talbot Island SP - Spoonbill Pond 20 May (+K. Dailey); 1 at Honeymoon Island SP 20 May (+C. Yilmaz); 1 at Sawgrass Lake Park 22 May (J. Clayton); 1 male at Largo Nature Reserve (*Pinellas*) 29 May (R. Smith).
- RED-HEADED WOODPECKER: 1 adult at Bill Baggs Cape Florida SP (*Miami-Dade*) 7-8 Apr (+M. Avello, m. obs.); 1 adult at Honeymoon Island SP 25 Apr (+J. McGinity, J. Zelik).
- YELLOW-BELLIED SAPSUCKER: 1 at Gulf Breeze 17 May (M. Brower, C. Brower).
- HAIRY WOODPECKER: 2 at Cross Creek 2 Apr (M. Manetz, B. Hall); 1 at the Escambia County Utility Authority (*Escambia*) 19 Apr (J. Callaway, B. Callaway); 1 feeding chick at Beachville (*Suwannee*) 19 May (A. Kent, B. Simons).
- CRESTED CARACARA: 1 SE of Brooksville (*Hernando*) 20 Apr (D. Grimes).
- AMERICAN KESTREL: An unsuccessful nesting at Gainesville 5 Mar-28 Apr (G. Parks, T. Webber) was the first attempt in the city limits in over 50 years.
- MERLIN: 2 in *Pinellas* (Boyd Hill NP and Fort De Soto Park) 6 May established a new spring "late date" for the county (+R. Smith, J. Clayton).
- PEREGRINE FALCON: 1 at Lake Talquin (*Gadsden*) 1 Mar (T. Rodriguez); 1 at Paynes Prairie Preserve SP through 20 Mar (J. Mays, et al.).
- MONK PARAKEET: 1 at an Atlantic Beach feeder (*Duval*) 3 Mar (D. Pridgen).
- NANDAY PARAKEET: 1 at Crystal River (*Citrus*) 11 Mar (P. Bazany).
- WHITE-WINGED PARAKEET: 1 at Clearwater 10-19 May (+M. Hornsby) provided the second *Pinellas* record.
- \*CUBAN PEWEE: 1 at Bill Baggs Cape Florida SP 8 Apr (+S. Runyon, N. Salino); 1 at Pine Tree Park, Miami Beach (*Miami-Dade*) 5 May (F. Schena, +S. Runyon).
- \*YELLOW-BELLIED FLYCATCHER: 1 at Charles Deering Estate (*Miami-Dade*) 8-10 Mar (M. Avello, +Ra. Diaz).
- ACADIAN FLYCATCHER: 3 at Thomas Creek (*Duval*) 22 Apr (+K. Dailey, M. Dailey); 1 at Boca Ciega Millennium Park (*Pinellas*) 25 May (C. Gjervold).
- EASTERN PHOEBE: 1 at Bald Point SP (*Franklin*) 4 May (S. Parrish).
- \*SAY'S PHOEBE: 1 at Lake Belleview Park 14 May represents the only Apr-May record for Florida (+K. Duncan).
- VERMILION FLYCATCHER: 1 female at Little Big Econ WMA (*Seminole*) 4 Mar (+G. Williams); 1 at Fort Walton Beach (*Okaloosa*) 13 Mar (T. Perkins); up to 2 at Paynes Prairie Preserve SP through 17 Mar (L. Gaudette, J. Russo, et al.).
- ASH-THROATED FLYCATCHER: 1 at River Lakes Conservation Area, Moccasin Island (*Brevard*) 7-29 Mar (W. Kennedy); 1 at Okaloosa County Water and STF 11-14 Mar (B. Duncan, L. Duncan, et al.).
- GREAT CRESTED FLYCATCHER: 1 at Gainesville 19 Mar (M. Bruce).
- \*LA SAGRA'S FLYCATCHER: 1 at Long Key SP 21 Apr (+N. Frade).
- TROPICAL KINGBIRD: 1 at STA-2 (*Palm Beach*) 1 Mar-EOS (m. obs.).
- TROPICAL/COUCH'S KINGBIRD: 1 at St. George Island SP 29 Apr (S. Parrish, +J. Murphy), details to FOSRC; 1 at Fort Pickens 1 May (B. Duncan, L. Duncan).
- WESTERN KINGBIRD: 1 at the Okaloosa County Water and STF 6 May (B. Purdy).
- GRAY KINGBIRD: 1 at Tierra Verde 29 Mar (E. Plage); 1 at Buck Island Ranch 11 Apr (+J. Fitzpatrick); 1 at Theodore Roosevelt Area (*Duval*) 7 May (+K. Dailey et al.).
- \*LOGGERHEAD KINGBIRD: 1 at Hialeah Water Treatment Plant (*Miami-Dade*) 9 Apr (+L. Manfredi).
- SCISSOR-TAILED FLYCATCHER: 1 at Space Coast Regional Airport (*Brevard*) 4-23 Mar (m. obs.); 1 at Tierra Verde 22 Apr (+E. Plage et al.); 1 at St. Vincent NWR 16 May (S. Cerulean, J. Murphy).
- \*FORK-TAILED FLYCATCHER: 1 at Bear Cut Preserve, Crandon Park (*Miami-Dade*) 23-25 Apr (+R. Galvez; m. obs.); 1 juvenile at Herbert Hoover Dike, Lake Okeechobee, Clewiston

- (*Hendry*) 17-24 May (W. Biggs, m. obs.); 1 at Lake Apopka NSRA (*Orange*) 28 May-EOS (m. obs.).
- \*THICK-BILLED VIREO: 1 at Crandon Park 24 Apr-2 May (m. obs.).
- BELL'S VIREO: 1 at "Sonny" McCoy Indigenous Park (*Monroe*) 11 Apr (C. Goodrich, L. Dunn).
- \*CUBAN VIREO: 1 at "Sonny" McCoy Indigenous Park 10 Apr (C. Goodrich, L. Dunn).
- YELLOW-THROATED VIREO: 1 at St. Marks NWR 19 Mar (J. Cavanagh).
- PHILADELPHIA VIREO: 1 at Dixie's Park (*Brevard*) 5 May (A. Whitlock).
- \*YELLOW-GREEN VIREO: 1 at Fort De Soto Park 8-9 May (+J. Gibson, +P. Branon, et al).
- BLACK-WHISKERED VIREO: 3 at Sebastian Inlet SP (*Indian River* and *Brevard*) 8 Apr (M. Brothers, M. Harris); 1 adult at Lori Wilson Park, Cocoa Beach (*Brevard*) 8 Apr (J. Eager); 1 at Fort De Soto Park 13 Apr (J. Rosenfeld, +J. Clayton, m. obs.); 1 at W Largo 18 Apr (+T. Knuth); 1 at Fort De Soto Park 8-10 May (+J. Gibson).
- TREE SWALLOW: 2 at Lake Maggiore 6 May (R. Smith).
- NORTHERN ROUGH-WINGED SWALLOW: 2 at Lake Placid 14 May (F. Lohrer).
- BANK SWALLOW: 1 at Sweetwater Wetlands Park 5 Mar (M. Manetz); 1 at Sweetwater Wetlands Park 7-8 Apr (L. Davis et al.); 1 at Paynes Prairie Preserve SP 14 Apr (J. Mays); 1 at Sweetwater Wetlands Park 3 May (R. Rowan).
- CLIFF SWALLOW: 1 at Sweetwater Wetlands Park 3-6 Mar (L. Davis, T. Anderson); 1 at Okaloosa County Water and STF 15 Mar (S. McNemar); 1 at Hague 1 Apr (J. Donsky); up to 2 at Sweetwater Wetlands Park 4-11 Apr (D. Segal, J. Mays et al.); 4 at St. George Island 8 Apr (R. Cassidy).
- CAVE SWALLOW: 1 at Lake Seminole Park 4 Mar (T. Leukering et al.); 2 at Fort De Soto Park 14 May (E. Plage, +J. Clayton); 1 at Lake Maggiore 17 Mar (P. Plage, +P. Graber); 1 at Eastman/Taminco Sanctuary 24 Apr (L. Kelly, B. Furlow); 1 at Midway (*Gadsden*) 5 May (R. Cassidy).
- BARN SWALLOW: 2 building nests at Gainesville 4 Mar (R. Rowan); 10 at Scarborough Ranch 7 Mar (J. Carlisle, S. Mackenzie).
- RED-BREASTED NUTHATCH: 1 at Busch Wildlife Sanctuary (*Palm Beach*) 16 Mar (+T. Datena); 1 at Guana Tolomato Matanzas NERR 21 Mar (C. Elder, D. Reed); 1 first seen 3 Jan at Taylor Park was present through 4 Apr (K. Nelson); 1 last seen at Boyd Hill Nature Preserve 11 Dec was discovered again 7 Apr (+R. Smith); 1 at St. George Island SP 27-28 Apr (D. Meehan, D. Reed); 1 at Fort Pickens 7 May (B. Duncan, L. Duncan).
- HOUSE WREN: 1 SE of Brooksville 20 May (J. Mann, S. Mann).
- VEERY: 1 at Fort Caroline (*Duval*) 7 May (K. Dailey et al.).
- GRAY-CHEEKED THRUSH: 1 at Gulf Breeze 16-17 Mar (W. Duncan, B. Duncan, L. Duncan); 1 at Highlands Hammock SP (*Highlands*) 7 May (A. Griffin); 4 at Fort Caroline 7 May (K. Dailey et al.).
- \*BICKNELL'S THRUSH: 1 at Cocoa Beach Nature Park (*Brevard*) 9 May (+M. Harris).
- SWAINSON'S THRUSH: 3 in *Alachua* 5-12 May (D. Segal, K. Collingwood, M. Manetz); 1 at Fort Caroline 7 May (K. Dailey et al.).
- WOOD THRUSH: 1 at Arlington (*Duval*) 12 May (+W. Nolan).
- \*BAHAMA MOCKINGBIRD: 1 at Windley Key Fossil Reef Geological SP (*Monroe*) 20 Apr (M. O'Brien, m. obs.); 1 at Channel Two Bridge, mile marker 74 (*Monroe*) 22 Apr (A. Crittenden); 1 at Evergreen Cemetery (*Broward*) 22 Apr (R. Titus); 1 at Bear Cut Preserve, Crandon Park 27-29 Apr (S. Juan; m. obs.); 1 at Boca Chita Key, Biscayne NP (*Miami-Dade*) 23 May (L. Manfredi).
- CEDAR WAXWING: 4 at Inverness 23 May (D. Simpson).
- AMERICAN PIPIT: 1 at Paynes Prairie Preserve SP 30 Mar (M. Manetz).
- PINE SISKIN: 1 at Gainesville through 5 Mar (S. Robinson); 1 at Gainesville 30 Apr (A. Kratter).
- AMERICAN GOLDFINCH: 2 at a *Clay* residence through 5 May (D. Cusick).

- \*LAPLAND LONGSPUR: 1 at Crooked Island (*Bay*) 26 Mar (+K. Christman).
- WORM-EATING WARBLER: 1 at Bonner Park 26 Mar (K. Nelson); up to 6 at Fort De Soto Park 15-20 Apr (+J. Clayton, m. obs.).
- LOUISIANA WATERTHRUSH: 1 at Lori Wilson Park, Cocoa Beach 8 Apr (J. Eager).
- GOLDEN-WINGED WARBLER: 1 at Fort Pickens 1 May (B. Callaway, J. Callaway).
- BLUE-WINGED WARBLER: 1 adult male at Charles Deering Estate 1 Mar (m. obs.; wintering bird); singles at Fort De Soto Park 12 Apr (K. Duncan, P. Brannon) and 2-7 May (+T. Ford et al.); 1 at George C. McGough Park (*Pinellas*) 18 Apr (T. Young); 1 at W Largo 18 Apr (T. Knuth).
- PROTHONOTARY WARBLER: 4 singing at Thomas Creek 22 Apr (+K. Dailey, M. Dailey).
- SWAINSON'S WARBLER: At least 14 different individuals seen at 6 different sites in *Pinellas* 26 Mar-20 Apr (*fide* R. Smith); 1 at Bonner Park 26 Mar (K. Nelson); 1 at McGough Park 26-30 Mar (+K. Duncan et al.); 2 banded at Dunedin Hammock Park 26 Mar (+J. McGinity et al.); 1 at Fort De Soto Park 29 Mar (E. Plage); 1 at Boca Ciega Millennium Park 29 Mar (C. Gjervold); 1 at Gainesville 7-13 Apr (B. Ewing et al.); 1 at Lori Wilson Park, Cocoa Beach 8 Apr (J. Eager); 1 at Honeymoon Island SP 12 Apr (M. Morgante).
- NASHVILLE WARBLER: 1 continued from the previous season at Gulf Breeze through 20 Apr (B. Duncan, L. Duncan); 1 at Gainesville through 29 Mar (G. Kent, A. Kent); 1 at Gainesville 2 Apr (G. Kiltie); 1 at Country Club of Orange Park (*Clay*) 9 Apr (C. Long); 1 at Fort De Soto Park 21-23 Apr (*fide* R. Smith).
- CONNECTICUT WARBLER: Up to 2 at Rotary Park, Merritt Island (*Brevard*) 12-14 May (P. Mansfield et al.).
- KENTUCKY WARBLER: 1 at Fort De Soto Park 2 Apr (+M. Burns et al.); 1 at High Springs (*Alachua*) 5 Apr (T. Greenwald, M. Flowers); 2 at Boca Ciega Millennium Park 18 Apr (C. Gjervold); 1 late at Fort De Soto Park 6 May (B. Ahern, R. Harrod).
- HOODED WARBLER: Up to 20 singing at Thomas Creek 22 Apr (K. Dailey, M. Dailey).
- \*KIRTLAND'S WARBLER: 1 at Maritime Hammock (*Brevard*) 8 May (C. Ferro).
- CAPE MAY WARBLER: 1 at Lori Wilson Park, Cocoa Beach 8 Apr (J. Eager); 2 at Sawgrass Lake Park 12 Apr (M. Burns et al.); up to 6 at Fort De Soto Park 11 Apr-8 May (*fide* R. Smith).
- MAGNOLIA WARBLER: Up to 8 around Jacksonville (*Duval*) 5-7 May (*fide* K. Dailey).
- BAY-BREASTED WARBLER: 1 at San Felasco Hammock (*Alachua*) 8 Apr (E. Martin); 1 at Gainesville 7 May (S. Hofstetter).
- BLACKBURNIAN WARBLER: 1 male at Fort De Soto Park 7-9 Apr (+S. Tavaglione et al.).
- YELLOW WARBLER: 1 at Lakewood (*Duval*) 6 May (M. Fethe); 1 at Fort Caroline 7 May (K. Dailey et al.).
- CHESTNUT-SIDED WARBLER: 1 male at Fort De Soto Park 5-7 May (K. Nelson, S. Aversa, +J. Clayton, m. obs.); 1 male at Honeymoon Island SP 5 May (+C. Shavers).
- BLACK-THROATED BLUE WARBLER: 1 wintered at Gainesville through 14 Apr (E. Scales); 1 female SE of Brooksville 23-24 May (J. Mann).
- YELLOW-RUMPED WARBLER: 1 at Sweetwater Wetlands Park 16 May (J. Bailey).
- BLACK-THROATED GREEN WARBLER: 1 at Bolles High School (*Duval*) 6 May (B. Moyer).
- WILSON'S WARBLER: 1 at Tallahassee (*Leon*) 1 Mar-10 Apr (F. Rutkovsky, J. Cavanagh).
- YELLOW-BREASTED CHAT: 1 at Guana River WMA (*St. Johns*) 21 Apr (C. Elder et al.); 13 at Orchard Pond Road (*Leon*) 26 May (R. Cassidy).
- \*WESTERN SPINDALIS: 1 female at Bill Baggs Cape Florida SP 8 Mar (+Ro. Diaz); 1 singing male (black-backed race) at Bill Baggs Cape Florida SP 15-29 Apr (+M. Avello); 1 female at Bill Baggs Cape Florida SP 16 Apr (m. obs.); 1 at Castaway Cove (*Indian River*) 21-29 Apr (W. Johnson); 1 male (black-backed race) at Windley Key Fossil Reef Geological SP 21-23 Apr (D. Segal, m. obs.); 1 at Long Key SP 22 Apr (A. Whitlock); 1 male at Plantation Preserve (*Broward*) 24-25 Apr (S. Kaplan, m. obs.); 2 males at Elliott Key, Biscayne NP (*Miami-Dade*) 28 Apr (L. Manfredi, m. obs.); 2 at Gulfstream

Shores, North Key Largo (*Monroe*) 2-11 May (m. obs.); 2 at Lantana Nature Preserve (*Palm Beach*) 7-11 May (m. obs.); 1 female at Elliott Key, Biscayne NP 23 May (L. Manfredi).

\*BANANAQUIT: 1 female-type at DeSoto Inn (*Broward*) 1-12 Mar (m. obs.); 1 at North Shore Open Space Park (*Miami-Dade*) 14-22 Mar (+S. Runyon); 1 at Bear Cut Preserve, Crandon Park 22 Apr-10 May (m. obs.); 1 at Boca Chita, Biscayne NP 22 Apr (T. Pope, K. Marvel); 1 at Bill Baggs Cape Florida SP 6 May (N. Salino).

\*AMERICAN TREE SPARROW: 1 at Flamingo, Everglades NP (*Monroe*) 27 May (+A. Kent).

CLAY-COLORED SPARROW: 4 at Twin Oaks Conservation Area (*Osceola*) 7 Mar (C. Irwin); 1 at DuPuis (*Martin*) 6-22 Mar (P. Grannis); 1 at Melrose (*Alachua*) 17 Mar-3 Apr (K. Collingwood).

FIELD SPARROW: Fledglings at Beachville (*Suwannee*) 19 May (A. Kent, B. Simons).

LARK SPARROW: 1 at Fort Zachary Taylor Historic SP (*Monroe*) 30 Mar (C. Goodrich).

GRASSHOPPER SPARROW: Up to 2 at Reddie Point Preserve (*Duval*) 4-6 Apr (+T. Rohtsalu, m. obs.).

HENSLOW'S SPARROW: 2 at Hal Scott Regional Preserve Park, Orlando (*Orange*) 25 Mar (J. Eager).

FOX SPARROW: 1 at Fort De Soto Park 12 Apr (+P. Brannon) was the first *Pinellas* record.

LINCOLN'S SPARROW: 1 at Honeymoon Island SP 22 Apr (+J. McGinity); 1 at a *St. Johns* residence 26 Apr (C. Elder).

\*HARRIS'S SPARROW: 1 adult continued at Kettering Rd., Brooksville (*Hernando*) through 26 Mar (J. Eager, G. DelPizzo, D. Richard, m. obs.).

WHITE-CROWNED SPARROW: 3 males and 2 females at Kettering Rd, Brooksville 12 Mar (J. Eager).

SCARLET TANAGER: 1 at a *Clay* residence 5 May (S. Raduns).

WESTERN TANAGER: 1 at Disney's Port Orleans Resort (*Orange*) 23 Mar (S. Ansell).

ROSE-BREASTED GROSBEAK: 1 wintered at Gainesville through 9 Mar (A. Kratter); 1 at Archer (*Alachua*) 19 May (B. Senn); 1 at Honeymoon Island SP 1 Apr (+L. Margeson); 1 at a *Duval* residence through 14 May (L. Royce).

BLUE GROSBEAK: 1 at Fort Pickens 2-8 Mar (J. Callaway, B. Callaway).

DICKCISSEL: 1 at Ponce Preserve (*Volusia*) 9 May (+D. LaGrange).

YELLOW-HEADED BLACKBIRD: Up to 50 at Sem-Chi Rice Mill (*Palm Beach*) 5 Mar-22 Apr (m. obs.); 5 at Florida Crystals Rice Mill (*Palm Beach*) 22 Apr (m. obs.); 1 at Gulf Breeze 28 Apr (B. Duncan).

RUSTY BLACKBIRD: Up to 35 at Gainesville through 13 Mar (T. Anderson et al.).

BREWER'S BLACKBIRD: 2 females at Feiser's Dairy, DeLeon Springs (*Volusia*) 16-18 Mar (M. Brothers); 1 female at Bayport through 22 Mar (W. Meehan) marked this bird's sixth winter in *Hernando*; 1 at Okaloosa County Water and STF 23 Apr (G. Floyd, +M. Swan); 1 in Pace (*Santa Rosa*) 6 May (L. Kelly).

BOAT-TAILED GRACKLE: 1 *westoni* at Huguenot Memorial Park 4 Mar (K. Dailey).

SHINY COWBIRD: 1 at Viera Wetlands (*Brevard*) 16 Apr (P. Marvin); 1 at Gulf Breeze 27 Apr-1 May (B. Duncan, L. Duncan); 1 at Alligator Point (*Franklin*) 28 Apr-EOS (+J. Murphy).

BRONZED COWBIRD: 1 at Gulf Breeze 25 Apr (W. Duncan, B. Duncan).

ORCHARD ORIOLE: 1 at Bystre Lake (*Hernando*) 17 May (J. Mann, S. Mann).

**Contributors:** Howard Adams, Brian Ahern, Trina Anderson, Steve Ansell, Regina Armaly, Tom Auer, Miriam Avello, Steve Aversa, Jeffrey Bailey, Patricia Bazany, Mark Berney, Reed Bowman, Patrick Brady, Dan Brand, Kate Brand, Peter Brannon, Michael Brothers, Cathy Brower, Michael Brower, Matt Bruce, Mark Burns, Brenda Callaway, Jerry Callaway, Jay Carlisle, Rodney Cassidy, Jim Cavanagh, Sue Cerulean, Kim Chaney, Kevin Christman, JoAnna Clayton, Bruce Cochrane, Keith Collingwood, Alyssa Crittenden, Debbie Cusick, Kevin Dailey, Marie Dailey, Tuly Datena, Candice Davis,

Lloyd Davis, Gina DelPizzo, Rangel Diaz, Robin Diaz, Peggy Doggrell, Jennifer Donsky, Cathy DiSalvo, Phil DiSalvo, Terry Donovan, Bob Duncan, Kathy Duncan, Lucy Duncan, Will Duncan, Lee Dunn, Jim Eager, Cynthia Elder, Madeleine Ely, Robert Emond, David Essian, Ben Ewing, Pete Grannis, Linda Felker, Christopher Ferro, Martha Fethe, John Fitzpatrick, Mary Ellen Flowers, Graham Floyd, Hunter Folmar, Tony Ford, Ann Forster, David Foster, Noah Frade, Cole Fredricks, Bruce Furlow, Rafael Galvez, Lawrence Gardenhire, Laura Gaudette, Ivy Gibbons, John Gibbons, Jerry Gibson, Colin Gjervold, Marcello Gomes, Louise Gomez, Larry Goodman, Carl Goodrich, Pamela Graber, Jeffrey Graham, Tedd Greenwald, Larry Gridley, Ann Griffin, Debbie Grimes, Brad Hall, Mitchell Harris, Randy Harrod, Andrew Herriger, Kate Herriger, John Hintermister, Jon Hoch, Steve Hofstetter, Mardy Hornsby, Casey Irwin, Glen Israel, Will Johnson, Smith Juan, Steve Kaplan, Alan Keitt, Les Kelly, Wayne Kennedy, Adam Kent, Gina Kent, Grace Kiltie, Tammy Knuth, Andy Kratter, David Lagan, Jana Lagan, David LaGrange, Alex Lamoreaux, Gary Leavens, Janet Leavens, Sharon Levins, Ken Lewis, Fred Lohrer, Connie Long, Becky Loyacano, Tony Leukering, Stuart Mackenzie, Margeaux Maerz, Mike Manetz, Larry Manfredi, Jane Mann, Steve Mann, Len Manning, Phyllis Mansfield, Joe Marchionno, Lorraine Margeson, Elizabeth Martin, John Martin, Keeli Marvel, Paul Marvin, Johnathan Mays, Jim McGinity, Michael McMillian, Shelby McNemar, David McQuade, Tammy McQuade, Deirdre Meehan, Wendy Meehan, Carol Miller, Karl Miller, Kenny Miller, Mike Morgante, Don Morrow, Brent Moyer, John Murphy, Kris Nelson, Roy Netherton, Wade Nolan, Mike O'Brien, Cristen Olsen, David Olsen, Geoff Parks, Steve Parrish, Tom Perkins, Eric Plage, Pete Plage, Keith Pochy, Terry Pope, Bill Pranty, Bill Price, Donald Pridgen, Bruce Purdy, L. Quinlan, Steve Raduns, Diane Reed, Douglas Richard, Harry Robinson, Scott Robinson, Tom Rodriguez, Thomas Rohtsalu, Jon Rosenfeld, Rex Rowan, Lesley Royce, Shane Runyon, JoAnne Russo, Fran Rutkovsky, Nicola Salino, Chip Sasser, Earl Scales, Jr., Frank Schena, Victor Schwartz, Debbie Segal, Beth Senn, Carl Shavers, Barbara Shea, David Sherer, Bob Simons, David Simpson, Marvin Smith, Ron Smith, Daniel Stangeland, Aaron Stutz, Malcolm Swan, Paul Sykes, Bryan Tarbox, Sue Tavaglione, Ryan Terrill, Cathy Terry, Ezra Thompson, Russ Titus, Roberto Torres, Brandon Trentler, Robert Wallace, Eary Warren, Paul Waton, Tom Webber, Chuck Weber, Carol Wheeler, Audrey Whitlock, Graham Williams, Sam Wilson, Cuneyt Yilmaz, Travis Young, John Yuhasz, Jennifer Zelik.

Report prepared by **Kevin E. Dailey**, state compiler (6661 Beatrix Drive, Jacksonville, Florida 32226, <kedailey@yahoo.com>). Regional compilers are **Kevin E. Dailey**, **Robin Diaz** (200 Ocean Lane Drive #PB-1, Key Biscayne, Florida 33149, <rd4birds@bellsouth.net>), **Bob and Lucy Duncan** (614 Fairpoint Drive, Gulf Breeze, Florida 32561, <Town\_Point@bellsouth.net>), **Jim Eager** (350 Filmore Ave., Apt F-18, Cape Canaveral, Florida, 32920, beachbirder@bellsouth.net), **Charlie Ewell** (115 SW 51st Terrace, Cape Coral, Florida 33991, <anhinga42@comcast.net>), **Bev Hansen** (6573 Pine Meadows Drive, Spring Hill, Florida 34606, <bevalhansen@gmail.com>), **John Murphy** (766 Alligator Drive, Alligator Point, Florida 32346, <southmoonunder@mchsi.com>), **David Sherer** (123 Main Drive, Venus, FL 33960, <dlsherer@gmail.com>), and **Ron Smith** (1500 85th Avenue North, St. Petersburg, Florida 33702, <rsmithbirds@gmail.com>).



## BE A FRIEND OF FFN

*Florida Field Naturalist* is the journal of FOS, an important communication vehicle for the Florida scientific and birding community. Increasing costs need to be offset with a combination of member dues and contributions.

Please consider a donation of \$50, \$100, \$200 or more to FRIENDS OF FFN. Your gift will allow FFN to improve its artwork, including four-color photographs of rarities similar to the one of the state's first Varied Bunting, published in the February 2006 issue, and other improvements in the content and appearance of our journal.

Contributions to FRIENDS OF FFN will be added to a special endowment of FOS, the interest of which will be used to improve the journal. Please write a check payable to the Florida Ornithological Society and specify that the gift is for FOS Friends of FFN. Send your check to the Treasurer: Charles H. Fisher, Jr., c/o Reilly, Fisher & Solomon PA, 4950 W. Kennedy Blvd., Ste. 610, Tampa, FL 33609. Email: chflshercpa@hotmail.com

We thank the following generous donors for contributing to FRIENDS OF FFN:

### 2013

Silvio Crespo, Jr.  
Larry Hribar  
Mary Landsman  
John Murphy  
Robin Diaz  
Andrew Kratter  
Robert & Lucy Duncan  
Michael Brothers  
James E. Cavanagh, Jr.  
Robert Budliger  
Tim Towles  
Nancy Prine

### 2014

Stephen Gross  
William Courser  
David Hartgrove  
John Murphy

Robin Diaz  
Larry Hribar  
Wilfred Yusek  
Silvio Crespo, Jr.  
James E. Cavanagh, Jr.  
Kevin & Marie Dailey  
St Johns River WMD  
(In Memory of Judy Bryan)  
Richard L. West  
Billi Wagner  
William Post  
John L. Wuepper  
Michael Brothers  
Wade Nolan  
Ann Paul  
Anthony White  
Stuart R. Wilson  
James E. Cavanagh, Jr.  
Silvio Crespo, Jr.

Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Hartgrove  
 Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2015**

James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Hartgrove  
 Larry Hribar  
 Dennis Meritt  
 William Post  
 Nancy A. Prine

**2016**

Michael Brothers  
 James E. Cavanagh, Jr.  
 Silvio Crespo, Jr.  
 Kevin & Marie Dailey  
 Robin Diaz  
 Bob & Lucy Duncan  
 Todd Engstrom

David Goodwin  
 David Hartgrove  
 Earl & Dorothy Horn  
 Barbara C. Kittleson  
 John Michael Murphy  
 Stephen Nesbitt  
 Will Post  
 Nancy A. Prine  
 Raymond G. Scory  
 Paul Sykes

**2017**

Michael Brothers  
 James E. Cavanagh, Jr.  
 Silvio Crespo  
 Kevin & Marie Dailey  
 Robin Diaz  
 Todd Engstrom  
 David Goodwin  
 David Hartgrove  
 Earl & Dorothy Horn  
 Fred & Charlotte Lohrer  
 Travis & Karen MacClendon  
 Dennis Meritt  
 John Michael Murphy  
 Ann Paul  
 Will Post  
 Walter K. Taylor

**SPECIAL PUBLICATIONS OF THE  
FLORIDA ORNITHOLOGICAL SOCIETY**

- M. C. BOWMAN. 1978. **Species Index to Florida Bird Records in *Audubon Field Notes* and *American Birds*, Volumes 1-30, 1947-1967.** Florida Ornithological Society Special Publication No. 1. xii + 43 pages. \$4.
- J. A. COX. 1987. **Status and Distribution of the Florida Scrub Jay.** Florida Ornithological Society Special Publication No. 3. vii + 110 pages. \$8.
- R. W. LOFTIN, G. E. WOOLFENDEN, AND J. A. WOOLFENDEN. 1991. **Florida Bird Records in *American Birds* and *Audubon Field Notes* (1947-1989): Species Index and County Gazetteer.** Florida Ornithological Society Special Publication No. 4. xiv + 99 pages. \$8.
- R. W. LOFTIN. 1991. **West Indian Bird Records in *American Birds* and *Audubon Field Notes* (1947-1990): Species Index by Islands.** Florida Ornithological Society Special Publication No. 5. ix + 90 pages. \$8.
- W. B. ROBERTSON, JR. AND G. E. WOOLFENDEN. 1992. **Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 6. ix + 260 pages. FOS members: \$15 soft cover, \$20 hard cover; Non-members: \$18 soft cover, \$23 hard cover.
- G. E. WOOLFENDEN, W. B. ROBERTSON, JR., AND J. COX. 2006. **The Breeding Birds of Florida.** Florida Ornithological Society Special Publication No. 7. ii + 142 pages. \$12.
- J. S. GREENLAW, B. PRANTY, AND R. BOWMAN. 2014. **The Robertson and Woolfenden Florida Bird Species: An Annotated List.** Florida Ornithological Society Special Publication No. 8. viii + 435 pages. \$24.

**To order Special Publications:** Please send a check payable to the *Florida Ornithological Society* to the Treasurer:

**Charles H. Fisher, Jr.**  
**c/o Reilly, Fisher & Solomon PA**  
**4950 W. Kennedy Blvd., Ste. 610**  
**Tampa, FL 33609**  
**E-mail: chf1shercpa@hotmail.com**

For Special Publication Number 8 only, there is a flat price of \$24, which *includes* tax and shipping.

For all other Special Publications, your check should include the price given in the list above plus tax and shipping as determined here:

**Shipping:** Add \$2 shipping for 1-5 copies; \$4 for 6-10 copies.

**Sales Tax:** Florida residents add the sales tax for the county in which the Special Publications will be delivered. Calculate the sales tax based on the total cost of the special publications plus shipping.



# Florida Field Naturalist

ISSN 0738-999X

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

**EDITOR:** SCOTT ROBINSON, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. Email: srobinson@flmnh.ufl.edu

**MANAGING/COPY EDITOR:** TOM WEBBER, Florida Museum of Natural History, University of Florida, P.O. Box 117800, Gainesville, FL 32611-7800. Email: twebber@flmnh.ufl.edu

**ASSOCIATE EDITOR** (for bird distribution): BRUCE ANDERSON, 2917 Scarlet Road, Winter Park, FL 32792. Email: scizortail@aol.com

## INFORMATION FOR CONTRIBUTORS

*Florida Field Naturalist* is a refereed journal emphasizing biological field studies and observations of vertebrates, especially birds, in or 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/content/ffn-article-submission-guidelines>) for style, noting especially that manuscripts should:

- (1) be double-spaced throughout, including table- and figure captions;
- (2) include the scientific name at the first mention of each species;
- (3) include capitalized standard English names for all birds, but lower case for English names of other organisms;
- (4) use 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) use active voice where at all possible.

Submit manuscripts, and books for review, to the Editor, Scott Robinson. Field observations should be sent to a regional compiler of the Field Observations Committee (see Field Observations, this issue, and <http://www.fosbirds.org/content/submit-observation>). Reports of birds for which the FOS Records Committee requires documentation (see <http://fosbirds.org/content/records-committee>) should be sent to the Secretary of the Committee, Andrew W. Kratter, Florida Museum of Natural History, P.O. Box 117800, Gainesville, FL 32611-7800; Email: kratter@flmnh.ufl.edu.

# Florida Field Naturalist

PUBLISHED BY THE FLORIDA ORNITHOLOGICAL SOCIETY

---

VOL. 45, No. 4

NOVEMBER 2017

PAGES 103-125

---

## CONTENTS

### ARTICLES

- Eleven recent additions to the exotic avifauna of Florida  
*Bill Pranty and Valeri Ponzo* ..... 103-109

### NOTES

- Red-eyed Vireo (*Vireo olivaceus*) plunges into pond in apparent foraging  
maneuver  
*Ken F. Tracey and Jon S. Greenlaw* ..... 110-112

### FIELD OBSERVATIONS

- Spring Report: March-May 2017  
*Kevin E. Dailey* ..... 113-122

### ANNOUNCEMENTS

- Friends of FFN. .... 123-124  
FOS Special Publications ..... 125