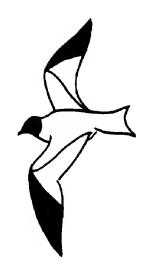




# WESTERN BIRDS



Volume 6, Number 4, 1975

# SEABIRDS IN WASHINGTON'S OFFSHORE ZONE

TERENCE R. WAHL, 3041 Eldridge, Bellingham, Washington 98225

Accounts of "pelagic" seabirds in Washington given by Jewett et al. (1953) reflect a virtual lack of offshore observations before 1953. Subsequent observations made primarily between 100-1200 km off the coast in pelagic waters during oceanographic surveys are reported by Sanger (1965, 1970, 1972b). Martin (1942) and Martin and Myres (1969) report sightings and specimens acquired during salmon and tuna fishing cruises off British Columbia and northern Washington. Yocom (1947) reports sightings off southern Oregon. Gruchy et al. (1972) give notes of records from 50°N 145°W. A few other short notes (Alcorn 1942 and 1946, Kenyon 1950, Slipp 1952, Wahl 1970) and seasonal reports in field ornithology journals comprise most of the published seabird records off Oregon, Washington and British Columbia.

Between September 1966 and September 1975 I made a series of 42 one-day trips offshore from Westport, which is about 80 km north of the Washington-Oregon border, in Grays Harbor County, Washington. Trips were made aboard chartered sportfishing vessels in the general "Grays Canyon" area, between about 46°30' to 47°10'N and to 125° 20'W, up to about 100 km offshore (Figure 1). Eight of these trips reached water depths of 1800 m or greater. The trips were made between 16 April and 16 October.

## THE OFFSHORE ZONE

The offshore zone includes the continental shelf and slope seaward from about 10 km off the coast to a depth of about 1800 m. This generally follows Wynne-Edwards (1935). Washington's offshore zone extends to about 120 km off the coast. The shelf is cut by several submarine canyons and the beginning of the continental rise is from 28 to 53 km off the coast.

# METHODS AND RESULTS

On the first eleven trips, numbers of birds seen were estimated on arrival back at port. Beginning in September 1971 all species of birds seen were recorded by numbers estimated after periods of 30 to 60 minutes. Records of visibility and sea conditions, along with features such as feeding activity and concentrations, species associations, ships, etc., locations and sea surface temperatures were taken when possible. Usually two experienced observers, one each in bow and stern, observed continuously and periodically they together estimated numbers on a pre-printed checklist. A fixed transect width was not used, but corrections were made for numbers duplicated in counts. I was present on all trips and recorded birds alone on two occasions. D. R. Paulson shared compilation on 15 trips; D. Heinemann, A. Benedict, J. Duemmel, R. Furrer, E. Hunn, D. L. Pearson, E. W. Stiles and W. Tweit assisted on other trips.

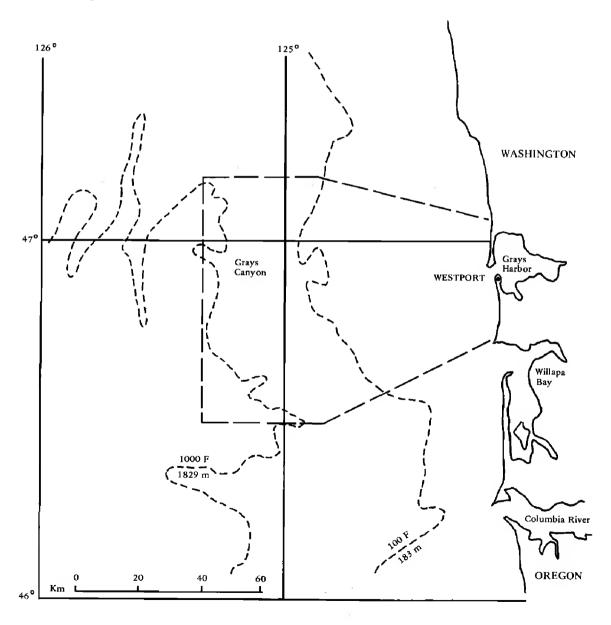


Figure 1. Study area off Westport, Washington.

Table 1 gives daily totals on 31 trips on which systematic records were taken. First and last one-half hour counts are omitted, thus inshore zone birds are generally excluded. Table 2 gives occurrence rates both for all trips and for seasons of species' occurrence, range of dates species were noted, and periods of peak occurrence.

# SPECIES ACCOUNTS

Abundance designations below generally follow those used by Robbins et al. (1966). Casual refers to irregular, usually in small numbers. Each status description refers to that likely in the offshore zone. Audubon Field Notes and American Birds record citations are abbreviated AFN and AB, respectively.

SHORT-TAILED ALBATROSS (Diomedea albatrus). Presumably a casual visitor. A bird photographed on 3 May 1970 was identified as a sub-adult of this species (Wahl 1970). The quality of the photograph is poor, and the record should be considered a "possible". However, this species certainly occurs in the eastern North Pacific (Sanger 1972a). The most recent regional record appears to be that on 24-26 June 1971 at Ocean Station 'P', the Canadian weathership station at 50°N, 145°W (Gruchy et al. 1972). All Washington records appear to be from the spring season (Jewett et al. give dates of April to June).

The white albatross sightings related by Jewett et al. probably refer to the Laysan Albatross, a species not credited for Washington in 1953. In view of the record of the Shy Albatross collected off Washington in 1951 (Slipp 1952), the regular occurrence of one dark and one light species, and the discussion by Gochfeld and Tudor (1975) of possible confusion of albatrus with vagrant Wandering Albatrosses (D. exulans), all albatrosses should be scrutinized.

BLACK-FOOTED ALBATROSS (Diomedea nigripes). Common visitor. Has occurred all months of the year, but largest numbers are apparently in April to October, with few birds present in winter (Sanger 1974a). We noted Black-foots primarily from about 140 m depth to the edge of the continental shelf. Numbers decreased beyond the edge of the continental shelf, though Jehl (1973) comments that off southern California in October Black-foots were virtually absent from shelf waters, and uncommon but regular over 1800 m and greater depths. While there may be differences in biological features, this likely shows lack of commercial fishing vessel attraction off southern California. Large numbers off Washington appear related to known fishing activity. On 12 September 1971 approximately 250 gathered at a Japanese stern trawler which had been operating continuously for two days. On days following storms, when local vessels were not fishing and no foreign vessels were known to be in the area, we found albatrosses and other ship-followers in low numbers and scattered, likely representing a normal distribution when birds utilize natural food sources only. Albatrosses are occasionally seen inshore, probably due to ship-following (e.g. one seen in July 1974 over about 25 m depth off Grays Harbor).

We noted large numbers on occasions through our range of dates, with numbers decreasing in October. On 15 October 1972 there were about 11,000 California Gulls and many other birds present at a working fleet of six Russian stern trawlers, but only 2 Black-foots were found—far fewer than would be expected, though we did see 37 on 7 October 1973. Sanger (1974a) indicates that winter distribution in the northeastern Pacific is poorly known.

Table 1. Birds regularly observed on 31 trips in the offshore zone off Westport, Washington. First and last one-half hour counts are omitted to exclude inshore zone.

	16 April 1972	6 May 1973	12 May 1973	14 May 1972	16 May 1975	18 May 1975	19 May 1974	17 Jun 1973	19 Jul 1975	22 Jul 1973	23 Jul 1972	27 Jul 1975	12 Aug 1973	13 Aug 1972	17 Aug 1975	24 Aug 1975
Black-footed Albatross	∞	50	13	93	23	25		13	23	41			29	09	21	17
Northern Fulmar	3	1	I	29	П	1		33	86	172			82	313	130	21
Pink-footed Shearwater	I	21	37	8	99	52		17	37	54			53	6	44	62
Flesh-footed Shearwater	1	15	22	3	4	S		1	1	m			1	1	-	m
Buller's Shearwater	I	1	I	l	1	l		1	1	ı			1	I	10	∞
Sooty Shearwater	15200	11025	4150	1255	4615	0099		245	3950	6850			5548 (	5885	6409	705
Fork-tailed Storm-Petrel	9	1	28	29	11	10		41	32	55			S	99	109	12
Leach's Storm-Petrel	1	ł	l	I	1	1		1	1	30				1	99	13
Red Phalarone	ł	1	ı	l	1	I		I	1	1			1	81	2	33
Northern Phalarope		32	718	305	40	15		I	22	10			1	46	19	35
Pomarine laeger	1	ł	1	I		3		l	10	1			-	13	28	12
Parasitic laeger	١	ł	I	ı	S	I		2	1	I	1		1	1	<b>∞</b>	~
Long-tailed Jaeger	1	1	I	I	1	1		1	l	I	-		I	1	_	S
South Polar Skua	I	1	1	1	l	1		١	8		+-		1	I	7	33
Glaucous-winged Gull	58	+	604	7	46	42		19	24	œ	S		9	1	_	4
Western Gull	90	+	1020	107	113	40		113	53	486	19		9	33	37	10
Herring Gull	21	20	9	4	I	1		1	1	I	I		I	I	1	1
California Gull	21	25	56	4	7	9		13	12	12	11		88	459	133	6
Black-legged Kittiwake	299	7	I	11	12	9		1	7	1	4			1	33	I
Sabine's Gull	1	7	æ	4	33	7		æ	1	2	7		7	24	<b>∞</b>	4
Arctic Tern	I	I	I		1	1		I	+				1	13	ĸ	4
Common Murre	492	206	194	545	593	255		105	170	756	132		561	1351	128	43
Cassin's Auklet	32	3	4	I	9	2		9	<b>∞</b>	71	140		2	153	59	32
Rhinoceros Auklet	23	11	10	28	22	51		4	1	Ŋ	1		<b>∞</b>	13	19	_
Tufted Puffin	1	33	12	∞	2	l		6	<b>∞</b>	6	33		r	∞	1	11
Fishing vessels <sup>1</sup>	I	2L	2+L 1L	1L, 4F	3F	4F		1	9 P	2F	3 F		2L	11C	79	1
Hours of observation	6.5	5.0	7.0	7.0	6.5	7.0		7.0	9.0	8.0	8.0	9.0	8.0	7.5	9.0	8.0
Maximum km offshore	54	35	104	25	61	64		64	72	85	52		28	66	83	82

	25	7	7	œ	œ	6			11	12			7	15	16
	Aug 1974	Sep 1974	Sep 1975	Sep 1973	Sep 1974	Sep 1972	Sep 1973	Sep 1972	Sep 1971	Sep 1971	Sep 1972	Oct 1974	Oct 1973	Oct 1972	Oct 1971
Rlack-footed Albatross	12	11	23	36	7	28			17	250			37	2	10
Northern Fulmar	9	ı	П	244	l	4			18	400			534	117	329
Pink-footed Shearwater	16	77	2286	225	115	48			21	331			98	104	3
Flesh-footed Shearwater	1		ì	r	1	1			1	7			9	2	1
Buller's Shearwater	4	12	207	712	7	18			ĸ	31			870	509	153
Sooty Shearwater	742	7470	6450	1180	950	3823			162	2590			2770	1445	1300
Fork-tailed Storm-Petrel	27	I	118	236	26	1			24	29			39	1	15
Leach's Storm-Petrel	7	١	1	1	10	I			1	İ			1	I	1
Red Phalarope	4	3	ı	ł	I	7			20	30			5	ĸ	1
Northern Phalarope	12	27	13	41	3	10			13	S			Ŋ	1	S
Pomarine Jaeger	5	13	27	9	1	21			9	Ŋ			S	_	S
Parasitic Jaeger	l	20	10	S	<b>∞</b>	12			2	10			4	1	m
Long-tailed laeger	l	I	<b>5</b> 2	1	I	I			2	4				I	1
South Polar Skua	I	1	7	ĸ	1	I			П	r			I		
Glancons-winged Gull	19	89	13	25	+	10			+	9			156	36	23
Western Gull	33	44	62	112	+	42			+	40			175	155	56
Herring Gull	!		I	<b>-</b>	I	I			2	1			11	21	4
California Gull	51	536	63	069	33	129			+	1707		_	605	11276	38
Black-legged Kittiwake	1	I	I	<b>-</b>	1	1			1	1			15	m	20
Sabine's Gull	4	23	13	27	ĸ	74			40	415			4	1	I
Arctic Tern	18	20	170	7	17	37			2	4			1	1	l
Common Murre	3021	682	172	1030	332	322			323	100			87	710	260
Cassin's Auklet	8	123	10	177	355	100			54	108			27	2	14
Rhinoceros Auklet	7	12	90	28	21	1			33	12			10	7	4
Tufted Puffin	2	3	4	ĸ	4	١			1	6			I	l	П
Fishing vessels	1	3F	$1\Gamma_5$	4L,1F	۸.	1T			١	1 F			2L	1L,6F	I
Hours of observation	7.5	7.5	8.5	8.0	4.0	7.5			7.5	7.5			6.5	7.5	0.9
Maximum km offshore	74	64	29	<b>2</b> 5	72	80			<b>5</b> 2	64			62	55	<b>88</b>

Tobserved vessels only: L=local (trawler, shrimper); F=foreign (trawler, processor)

Vessels present; little effect on presence of birds

As Martin experienced (Martin and Myres 1969), this species seemed to respond more readily to "chum" in summer and fall than in spring, though somewhat inconsistently. If only a few albatrosses were attracted to our vessel, they generally were cautious, allowing gulls to dominate feeding. In mid-summer, when the large flocks of California Gulls were absent and numbers of Black-foots were chummed-in they quickly became aggressive and competitive.

LAYSAN ALBATROSS (Diomedea immutabilis). Not listed for Washington by Jewett et al. Probably uncommon in winter, uncommon to rare in late summer. We photographed one with a concentration of about 250 Black-footed Albatrosses on 12 September 1971, and a bird was filmed by a charterboat skipper about 90 km WNW of Grays Harbor on 10 September 1972. Usually a white albatross is reported each summer by charterboat skippers in the offshore zone.

Table 2. Species regularly observed on 42 trips in offshore zone off Westport, Washington. Occurrence rates are given as percentages of all trips (OR) and of all trips during species' season of occurrence (Season OR).

	No. of trips seen	OR	Range of dates seen	Season OR	Date of peak numbers seen in offshore zone
Black-footed Albatross	40	95.2	16 Apr-16Oct	95.2	May-Sep
Northern Fulmar	36	85.7	16 Apr-16 Oct	85.7	Sep-Oct, variable in Jul-Aug
Pink-footed Shearwater	39	92.9	2 May-16 Oct	95.1	Sep
Flesh-footed Shearwater	21	50.0	6 May-16 Oct	53.8	May, Sep-Oct
Buller's Shearwater	20	47.6	17 Aug-16 Oct	87.0	Oct
Sooty Shearwater	42	100.0	16 Apr-16 Oct	100.0	Apr-May, Aug-Sep
Fork-tailed Storm-Petrel	39	92.9	16 Apr-16 Oct	92.9	mid-May-late Sep
Leach's Storm-Petrel	10	23.8	20 Jul-8 Sep	62.5	Jul-Aug
Red Phalarope	18	42.9	2-19 May, 13 Aug-15 Oct	20.0 66.7	May Aug-Sep
Northern Phalarope	37	88.1	2-19 May,	100.0	May
Pomarine Jaeger	34	81.0	19 Jul-16 Oct 2-19 May, 19 Jul-16 Oct	90.0 50.0 96.7	Aug-Sep May Aug-late Sep
Parasitic Jaeger	31	73.8	2-19 May, 17 Jun-15 Oct	80.0 74.2	May Aug-late Sep
Long-tailed Jaeger	9	21.4	23 Jul-24 Sep	40.9	late Aug-mid-Sep
South Polar Skua	16	38.1	19 Jul-6 Oct	61.5	late Aug-early Sep
Glaucous-winged Gull	42	100.0	16 Apr-16 Oct	100.0	
Western Gull	42	100.0	16 Apr-16 Oct	100.0	
Herring Gull	17	40.5	16 Apr-19 May 7 Sep-16 Oct	45.5 60.0	early May Oct
California Gull	42	100.0	16 Apr-16 Oct	100.0	mid-May, mid-Aug-Oct
Black-legged Kittiwake	39	92.9	16 Apr-19 May,	100.0	Apr-early May
			19 Jul-16 Oct	93.3	Oct
Sabine's Gull	35	83.3	2 May-15 Oct	85.4	mid-May, early Sep
Arctic Tern	17	40.5	18-19 May, 13 Aug-24 Sep	18.3 78.9	early Sep
Common Murre	42	100.0	16 Apr-16 Oct	100.0	
Cassin's Auklet	39	92.9	16 Apr-16 Oct	92.9	Aug-mid-Sep
Rhinoceros Auklet	41	97.6	16 Apr-16 Oct	97.6	mid-May, early Sep
Tufted Puffin	33	78.6	16 Apr-16 Oct	78.6	•

Records for August off Vancouver Island and Oregon (AB 25:75, 1971; AB 26: 107, 1972; AB 27:107, 1973), off northern California in June (AB 28:944, 1974), and the report by Alcorn (Kenyon 1950) of three white-bodied albatrosses (likely this species) about 40 km off Destruction Island on 23-24 August 1949 indicate the species is present at least occasionally in summer.

Records of Sanger (1970, 1974b) and Campbell (AB 25:615, 1971), two records off Oregon (AB 26:107, 1972; AB 26:893, 1972; AB 27:105, 1973), and 11-13 records off northern California (AB 26:112, 1972; AB 27:813, 1973; AB 28:99, 1974; AB 28:846, 1974; AB 29:736, 1975) during the fall-winter-spring season indicate the species is to be expected well offshore in winter at least occasionally.

NORTHERN FULMAR (Fulmarus glacialis). Common in winter well offshore, with numbers decreasing in spring and variable numbers of non-breeders seen at fishing vessels in July and into fall. (Jewett et al. mention no summer records.) Jehl (1973) states that 1971 was a "flight year" off southern California, and we had high counts in September and October, as we did in 1973. Very few were recorded in 1974, but an increase was apparent in 1975.

Fulmars were usually noted over 70 m depth or greater, though an occasional bird is seen from shore. About 10% of birds seen were of "Light" or "Double-light" plumage (see Fisher 1952), though 21 of 29 birds seen on 14 May 1972 were light phase.

Fulmars gathered readily when chummed and usually approached more closely than California Gulls. On one such occasion fulmars soundly pecked an idling Blue Shark (*Prionace glauca*) on the snout several times, though any sudden movement by the shark produced quick but brief flight response by the birds.

PINK-FOOTED SHEARWATER (Puffinus creatopus). Common offshore from May through October, though there are late April records for Washington and British Columbia (Martin 1942) and a Washington date for 20 November (pers. obs.) Our high count was 2286. Large numbers are attracted to fishing vessels. Usually seen offshore from about the 70 m contour, though occasional birds are seen inshore with Sooty Shearwaters.

FLESH-FOOTED SHEARWATER (Puffinus carneipes). Uncommon offshore visitor and migrant, with apparent year-to-year variations. Jewett et al. list the species as a "casual visitor." The lack of sightings prior to 1970 may have been partly due to a lack of observer experience. Other than our offshore sightings there are few state records: one off Cape Flattery, 18 June 1920 (Jewett et al. 1953), one seen from shore at Cape Disappointment, Pacific County in September 1965 (AFN 20:81, 1966), and one off Westport 9 May 1971 (AB 25:787, 1971). Martin saw up to 30 on the Goose Island Banks off northern Vancouver Island (Martin and Myres 1969); we saw 15 and 22 on two May trips. All but 6 of our 84 sightings were in proximity to known fishing activity. Except for plumage differences, this species is very similar in behavior to the Pink-footed Shearwater, often flying high above the surface, circling and soaring. Like the Pink-foot it competes vigorously for discards from fishing vessels. We have noted it particularly following shrimp trawlers.

BULLER'S SHEARWATER (Puffinus bulleri). Variably common fall migrant offshore, with records for Washington from 17 August through 30 October. We recorded the species on 20 of 23 trips within the range of 17 August to 16 October, and on all trips within this range subsequent to 1970. Jewett et al. report one record for the state. We first noted the species in 1968, with dramatic increases following 1970 and a count of 870 (most in one flock) in October 1973. Numbers were lower in 1974 and 1975. Other Washington records include 1 bird seen from shore at Westport on 23 August 1975 (F. Scheider pers. comm.), 2

from shore and 8 offshore in September 1965 (AFN 20:82, 1966), and 30 off the coast on 20 October 1971 (AB 26:107, 1972). An early date is 7 August 1926 off the British Columbia coast (Nichols 1927). Guiguet (1971) cites a record of birds "seen daily in the first 10 days of July 1971" off northwestern Vancouver Island, and there is a late record of one bird off Dixon Entrance, Queen Charlotte Sound, B.C., on 2 November (AB 26:107, 1972).

Buller's were usually seen flying individually or in small loose groups. We saw about 700 in one "pure" resting flock which when flushed took flight together, flew a short distance and landed again in a tight flock. Other birds, especially Pink-footed Shearwaters, often joined resting flocks of Buller's. While individuals or flocks were often seen in the general area of fishing activity, this species was seldom if ever seen feeding on the discards of vessels.

Slow wing-beat, graceful buoyant flight, brilliant white underparts and sharply contrasting dark crown and gray back, in addition to the characteristic "M" pattern across the wings, make Buller's easily identifiable at great distances.

SOOTY SHEARWATER (Puffinus griseus). Common to abundant, with state records from March through December. Recorded on all trips, and the most abundant species noted. Numbers generally decreased about 5 km offshore. We noted Sooties beyond the continental shelf, but in comparatively quite low numbers. On 16 April we noted approximately 10,000, 50-60 km offshore, feeding actively on natural prey with Black-legged Kittiwakes. This was the largest number we noted offshore, and unlike our experience later in the season.

Very large numbers are often seen inshore in late afternoon especially in the fall. At peak times 500,000 to one million (H. Nehls pers. comm., AFN 24:83, 1970) have been estimated feeding in Grays Harbor or Willapa Bay, often preying on anchovies (Engraulis sp.). This species usually ignored our chum altogether. However, there were occasions (May 1975, for example) when Sooties responded actively to chum and fishing vessel discards. This possibly resulted from poor natural feeding conditions.

SHORT-TAILED SHEARWATER (Puffinus tenuirostris). This species is now best described as uncommon or irregular. We have not certainly identified it on any trip offshore, though at-sea differentiation between this species and the Sooty Shearwater is extremely difficult in some conditions. "Up to a dozen" were seen 67 km of Westport on 9 May 1971 (AB 25:787, 1971).

A number of old coastal records for Washington are cited by Jewett et al., who describe the species as an "offshore wanderer at all seasons." Beached birds recently recovered near Westport are one in December 1973, one in May and one in December 1974, one in June and three in July 1975 (W. Tweit pers. comm.). There are recent records off Oregon (AB 28:938, 1974) and a few others off northern California and Monterey Bay in winter and spring (AB 25:620, 1971; AB 26:112, 1972; AB 26:650, 1972; AB 27:813, 1973; AB 28:99, 1974; AB 29: 736, 1975).

Several old Washington records appear to have been of disease-weakened birds which likely were beached following storms. There are a few records for August (e.g. Dawson 1908) and September, including one on 11 August 1970 in Queen Charlotte Sound, B.C. (AFN 24:708, 1970), but most are for late fall and winter.

FORK-TAILED STORM-PETREL (Oceanodroma furcata). Jewett et al. described the Fork-tail as a "rather rare migrant and winter visitor." Breeding for Washington was not confirmed until 1959 (Richardson 1960). The species is common offshore during the summer and is very likely present all year. It is occasionally seen in inshore waters (particularly during foggy periods) and in the Strait of Juan de Fuca, though less than 1% of the birds we recorded were in waters less than 90 m deep.

We noted the species in quite variable numbers. This was felt due to local conditions. Normally, individuals or very small groups were seen, but up to 20 were found occasionally following fishing vessels. On 8 September 1973, 236 scattered birds were recorded.

This is the common storm-petrel of colder waters off the coast and our experience reflects that numbers decrease as sea surface temperature increases in transects going offshore. Sanger (1972b) describes the pelagic status of the species as year-round, fewer in winter. W. Hoffman (pers. comm.) reports several beached specimens for Oregon from January to March 1972.

LEACH'S STORM-PETREL (Oceanodroma leucorboa). Common in the off-shore zone, in warmer waters than the Fork-tail. There are Washington records for all months except January, though Sanger (1970) suggests the species may be absent in winter (in pelagic waters, at least). He did describe this as the species most frequently seen (after Black-footed Albatross) in offshore waters in February-March, May and June. We noted the species between 20 July and 8 September, usually in small scattered groups. On several occasions as our vessel crossed from the boundary of the cool Davidson current to the warm west wind drift, the eastward extension of the Kuroshio current of the western Pacific (see Fisher and Fisher 1972, Martin and Myres 1969 and Sanger 1970 for descriptions of the general oceanographic regime of the northeastern Pacific Ocean), the storm-petrel composition changed from Fork-tail to both species, then to Leach's almost exclusively.

Martin and Myres (1969) state Leach's is the most frequently observed, if not the most abundant bird in the west wind drift, that it is not abundant until sea surface temperature exceeds 14°C and that the water temperature preference for the species is identical to that of Albacore (Thunnus alalunga). Sea surface temperatures are below 14°C during much of the year, of course, and "warm" water may not be within foraging range of Leach's nest sites. Sanger's (1970) February-March records offshore may refer to O. l. leucorhoa, the form nesting in the northern Pacific areas where sea surface temperatures at the warmest period of the year are below the coldest off Washington, where beali is the nesting race. Kuroda (1955) recorded the species in the Bering Sea in June over water of 3°C.

Away from colonies, Leach's is reported occasionally in the Straits of Juan de Fuca (AFN 18:66, 1964) at least following storms, and "wrecks" occur during foggy or inclement weather (AFN 20:82, 1966).

RED PHALAROPE (Phalaropus fulicarius). Common migrant offshore. Washington records are from 30 April through 19 May and 14 July through 21 December. Occasionally seen inshore, including the Strait of Juan de Fuca and Puget Sound, particularly following storms. Large numbers may be seen in the offshore zone, though we recorded the species only twice in spring. Martin and Myres (1969) state the species appears to prefer warmer waters in fall migration and our fall sightings generally agreed with this. The species was usually seen in small numbers associating with Northern Phalaropes. Numbers of unidentified phalaropes were recorded in the fall and are omitted from Table 1.

NORTHERN PHALAROPE (Lobipes lobatus). Common spring and fall migrant offshore as well as inshore. We recorded larger numbers in spring than in the more protracted fall movement. Along the coast there are also records from 27 April to 10 June, and as late as 26 December.

POMARINE JAEGER (Stercorarius pomarinus). Described as a rare migrant by Jewett el al., the Pomarine is a common migrant offshore. Our counts were low in spring—largest numbers occurred between mid-August and early October. Generally found farther offshore than the Parasitic Jaeger. We recorded a total of 276 sightings on 34 trips and of these only 18 were 10 km or less from shore.

PARASITIC JAEGER (Stercorarius parasiticus). Common migrant. Records for Washington range from 30 April through 22 November, though we did not see it offshore in July. Migration patterns appear similar to those of the Pomarine Jaeger. The Parasitic is the common inshore jaeger, seen frequently in Puget Sound and the Strait of Juan de Fuca on migration, but we also recorded it throughout the offshore zone. Of 175 sightings, 35 birds were either in Grays Harbor channel or within 10 km of shore. Seventy-one unidentified jaegers (not shown in Table 1) were believed to have been either Pomarine or Parasitic.

LONG-TAILED JAEGER (Stercorarius longicaudus). Not mentioned by Jewett et al., this is an uncommon if irregular fall migrant. Our dates ranged from 20 July through 24 September, and the birds were well offshore, over relatively warm waters. Recorded occasionally inshore and in Puget Sound. Latest fall record appears to be of one bird seen in the eastern Strait of Juan de Fuca following an ocean storm on 25 October 1963 (AFN 18:67, 1964).

Ten sightings occurred on three trips in 1971, another bird was seen from shore at Ocean Shores, Grays Harbor County, on 25 September 1971 (AB 26:109, 1972), and we had two sightings in 1972. In 1975 one bird was seen on 17 August and five were seen on 24 August. An estimated 55 were seen over warm water well offshore on 7 September 1975; 4 adults with full tail extension and approximately 30 "short-tailed" adults and 21 immatures comprised this exceptional aggregation. Records suggest fall migration dates similar to those of Sabine's Gull and Arctic Tern.

SOUTH POLAR SKUA (Catharacta maccormicki). Uncommon migrant off-shore from 19 July through 6 October, though Jewett et al. list a number of specimens and sightings of "C. skua" for 28-30 June 1917. We recorded 44 birds on 16 trips, with a total of 8 birds occurring on 8-9 September 1973. High daily counts were 7 on both 17 August and 7 September 1975. The species was noted primarily over depths of 100-900 m, though individuals occurred at 70 m depth near fishing vessels and 3 were between 900-1800 m depth on another trip. Sightings often occurred when birds were attracted to fishing vessels, etc., though birds were also noted apparently migrating directly south.

Efforts to determine the species or subspecies of skuas off our coast have really only recently begun. Godfrey (1966) states C. s. lonnbergi occurs off British Columbia. Alcorn (1942, 1946) identified four specimens taken off Washington as antarctica and four as lonnbergi. Jehl (1973), commenting on Deviller's manuscript on the subject, states "it now appears the vast majority of skua records from the west coast of the United States are referable to the South Polar Skua, C. maccormicki", but says he is confident he has also seen C. s. chilensis off California. All the skuas I have seen were either typical light-bodied birds or blackish-brown birds of the same size, and all were believed maccormicki. Further field work is necessary; see also comments by McCaskie (1973).

Skuas are occasionally reported inshore and in Puget Sound, and I saw one pale-bodied bird in Grays Harbor channel on 8 September 1973. However, lack of details and possible confusion with immature Pomarine Jaegers make caution necessary in accepting inshore records.

GLAUCOUS-WINGED GULL (Larus glaucescens). Small numbers were found regularly at fishing vessels well offshore. Common resident inshore, nesting from Destruction Island, Jefferson County, north. This species is present all year all along the Washington coast. Sanger (1973) remarks on the pelagic occurrence of numbers in winter (adult Glaucous-wings represented 38% of all birds seen in an offshore study area in January) but winter status over the continental shelf is uncertain.

WESTERN GULL (Larus occidentalis). Found offshore in small numbers. More numerous than the Glaucous-winged Gull close to shore, but often less numerous at feeding concentrations far offshore. Abundant resident along the coast. Sanger (1973) does not report Western Gulls in pelagic study areas far offshore.

HERRING GULL (Larus argentatus). Present offshore in small numbers in spring, and from late August into October, after which numbers presumably increase during winter. Sanger (1970, 1972b, 1973) discusses mid-ocean occurrence with maximum numbers and widest distribution in winter; a dispersal away from land in fall and return to land in spring is indicated.

Due to past confusion of this species with Thayer's Gull, further winter censuses are especially desirable. It is presently believed the Herring Gull is the more numerous coastal and offshore species, and Thayer's more numerous in Puget Sound.

THAYER'S GULL (Larus thayeri). Casual offshore. We recorded this species once in April and twice in October. A juvenile was seen in October 1973 62 km off the coast in a mixed feeding flock. The species is relatively common coastally in winter and is then the third most common gull in northern Puget Sound (after Glaucous-winged and Mew gulls.) Status throughout Washington requires further study.

CALIFORNIA GULL (Larus californicus). Seasonally common to abundant in the offshore zone. This gull was often one of the most abundant species recorded far offshore in August and into October, usually outnumbering all other species at fishing vessels then. On 15 October 1972 six working Russian stern trawlers attracted an estimated 11,000 Californias.

In September there are thousands of Californias on the ocean beaches and it is possible that first-year birds in particular, which must compete not only with older Californias but also with the abundant and larger Glaucous-winged and Western gulls, may be forced to forage offshore where they are found to the limit of fishing activity. We have seen juveniles, wing-tagged at Wyoming nesting colonies in June (K. Diem pers. comm.), 80 km offshore at fishing vessels in September. I. Robertson (pers. comm.) reports the status of the California Gull off the British Columbia coast is similar to that off Washington.

RING-BILLED GULL (Larus delawarensis). Casual. Single first-year birds were seen offshore on two occasions, with large feeding flocks of California Gulls, once in late July and once in early September.

MEW GULL (Larus canus). Casual. One first-year bird, feeding 100 km offshore with Californias on 6 October 1974 was the only Mew Gull we recorded in the offshore zone. The species is the second most common gull in winter in Puget Sound.

BONAPARTE'S GULL (Larus philadelphia). Uncommon offshore in spring and fall. A very common migrant along the coast. We recorded small flocks of 8 to 20 migrating over 100-300 m depth, 35-65 km offshore, once in April and on three trips in October.

BLACK-LEGGED KITTIWAKE (Rissa tridactyla). Common offshore from late fall through early spring, uncommon from May through October. We have seen large numbers offshore only once, in April, when 692 were seen in several flocks up to 54 km offshore. Large flocks are usually present coastally in spring and fall. Small numbers are found in harbors all summer and feed close inshore. Abundance varies from year to year. It is uncommon in Puget Sound, but in 1969 there were large numbers in summer both along the coast and in Puget Sound (AFN 23:687, 1969).

SABINE'S GULL (Xema sabini). Described by Jewett et al. as an "apparently rare spring and fall migrant along the ocean coastwise," this is a common migrant in the offshore zone, and we noted it all during our trip season from May to October. Numbers apparently decrease abruptly by early October. Our counts show considerable year-to-year variation, though offshore it is one of the species seen most consistently. High count was 449 in September 1971. Our peak numbers occurred in 1970 and 1971 and, in view of comments on the decrease of sightings off California (Remsen and Gaines 1974), future trends will be of interest. Martin apparently saw Sabine's over the continental shelf off British Columbia, but not over pelagic waters (Martin and Myres 1969).

These birds often altered course to check on feeding activity behind vessels, but they generally stayed at the fringe of the flock, perhaps due to competition with larger, more aggressive and numerous species.

COMMON TERN (Sterna birundo). Uncommon migrant offshore. We have recorded with certainty this common coastal migrant only on three trips in the offshore zone, with Arctic Terns.

ARCTIC TERN (Sterna paradisaea). Described by Jewett et al. as a "probably uncommon migrant," this is a common fall migrant offshore. Washington records range from 15 April through 30 May, and 7 August through 30 September. We saw Arctics twice in spring and in small flocks on 15 of 19 trips between 13 August and 24 September, though 170 were seen on 7 September 1975. We noted Arctics several times resting on logs or floating debris offshore. Most sightings were over 150-400 m depth.

COMMON MURRE (Uria aalge). Common from spring through fall, winter status offshore uncertain. This common nesting species is abundant in a "belt" along the coast, usually between depths of about 55 and 110 m. It shows some movement farther offshore when young go to sea, with some birds then seen to the edge of the continental shelf, though very large concentrations remain near shore. Shuntov (1972) states that murres are found mainly over the continental shelf in the eastern North Pacific in winter. There are few observations in the Washington offshore zone in winter (and relatively few murres are seen from shore then). There is a very sizable winter influx into Puget Sound, which reportedly includes birds from south of Washington (Jewett et al. 1953), and numbers may decrease in coastal waters at that season.

PIGEON GUILLEMOT (Cepphus columba). Casual in the offshore zone. Common inshore. Normally we noted birds only in protected waters from Westport harbor to the jetty. However, single individuals were seen 56 km offshore on 13 August 1972, 45 km offshore on 16 May 1975, and four flying birds were seen on 24 August 1975, 43 km offshore over 130 m depth. All these birds were in adult summer plumage.

XANTUS' MURRELET (Endomychura hypoleuca). Uncommon late summer and fall visitor. Jewett el al. list occurrence in Washington as hypothetical. We noted 3 scattered pairs on 11 October 1970 in water of 14°C, at least 3 separate individuals on 8 September 1974, and 20 on 24 August 1975, from near inshore to 130 m depth, in water of about 16°C. Martin collected a male and female in water of about 16°C about 200 km SSW of Cape Flattery on 7 August 1947 (Cowan and Martin 1954). Inshore, Jewett recovered a specimen at Copalis Beach, Grays Harbor County, on 6 December 1941 (Feinstein 1958). Other records from Oregon (AB 25:98, 1971) and British Columbia (AB 26:110, 1972), like these off Washington, indicate northward movement along—and counter to—warm currents offshore from nesting locations off southern California or Baja California.

ANCIENT MURRELET (Synthliboramphus antiquus). Probably a fairly common migrant offshore. We noted five birds 55 km offshore on 16 April 1972. Jewett et al. discuss other spring sightings offshore. These were probably birds migrating north from wintering areas along the Pacific Coast. The species has nested off Washington as well as British Columbia. W. Hoffman (pers. comm.) reports a pair in breeding plumage off Alexander Is., Jefferson County, on 14 June, and suggests "it seems likely a few may still breed." In winter the species is locally common along the Strait of Juan de Fuca and in Puget Sound.

CASSIN'S AUKLET (Ptychoramphus aleuticus). Common offshore from April through October; reputedly winters offshore as well (Jewett et al. 1953). We found the species in numbers farther offshore than other alcids. However, our very few sightings in deeper waters beyond the continental shelf, plus Sanger's (1972b) apparent lack of pelagic sightings of this species, suggest that the shelf is the normal year-round limit of the Cassin's Auklet feeding range.

This species was recorded on all but three trips. Largest concentrations were usually in water of 150-700 m depth, in localized feeding areas. More so than other species this one was usually seen only as it was flushed by the moving vessel and was seldom seen sitting on the surface. When spray conditions prevented observation from the bow, numbers seen were low. Generally an observer in the stern saw only 10-20% of the birds seen from the bow. The count of 565 in September represents a nearly flat sea, excellent light, and large concentrations.

RHINOCEROS AUKLET (Cerorbinca monocerata). Common in the offshore zone spring through fall; winter status uncertainly known. A common local breeding species (on Destruction Island, Jefferson County), recorded on all trips. though often in relatively small numbers in the offshore zone, from Grays Harbor channel out to about 1600 m depth. Early spring and September and October counts indicate non-breeding distribution is relatively farther offshore, to the edge of the continental shelf. The species winters to some extent in the Strait of Juan de Fuca and Puget Sound, and apparently to a much larger extent farther along the Pacific coast. Jewett et al. state "the bulk of the population doubtless winters at sea," though Sanger (1972b) does not corroborate this.

HORNED PUFFIN (Fratercula corniculata). Irregular. I photographed a flight-less immature about 48 km offshore on 19 July 1975. There were numerous records along the Pacific Coast in 1975 (AB 29:115, 1975; AB 29:122, 1975; AB 29:909, 1975; AB 29:1023, 1975; AB 29:1027, 1975; AB 29:1032, 1975). Records along the West Coast south of the 49th parallel through 1973, including five from Washington, are summarized by Hoffman et al. (1975). Two of these Washington records fall in January, two in April and one in June. Alcorn (1959) describes a winter kill of about 200 puffins along one mile of beach near Grayland, Grays Harbor County, in a ratio of about two Tufted Puffins to one Horned Puffin.

TUFTED PUFFIN (Lunda cirrhata). Uncommon to common offshore in summer; winters farther offshore (Jewett et al. 1953, Kuroda 1955, Gruchy et al. 1972, Sanger 1972b). Counts were low in early spring and in October. From 1 to 17 birds were seen on 33 trips. We noted puffins occasionally close inshore but usually in the offshore zone to the edge of the continental shelf and in pelagic waters farther offshore.

Juvenile birds were normally noted in early fall but three flightless immatures were seen on 19 July and 7 were seen on 24 August 1975. These apparently were evidence of an unusual distribution of non-breeding puffins, perhaps related to abnormally cold water temperatures over much of the North Pacific in 1975. Tufted Puffins were usually seen flying singly or in pairs, often approaching the vessel from a distance and circling one to several times (see Kuroda 1955).

## CASUAL SEABIRD SPECIES

SHY ALBATROSS (*Diomedea cauta cauta*). A bird of the nominate race of this species collected on 1 September 1951 about 60 km off Cape Alava, Clallam County, (Slipp 1952) appears to be the only northern hemisphere record (Palmer 1962).

RED-BILLED TROPICBIRD (Phaethon aetherus). There is one specimen, taken off Westport in June 1941 (Flahaut 1947). This and the sight record about 740 km W of Cape Blanco, Oregon (Yocom 1947) are apparently the only records north of California.

# HYPOTHETICAL SPECIES

MANX SHEARWATER (Puffinus puffinus). Status is uncertain. Listed as hypothetical by Jewett et al., there are published inshore sight records with details of varying quality (Dawson 1908; AB 25:95, 1971; AB 28:93, 1974). There are two specimens and several sight records for British Columbia (Guiguet 1953) and "almost certain" sight records for Alaska (D. Heinemann and W. Russell pers. comms.).

MOTTLED PETREL (Pterodroma inexpectata). Campbell's photographs 46 km off British Columbia and sight records about 280 km off Washington (AB 25: 615, 1971), one beached specimen in Oregon in July 1959 (Wallace 1961) and two in March 1972 (AB 26:644, 1972), sightings in the Gulf of Alaska (Sanger 1972b) and 540 at 48½°N, 126½°W about 112 km WNW of Cape Flattery, Clallam County, on 28 April 1972 by Mobberley (Bourne and Dixon 1975), indicate the species occurs in Washington pelagic waters. One live bird seen from Ocean Shores, Grays Harbor County (G. and W. Hoge pers. comm.) and one beached specimen found near Copalis, Grays Harbor County (J. Smith, fide P. Mattocks), in late February 1976 show occurrence in the offshore zone is virtually certain.

RED-LEGGED KITTIWAKE (Rissa brevirostris). Jewett et al. considered this species hypothetical. In view of three beached specimens for Oregon (Gabrielson and Jewett 1940, Munroe 1953, Walker 1955), the sight report of 27 January 1974 at Leadbetter Point, Pacific County (AB 28:681, 1974) is mentioned.

THICK-BILLED MURRE (*Uria lomvia*). This species has occurred quite consistently in recent years in California (Yadon 1970, AB 27:115, 1973; AB 27:659, 1973; AB 29:737, 1975) and there are two beached specimens for Oregon (Scott and Nehls 1974). It is very likely, but unreported, in Washington.

MARBLED MURRELET (Brachyramphus marmoratus). Reports of this species in the offshore zone are probably attributable to one of the other small alcids. We never saw Marbled Murrelets more than about 300 m seaward of the Westport jetty. They are seldom seen more than a few hundred meters from shore, even in protected waters in Puget Sound.

PARAKEET AUKLET (Cyclorrynchus psittacula). There are old records for Washington (Jewett et al. describe it as a rare winter visitor in the Puget Sound region), and sight records for Destruction Island, Jefferson County, in June 1974 (D. Nieschwander pers. comm.) and off southern Vancouver Island on 24 February 1971 (AB 25:617, 1971). The species almost certainly occurs in winter in the offshore zone at least occasionally.

## DISCUSSION

With few exceptions (Jehl 1973), formal surveys in eastern North Pacific waters have seldom included the significant number of birds over the continental shelf. Our data, while difficult to compare quantitatively with those pelagic summaries of Sanger (1970, 1972b), indicate that off Washington birds are most abundant over the shelf; when we cruised up to 16 km past the 1800 m depth contour, birds were virtually absent. Not only is natural food more available over the shelf than it is in deeper waters just beyond the shelf (see Ashmole 1971, Ryther 1969, Shuntov 1972) and probably farther offshore, but also commercial fishing activity most attractive to seabirds—shrimp trawling and dragging—takes place over the shelf.

The effects of fishing activity on seabirds will be discussed elsewhere (Wahl in prep.). Species primarily associated with fishing vessels off Washington are Black-footed Albatross, Northern Fulmar and California Gull. Also obviously associated with fishing activity are Pinkfooted and Flesh-footed shearwaters, Glaucous-winged, Western and Herring gulls. The jaegers and skua are less directly associated but rather consistently found at vessels when prey species are present. Buller's Shearwater, phalaropes, terms and alcids appear virtually unaffected by fishing vessels.

The status farther offshore over pelagic waters of several species discussed above is uncertainly known. Sanger (1970, 1972b) does not mention sightings off Washington of Pink-footed, Flesh-footed or Buller's shearwaters, Red Phalarope, California Gull, Sabine's Gull, or Cassin's or Rhinoceros auklets for seven replicate cruises 100-1200 km off the west coast in 1964 and 1965 and twenty additional research cruises. He mentions few sightings of Northern Phalarope, Pomarine and Parasitic jaegers, skua and Arctic Tern. Our experience is that these species are regular over the continental shelf and many are common. Systematic observations over the continental slope and adjacent waters are desirable during all seasons. The difference in status of various species over the shelf and over open pelagic waters might prove to be substantial.

Large-scale oceanographic regimes over the northeastern Pacific Ocean undoubtedly have significant influence over the occurrence of birds off Washington. Detailed analysis of the relationship of sea surface temperatures, upwelling and other features of biological productivity with seabirds are beyond the scope of this paper and will be discussed elsewhere (Wahl in prep.).

The lack of winter observations in the offshore zone is important. Since winter trips offshore in small vessels are impractical if not impossible, ornithological observations from research or Coast Guard vessels are highly desirable.

# **SUMMARY**

Records of seabird sightings from 42 one-day trips off Westport, Washington, over the continental shelf during the April-October sport-fishing season between 1966 and 1975 are presented. Status of seabirds in the offshore zone is updated on the basis of data from these trips and other published and unpublished records.

## ACKNOWLEDGMENTS

Dennis R. Paulson particularly deserves credit for field observations and is due my sincere thanks for valuable advice, assistance and encouragement. Dennis Heinemann assisted on trips, in research and in commenting on an earlier draft of this paper. Alan Baldridge and Joseph R. Jehl also made many helpful suggestions on an earlier version. David L. Pearson, Gerald A. Sanger, David Ainley and M. Timothy Myres provided encouragement. Thanks are due also to many individuals who assisted at sea, and to hundreds of people and bird-watching groups who made the offshore trips possible.

## LITERATURE CITED

- Alcorn, G. D. 1942. The status of the skuas of the state of Washington. Condor 44:218-221.
- Alcorn, G. D. 1946. Another record of the skua from the state of Washington. Condor 48:246-247.
- Alcorn, G. D. 1959. Puffins on the south Grays Harbor beaches. Murrelet 40:21.
- Ashmole, N. P. 1971. Sea bird ecology and the marine environment. Pages 223-286 in D. S. Farner and J. R. King, eds. Avian Biology, vol. 1. Academic Press, New York.
- Bourne, W. R. P. and T. J. Dixon. 1975. Observations of seabirds 1970-1972. Sea Swallow 24:65-88.
- Cowan, I. McT. and P. W. Martin. 1954. A new northern record for Xanthus [sic] Murrelet, Brachyramphus hypoleuca. Murrelet 35:50.
- Dawson, W. L. 1908. New and unpublished records from Washington. Auk 25:482-485.
- Devillers, P. MS. The South Polar Skua, Catharacta maccormicki, on the Pacific coast of North America.
- Feinstein, B. 1958. Xantus' Murrelet (Endomychura hypoleuca scrippsi) from the state of Washington. Auk 75:90-91.
- Fisher, H. I. and J. R. Fisher. 1972. The oceanic distribution of the Laysan Albatross, *Diomedea immutabilis*. Wilson Bull. 84:7-27.
- Fisher, J. 1952. The Fulmar. Collins, London.
- Flahaut, M. 1947. Red-billed Tropicbird taken at Westport, Washington. Murrelet 28:6.
- Gabrielson, I. N. and S. G. Jewett. 1940. Birds of Oregon. Oregon State Univ., Corvallis.
- Gochfeld, M. and G. Tudor. 1975. Field identification of Short-tailed Albatross (*Diomedea albatrus*). Biol. Conserv. 8:153.
- Godfrey, W. E. 1966. The birds of Canada. Natl. Mus. Canada Bull. 203, Ottawa.

- Gruchy, C. G., A. A. R. Dykes and R. H. Bowen. 1972. The Short-tailed Albatross recorded at Ocean Station Papa, North Pacific Ocean. Can. Field Nat. 86:285-287.
- Guiguet, C. J. 1953. An ecological study of Goose Island, B.C., with special reference to birds and mammals. Occ. pap. No. 10. British Columbia Prov. Mus., Victoria, B.C.
- Guiguet, C. J. 1971. The birds of British Columbia. (9) Diving birds and tube-nosed swimmers. British Columbia Prov. Mus., Victoria, B.C.
- Hoffman, W., W. P. Elliott and J. M. Scott. 1975. The occurrence and status of the Horned Puffin in the western United States. West. Birds 6:87-94.
- Jehl, J. R. Jr. 1973. Late autumn observations of pelagic birds off southern California. West. Birds 4:45-52.
- Jewett, S. A., W. P. Taylor, W. T. Shaw and J. W. Aldrich. 1953. Birds of Washington State. Univ. Washington Press, Seattle.
- Kenyon, K. W. 1950. Distribution of albatrosses in the North Pacific and adjacent waters. Condor 52:97-103.
- Kuroda, N. 1955. Observations on pelagic birds of the northwest Pacific. Condor 57:290-300.
- Martin, P. W. 1942. Notes on some pelagic birds off the coast of British Columbia. Condor 44:27-29.
- Martin, P. W. and M. T. Myres. 1969. Observations on the distribution and migration of some seabirds off the outer coasts of British Columbia and Washington State, 1946-1949. Syesis 2:241-256.
- McCaskie, G. 1973. The spring migration. Southern Pacific coast region. Am. Birds 27:820.
- Munroe, J. A. 1953. Red-legged Kittiwake in Oregon. Murrelet 34:48.
- Nichols, J. T. 1927. Tubinares off the North-western coast. Auk 44:326-327.
- Palmer, R. S. 1962. Handbook of North American birds, vol. 1. Yale Univ. Press, New Haven, Conn.
- Remsen, V. and D. A. Gaines. 1974. The fall migration. Middle Pacific coast region. Am. Birds 28:98.
- Richardson, F. 1960. Breeding of the Fork-tailed Petrel off the Washington coast. Condor 62:140.
- Robbins, C. S., B. Bruun, and H. S. Zim. 1966. Birds of North America. Golden Press, New York.
- Ryther, J. H. 1969. Photosynthesis and fish production in the sea. Science 166:72-76.
- Sanger, G. A. 1965. Observations of wildlife off the coast of Washington and Oregon in 1963, with notes on the Laysan Albatross (Diomedea immutabilis) in the area. Murrelet 46:1-6.
- Sanger, G. A. 1970. The seasonal distribution of some seabirds off Washington and Oregon; with notes on their ecology and behavior. Condor 72:339-357.
- Sanger, G. A. 1972a. The recent pelagic status of the Short-tailed Albatross (Diomedea albatrus). Biol. Conserv. 4:189-193.
- Sanger, G. A. 1972b. Checklist of bird observations from the eastern North Pacific Ocean. Murrelet 53:16-21.
- Sanger, G. A. 1973. Pelagic records of Glaucous-winged and Herring gulls in the North Pacific Ocean. Auk 90:384-393.
- Sanger, G. A. 1974a. Pelagic studies of seabirds in the central and eastern North Pacific Ocean, III Black-footed Albatross (*Diomedea nigripes*). Smithsonian Contr. to Zool. no. 158:96-128.
- Sanger, G. A. 1974b. Pelagic studies of seabirds in the central and eastern North Pacific Ocean, IV Laysan Albatross (*Diomedea immutabilis*). Smithsonian Contr. to Zool. no. 158:129-153.

- Scott, J. M. and H. B. Nehls. 1974. First Oregon records for Thick-billed Murre. West. Birds 5:137.
- Shuntov, V. P. 1972. Sea birds and the biological structure of the ocean. (Transl. from Russian). TT74-55032, NTIS, U.S. Dept. of Comm. 1974.
- Slipp, J. 1952. A record of the Tasmanian White-capped Albatross, *Diomedea cauta cauta*, in American North Pacific waters. Auk 69:458-459.
- Wahl, T. R. 1970. A Short-tailed Albatross record for Washington State. Calif. Birds 1:113-115.
- Walker, A. 1955. Unusual bird records for western Oregon. Murrelet 36:29.
- Wallace, W. M. 1961. Scaled Petrel in Oregon. Condor 63:417.
- Wynne-Edwards, V. C. 1935. On the habits and distribution of birds on the North Atlantic. Proc. Boston Soc. Nat. Hist. 40:233-346.
- Yadon, V. L. 1970. Four Thick-billed Murre records for Monterey Bay. Calif. Birds 1:107-110.
- Yocom, C. F. 1947. Observations on bird life in the Pacific Ocean off the North American shores. Condor 49:204-208.

# 1973 REPORT OF THE CALIFORNIA FIELD ORNITHOLOGISTS RECORDS COMMITTEE

JON WINTER, Point Reyes Bird Observatory, Box 321, Bolinas, California 94924 GUY McCASKIE, Natural History Museum, P. O. Box 1390, San Diego, California 92112

The following is the second report of the CFO Records Committee and includes all reports received in 1973. The committee received 96 records, of which only 3 (3.1 percent) were found to be unacceptable. The latter figure attests to the very high quality of the records submitted to the committee in 1973 and represents a considerable improvement over the 1970-72 report period (Winter 1973).

It should be noted that some of the species contained in this report are no longer being reviewed by the committee. Because most of these records were already in hand when the revised list (Winter 1973:101) was published, the committee felt it only fair to review and publish them. The committee also decided not to review specimen-backed records, but to include such records in the annual report, along with the location of the specimens. These records are listed separately herein.

There has been some confusion on the part of many contributors as to the species that are acceptable for review by the committee. The following list includes those species that the committee is currently reviewing:

Yellow-billed Loon, Least Grebe, Wandering and Short-tailed albatrosses, Cape Petrel, Short-tailed and Streaked shearwaters, Galapagos and Wilson's storm-petrels, White-tailed Tropicbird, Brown and Red-footed boobies, Olivaceous Cormorant, Reddish Egret, Yellow-crowned Night Heron, White Ibis, Bewick's and Trumpeter swans, Emperor Goose, Black-bellied Tree Duck, Black Duck, Baikal Teal, Tufted Duck, King Eider, Mississippi Kite, Zone-tailed and Harris' hawks, Gyrfalcon, Yellow Rail, Purple Gallinule, American Oystercatcher, Piping and Wilson's plovers, Dotterel, European Jacksnipe, Upland, Sharp-tailed, White-rumped, Rufousnecked, Curlew, Semipalmated and Buff-breasted sandpipers, Bar-tailed and Hudsonian godwits, Ruff, Black-headed and Little gulls, Thick-billed Murre, Kittlitz's Murrelet, Parakeet Auklet, Black-billed Cuckoo, Grove-billed Ani, Snowy Owl, Broad-billed Hummingbird, Red-headed Woodpecker, Thick-billed Kingbird, Sulphur-bellied, Great Crested and Olivaceous flycatchers, Eastern Phoebe, Least and Coues' flycatchers, Blue Jay, Gray Catbird, Curve-billed Thrasher, Rufous-backed Robin, Wood and Gray-cheeked thrushes, Veery, Wheatear, White Wagtail, Redthroated and Sprague's pipits, White-eyed, Yellow-throated, Yellow-green and Philadelphia vireos, Prothonotary, Worm-eating, Golden-winged, Blue-winged, Golden-cheeked, Cerulean, Yellow-throated, Grace's and Pine warblers, Louisiana Waterthrush, Kentucky, Connecticut, Mourning, Red-faced, Hooded and Canada warblers, Scarlet-headed Oriole, Common Grackle, Scarlet Tanager, Pyrrhuloxia, Varied and Painted buntings, Black Rosy Finch, Common Redpoll, Baird's, Le Conte's, Sharp-tailed, Cassin's and Field sparrows and Snow Bunting.

The committee also reviews all species that would be new to the California State list.

<sup>1</sup>Revised March 1976

The committee currently consists of ten members: Laurence C. Binford, Eugene Cardiff, Theodore Chandik, Alan M. Craig, David DeSante, Clifford R. Lyons, Guy McCaskie, Richard Stallcup, G. Shumway Suffel, and Jon Winter (Secretary).

Records are grouped according to the year in which they were observed regardless of the year received. The file number assigned to each record is in parentheses. All the records are on file with the committee secretary, and are available to interested researchers upon request. The initials of the observers who submitted the record are in italics, and unitalicized initials are those of additional observers.

Comments on the status of individual species in California were provided by Guy McCaskie. This commentary includes reference to records which are considered to be well documented, but it should be pointed out that many of the records mentioned have not been reviewed by the Records Committee.

# 1969 ACCEPTED RECORD

RUFOUS-NECKED SANDPIPER (Calidris ruficollis). One (9-1972) on 5 May 1969 at Humboldt Bay, near Eureka, Humboldt Co. (RG). This record was originally published as a rejected record in the 1972 report (Winter 1973:106). The main objection to the record by certain committee members was that first state records should be seen by more than one observer. Since the publication of this record this species has been collected in California (McCaskie 1975). There is an additional sight record from Arcata, Humboldt Co. on 17 June 1974 which has not yet been reviewed by the committee. In view of the above records the secretary was asked to re-circulate record 9-1972 for reconsideration. It was accepted on 2 September 1975 and should now be considered the first record for California.

# 1972 ACCEPTED RECORDS

WILSON'S STORM-PETREL (Oceanites oceanicus). One (15-1973) in Monterey Bay, Monterey Co. on 23 September 1972 (VR, AB, LCB, BR, SFB, TC, BF, BE).

One or two Wilson's Storm-Petrels are now found virtually every year on Monterey Bay during the fall period with dates ranging from 18 August to 1 November. In addition there is one record from near the Farallon Islands, another from off Morro Bay, and two more from off San Diego during the same period.

BLUE-FOOTED BOOBY (Sula nebouxii). Up to 40 present between 22 July and 24 September 1972 (36-1973). Summary as follows: 12 on 22 July, 10 on 29 July, 40 on 5 August, 35 on 12 August, 16 on 26 August, 3 on 24 September, all near the mouth of the Whitewater River, Riverside Co., and 5 on 12 August near the mouth of the New River, Imperial Co. (GMcC, PT, RT, GSS, RW, KG, JD, SL, BR, HN, RS, DDeS, TM, TC). One (35-1973) on 23 October 1972 at Lake San Marcos, San Diego Co. This individual is believed to have been present from late August until 14 December 1972 when it was found dead (GMcC).

Blue-footed and Brown boobies are somewhat regular post breeding wanderers from the Gulf of California, sometimes appearing in numbers (McCaskie 1970). An influx in late July 1972 brought both species to the Salton Sea, and probably accounts for the individual present in San Diego County.

BROWN BOOBY (S. leucogaster). Two immatures on 5 and 12 August 1972 and a single immature on 26 August 1972 at the mouth of the Whitewater River, Salton Sea, Riverside Co. (34-1973) (GMcC, SL, BR, HN, DDeS, RS, TC, TM).

MAGNIFICENT FRIGATEBIRD (Fregata magnificens). One immature (39-1973) on 25 June 1972 at the mouth of the Whitewater River, Salton Sea, Riverside Co. (GMcC, KG, GSS, JD). One adult female (37-1973) on 6 July 1972 near the mouth of the Tijuana River, San Diego Co. (GMcC). One immature (38-1973) on 22 July 1972 at the mouth of the New River, Salton Sea, Imperial Co. (GMcC, SL, SuL, BR, ME).

Magnificent Frigatebirds are rare but regular late summer wanderers to both the coast of southern California and the Salton Sea (McCaskie 1970).

LITTLE BLUE HERON (Florida caerulea). One immature (28-1973) on 21 November 1972 at Upper Newport Bay, Orange Co. (CWS, AS). One adult (40-1973) on 22 July 1972 near the mouth of the New River, Salton Sea, Imperial Co. (GMcC, BR, SL, SuL). One immature (30-1973) on 11 September 1972 at Bolsa Chica, Orange Co. (CWS). One immature and one adult (29-1973) on 24 November 1972 at Bolsa Chica, Orange Co. (CWS). It is believed that a total of 3 birds (2 immatures and 1 adult) were present in coastal Orange Co. during the fall 1972 (GMcC pers. comm.). An immature was still present on 17 February 1973 at Bolsa Chica (GSS pers. comm.).

The first verified Little Blue Heron was found by Jeter and Paxton (1964) at Bodega Bay in March 1964. Since that time it has been found along the coast in Santa Barbara, Los Angeles, Orange and San Diego counties on various dates between 9 September and 13 June. Single birds have been seen somewhat regularly around San Francisco Bay since 1965. The individual herewith reported from the Salton Sea appears to be the first found away from the coast in California.

ROSEATE SPOONBILL (Ajaia ajaja). Five immatures (41AB-1973) on 8 July 1972 at the mouth of the New River, Salton Sea, Imperial Co. (GMcC, SL, SuL, BR). Four birds were still present at the same location on 16 July 1972 (GMcC pers. comm.). See comments under 1973 accepted records.

BLACK-BELLIED TREE DUCK (Dendrocygna autumnalis). Two (43-1973) on 29 July 1972: one bird at the mouth of the New River and one at the Salton Sea National Wildlife Refuge (Unit 1), Imperial Co. (GMcC, PT, RT).

The only records of Black-bellied Tree Ducks worthy of consideration as true vagrants, as opposed to escapees, prior to 1972 were one shot by a hunter in the Imperial Valley during the fall of 1912 (Bryant 1914) and another seen there 12 June 1951 (Aud. Field Notes 5:308, 1951).

BROAD-WINGED HAWK (Buteo platypterus). One adult (42-1973) on 18 November 1972 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (GMcC, RLeV, SS, JB). This bird was held captive for about two weeks and was later released in the San Luis Rey River Valley, San Diego Co. Two members of the committee indicated that the point of origin of this bird was questionable.

The Broad-winged Hawk has been seen regularly in California since the first record was made in 1966 (McCaskie 1968). It is noted as a fall migrant in September and October and one or two are found during the winter each year. The Deep Springs record (see 1973 accepted records) is only the second reported in spring.

CURLEW SANDPIPER (Calidris ferruginea). One immature (1-1973) on 17 September 1972 at the mouth of Pescadero Creek, San Mateo Co. (TC, DDeS, ZC, RD).

This is the second Curlew Sandpiper to be found in California, the first being one photographed (photo on file, San Diego Natural History Museum) at Rodeo Lagoon, Marin Co. on 7 September 1966.

LONG-TAILED JAEGER (Stercorarius longicaudus). One adult (45-1973) at sea 15 miles east of San Clemente Island on 9 September 1972 (GMcC and many observers).

Long-tailed Jaegers are undoubtedly regular fall migrants offshore but few observers have the opportunity to venture out to the waters where they occur, hence there are only a few specific records.

BLACK-HEADED GULL (Larus ridibundus). One second year bird (44AB-1973) on 20 July 1972 in the northeastern corner of Humboldt Bay, Humboldt Co. (GMcC, EH, LJ, GF, RS, LCB, DDeS, TC, TS, RLeV).

This bird, which was present 16-23 July 1972, is only the second Black-headed Gull to be reported in California. The first was an adult in Richmond, Alameda Co., on 23-24 January 1954 (Gull 36:15, 1954).

THICK-BILLED MURRE (Uria lomvia). One (46-1973) on 7 October 1972 four miles west of Moss Landing, Monterey Bay, Monterey Co. (GMcC and many observers).

This species was first found in California in 1964 when an adult female was found on the beach near Monterey (Yadon 1970), and has been seen around Monterey Bay virtually every year since.

CRAVERI'S MURRELET (Endomychura craveri). At least 30 (47-1973) on 9 September 1972 at sea off San Diego, San Diego Co. (GMcC and many observers). One (2AB-1973) on 14 August 1972 at Moss Landing, Monterey Co. (TC, BY, CY, ZC).

Craveri's Murrelets are regular late summer wanderers to southern California waters with some occasionally moving as far north as Monterey Bay.

EASTERN PHOEBE (Sayomis phoebe). One (12-1973) on 3 December 1972 at Lake Sherwood, Los Angeles Co. (EM). One (48-1973) on 14 October 1972 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (GMcC, SS, RM).

Eastern Phoebes are casual wanderers to California in the fall and winter, being recorded annually nowadays. The Lake Sherwood bird remained in the area until at least 5 January 1973, and the Furnace Creek Ranch bird stayed through 17 October 1972.

COUES' FLYCATCHER (Contopus pertinax). One (11-1973) on 28 October 1972 at the Brock Research Center, Imperial Co. (SC).

This is the sixth Coues' Flycatcher to be found in California.

GRAY-CHEEKED THRUSH (Catharus minimus). One (13-1973) on 15 October 1972 at the RCA Station, Point Reyes National Seashore, Marin Co. (DDeS, PE). There are two previous records for this species from the Farallon Islands (one banded and one specimen), the details of which will be published elsewhere (D. Ainley pers. comm. 1976).

RED-EYED VIREO (Vireo olivaceus). One (49-1973) on 2 September 1972 at Scotty's Castle, Death Valley National Monument, Inyo Co. (GMcC, PT).

The Red-eyed Vireo is a rare but regular straggler to California in both spring and fall.

BLACK-THROATED GREEN WARBLER (Dendroica virens). One (21-1973) on 30 September 1972 on Otay Mesa, San Diego Co. (BB, KG, LJ, GSS). One (3-1973) on 4 November 1972 at Scotty's Castle, Death Valley National Monument, Inyo Co. (MSM, GMcC).

BLACKBURNIAN WARBLER (D. fusca). One (31-1973) on 9 October 1972 at Costa Mesa, Orange Co. (CWS). One (20-1973) on 30 September 1972 on the Otay Mesa, San Diego Co. (BB, KG, LJ, GSS).

OVENBIRD (Seiurus aurocapillus). One (32-1973) on 16-17 August 1972 22 miles south of Orick at Patrick's Point, Humboldt Co. (WS). One (17-1973) on 24 September 1972 at Oasis Ranch, Mono Co. (KG).

The Ovenbird is a regular straggler to California occurring as commonly in spring as in fall. This August sighting is exceptionally early for a fall vagrant.

ORCHARD ORIOLE (*Icterus spurius*). One (18-1973) on 26 August 1972 at Encino, Los Angeles Co. (*JD*). One (16-1973) on 23 September 1972 at Shoshone, Inyo Co. (*KG*, LJ).

The Orchard Oriole is a regular wanderer to California, being found in small numbers every year.

ROSE-BREASTED GROSBEAK (Pheucticus ludovicianus). One immature male (6-1973) on 30 September 1972 at Kelso, San Bernardino Co. (SC).

The Rose-breasted Grosbeak is a regular wanderer to California, occurring in small numbers every year.

PAINTED BUNTING (Passerina ciris). One adult male (50-1973) on 4 November 1972 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (GMcC, MSM). Eight members of the committee indicated that the point of origin of this individual was questionable.

The Painted Bunting was first noted in California in 1962 (McCaskie et al. 1967b), but to date there are still only a handful of acceptable records, all for the fall period.

BLACK ROSY FINCH (Leucosticte atrata). Two (24AB-1973) on 18 November 1972 at Westgard Pass, White Mountains, Inyo Co. (GMcC, BB, RLeV, SS, JB). This species was found at this location on 11 November 1972 by Eugene Cardiff, who collected one (San Bernardino Co. Museum No. 5107) out of a flock of about 1000 Gray-crowned Rosy Finches (L. tephrocotis).

There appear to be only two previous documented records for the Black Rosy Finch in California, one collected in Bodie, Mono Co., 15 January 1904 (Swarth 1928) and two collected in Westgard Pass on 19 November 1947 (McLean 1969), but it occurs regularly in western Nevada.

SHARP-TAILED SPARROW (Ammospiza caudacuta). Two (22AB-1973) on 20-24 November 1972 in Upper Newport Bay, Orange Co. (BB, CWS, LJ, GSS, RW).

These Sharp-tailed Sparrows were present in Upper Newport Bay 20 November 1972 to 17 February 1973. The species is a rare but probably regular winter visitor to the coastal marshes of California, but due to its secretive nature it is rarely reported.

CLAY-COLORED SPARROW (Spizella pallida). One (23-1973) on 21 October 1972 in the Tijuana River Valley, south of Imperial Beach, San Diego Co. (BB, GMcC, LI, GSS, RLeV).

The Clay-colored Sparrow is a regular fall vagrant to California occurring in small numbers every year.

CHESTNUT-COLLARED LONGSPUR (Calcarius ornatus). One (5-1973) on 1 October 1972 at Kelso, San Bernardino Co. (SC, EC).

The Chestnut-collared Longspur is a regular fall migrant through much of California in limited numbers with flocks of up to 60 individuals being recorded some years.

# 1973 ACCEPTED RECORDS

YELLOW-BILLED LOON (Gavia adamsii). One (63-1973) on 17 June 1973 at Princeton Harbor, Half Moon Bay, San Mateo Co. (VR, LCB, SFB).

This bird was present 17-25 June 1973. The Yellow-billed Loon is a very rare but regular winter resident to the central and northern coast of California. The status and distribution of this species along the Pacific coast south of Alaska has recently been reviewed by Remsen and Binford (1975).

OLIVACEOUS CORMORANT (Phalacrocorax olivaceus). One (64-1973) at West Pond 0.25 mile west of Imperial Dam, Imperial Co. on 7 April 1973 (BB).

Jones (1971) reported the first Olivaceous Cormorant at West Pond on 13 April 1971 and an individual of this species was again noted at West Pond on 22-23 April 1972 (Winter 1973). This is the third report of this species from California; however, since all three come from the same locality at approximately the same time of the year it appears likely all three sightings involve the same individual migrating along the Colorado River with Double-crested Cormorants (Phalacrocorax auritus).

LITTLE BLUE HERON (Florida caerulea). One adult (66-1973) on 5 June 1973 at Bair Island, Redwood City, San Mateo Co. (BE, LRM, DZ).

ROSEATE SPOONBILL (Ajaia ajaja). One immature (74-1973) on 2 July 1973 at Marina del Rey, Los Angeles Co. (CS).

A massive influx of Roseate Spoonbills to southern Arizona and southwestern California in late June 1973 carried some individuals all the way over to the coast to give us our first verified records from that area of California.

EURASIAN GREEN-WINGED TEAL (Anas crecca crecca). One male (54-1973) two miles southeast of the Fleming Unit headquarters, Honey Lake Wildlife Area, Lassen Co. on 26 March 1973 (RS, GM, BM).

This race of the Green-winged Teal is now found regularly along the coast of California in winter, especially in the northern part of the state. This is the first to be found away from the coast.

MISSISSIPPI KITE (Ictinia misisippiensis). One sub-adult (58-1973) on 30 May-1 June 1973 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (RS, PA, JT, MP, GMcC). This individual was present from 26 May-1 June 1973 (GMcC pers. comm.). One sub-adult (62-1973) on 14 June 1973 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (DDeS, JF, BN, EW). This individual is believed to be different from the bird reported in record 58-1973.

There are only three previous records of the Mississippi Kite in California, and all three are for the late spring period between 2 and 18 June.

BROAD-WINGED HAWK (Buteo platypterus). One adult (60-1973) on 12 June 1973 at Deep Springs College, Deep Springs, Inyo Co. (DDeS, JFa, BN, EW). See comments under 1972 accepted records.

SHARP-TAILED SANDPIPER (Calidris acuminata). One (77-1973) on 4-9 October 1973 at the Woodland Sugar Ponds, Woodland, Yolo Co. (RS and many observers).

The Sharp-tailed Sandpiper is a rare fall straggler to the coast of California (Atwood 1970); this represents the first acceptable record for an inland locality.

BAR-TAILED GODWIT (Limosa lapponica). One (90-1973) on 27-29 October 1973 on the southwest side of Bolinas Lagoon, Marin Co. (RS, GP, LS and many observers).

This bird was present from 26 October to 30 November and represents the second record for California.

HUDSONIAN GODWIT (L. haemastica). One (104-1973) on 9-10 August 1973 at the north end of Humboldt Bay, Humboldt Co. (RW).

This is the first Hudsonian Godwit to be recorded in California.

BLACK SKIMMER (Rynchops niger). One adult and one immature (81-1973) on 17 August 1973 at the mouth of the Whitewater River, Salton Sea, Riverside Co. (RS, BS, BC, AE, PW).

Black Skimmers nested at the Salton Sea in the summer of 1972 (McCaskie et al. 1974) and appear to be establishing themselves as regular summer visitors to that area.

HORNED PUFFIN (Fratercula corniculata). One (51-1973) on 13 May 1973 at sea 10 miles southwest of Anacapa Island (GMcC and many observers).

A live Horned Puffin in California waters is most unusual, though there are a number of records of dead or dying birds being found on beaches (Hoffman et al. 1975). The spring of 1975 saw an unprecedented number of these birds off southern California.

LEAST FLYCATCHER (Empidonax minimus). One immature (banded) (78-1973) on 26 September 1973 on Southeast Farallon Island, San Francisco Co. (RS, JH).

The Least Flycatcher is probably more numerous in California as a spring and fall vagrant than the handful of records now available would indicate. All acceptable records to date are of birds banded or collected.

CURVE-BILLED THRASHER (Toxostoma curvirostre). One (80-1973) on 24 July 1973 at the Brock Research Center, Imperial Co. (RS, PA, GM).

This is only the ninth reported occurrence of the Curve-billed Thrasher for California; the other eight records are all for the fall and early winter (McCaskie and Prather 1965, McCaskie et al. 1967a).

RED-EYED VIREO (Vireo olivaceus). One (61-1973) on 14 June 1973 at Scotty's Castle, Death Valley National Monument, Inyo Co. (DDeS. JF, BN, EW).

BLUE-WINGED x GOLDEN-WINGED WARBLER (Vermivora pinus x V. chrysoptera). One (73-1973) on 1 October 1973 at Fairhaven, Humboldt Co. (SS, TS and many observers). Normally the committee will not review hybrid records. It was felt that this record was unusual enough to warrant an exception to the rule.

A complete discussion of this occurrence is in print (Schulenberg and Summers 1974).

NORTHERN PARULA (Parula americana). One male (57-1973) on 30 May 1973 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (RS, PA).

A regular spring vagrant to California.

MAGNOLIA WARBLER (Dendroica magnolia). One immature (98-1973) on 18 October 1973 on Southeast Farallon Island, San Francisco Co. (RS, TJL, JH). One male (55-1973) on 21-22 May 1973 at Pt. Pinos, Monterey Co. (RS, GM).

At least ten other Magnolia Warblers were found in California during 1973.

BLACK-THROATED BLUE WARBLER (D. caerulescens). One immature female (99-1973) on 18 October 1973 on Southeast Farallon Island, San Francisco Co. (RS, JH). One immature male (91-1973) on 29 October 1973 at the headquarters of Point Reyes National Seashore, Marin Co. (RS, GSS, PM, HB). One immature male (93-1973) on 19 October 1973 on Southeast Farallon Island, San Francisco Co. (RS). One adult male (72-1973) on 15 October 1973 at Morongo Valley Park, San Bernardino Co. (GSS). One female (102-1973) on 14-15 October 1973 on Southeast Farallon Island, San Francisco Co. (RS).

About twelve Black-throated Blue Warblers were seen in California during the fall of 1973.

BLACK-THROATED GREEN WARBLER (D. virens). One (69ABC-1973) on 16 September 1973 at the Rosecroft Gardens, Pt. Loma, San Diego Co. (VR, RS, GSS, GMcC, JD, RLeV, DE).

At least eight other Black-throated Green Warblers were noted in California during the fall of 1973.

BLACKBURNIAN WARBLER (D. fusca). One immature male (92-1973) on 3 November 1973 at Kelso, San Bernardino Co. (RS, JL, SLu, GMcC, JD). One immature (100-1973) on 15 October 1973 on Southeast Farallon Island, San Francisco Co. (RS). One immature male (97-1973) on 18 October 1973 on Southeast Farallon Island, San Francisco Co. (RS). One immature (101-1973) on 15-18 October 1973 on Southeast Farallon Island, San Francisco Co. (RS, TJL, JH).

Blackburnian Warblers are regular fall vagrants to California with a total of ten seen in 1973.

CHESTNUT-SIDED WARBLER (D. pensylvanica). One (83-1973) on 21 September 1973 on Southeast Farallon Island, San Francisco Co. (RS). One adult male (65-1973) on 28 June 1973 at Anderson Marsh, near Clear Lake Highlands, Lake Co. (BE). One immature (70-1973) on 18 September 1973 at Yucca Valley Golf Course, Yucca Valley, San Bernardino Co. (GSS).

BAY-BREASTED WARBLER (D. castanea). One (82-1973) on 16 September 1973 at the Rosecrans Cemetery, Point Loma, San Diego Co. (RS, GSS, GMcC, JD, BB, RLeV, DE and many observers).

PINE WARBLER (D. pinus). One (84-1973) on 21 September 1973 on Southeast Farallon Island, San Francisco Co. (RS).

This is only the fourth acceptable record of a Pine Warbler for California.

PRAIRIE WARBLER (D. discolor). One (79-1973) immature on 7 October 1973 at the mouth of the Carmel River, Monterey Co. (RS, JL, TM, BF, BY, CY). One (105-1973) on 26 September 1973 on Pt. Loma, San Diego Co. (JJ).

The Prairie Warbler is a rare but regular fall vagrant to the coast of California, with four seen in 1973.

HOODED WARBLER (Wilsonia citrina). One male (76-1973) on 7 October 1973 near the mouth of the Carmel River, Monterey Co. (RS, JL, BF, BY, CY).

The Hooded Warbler is a very rare but regular wanderer to California, with a total of five seen during 1973.

PAINTED REDSTART (Setophaga picta). One (56-1973) on 16 April 1973 at Cottonwood Canyon, 20 miles north northwest of Stovepipe Wells, Death Valley National Monument, Inyo Co. (RS, JG, GM). This bird was first noted on 13 April 1973 (JG).

The Painted Redstart is a casual straggler to California but may be spreading westward from Arizona to colonize southern California mountains as a nesting species (Unitt 1974). This is the northernmost record for California.

ORCHARD ORIOLE (*Icterus spurius*). Two (52-1973), one female and one immature male, on 30 May 1973 at Scotty's Castle, Death Valley National Monument, Inyo Co. (RS, PA). One adult male (53-1973) on 31 May 1973 at Mesquite Springs Campground, Death Valley National Monument, Inyo Co. (RS, PA).

RUSTY BLACKBIRD (Euphagus carolinus). One (88-1973) on 4 November 1973 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (RS, GMcC, JD, JL, SLu, MP, NP). One male (89-1973) on 3 November 1973 at the Kelso train station, Kelso, San Bernardino Co. (RS, JL, SLu, GMcC, JD).

The Rusty Blackbird is found regularly in small numbers in eastern California during the late fall (McCaskie 1971).

ROSE-BREASTED GROSBEAK (Pheucticus ludovicianus). One adult male (71-1973) on 4 October 1973 in the Tijuana River Valley, San Diego Co. (GSS). 142

DICKCISSEL (Spiza americana). One (87-1973) on 4 November 1973 at Furnace Creek Ranch, Death Valley National Monument, Inyo Co. (RS, GMcC, JD, JL, SLu, MP, NP).

The Dickeissel is a regular straggler to the coast of Califonria but interior sightings are rare.

CLAY-COLORED SPARROW (Spizella pallida). One (94-1973) on 19 October 1973 on Southeast Farallon Island, San Francisco Co. (RS).

CHESTNUT-COLLARED LONGSPUR (Calcarius ornatus). One (85-1973) on 19 October 1973 on Southeast Farallon Island, San Francisco Co. (RS).

#### PENDING RECORDS

The following records are still under consideration by the committee:

HARCOURT'S STORM-PETREL (Oceanodroma castro). One (103-1973) on 12 September 1970, 25 miles west of San Diego, San Diego Co.

RED-BILLED TROPICBIRD (Phaethon aethereus). One (67-1973) on 29 June 1973 at Pescadero Marsh, San Mateo Co.

VEERY (Catharus fuscescens). One (95-1973) on 20 October 1973 on Southeast Farallon Island, San Francisco Co.

INDIGO BUNTING (Passerina cyanea). One (10-1973) on 30 September 1972 at Kelso, San Bernardino Co.

## SPECIMEN RECORDS

ORCHARD ORIOLE (Icterus spurius). One immature female collected on 30 September 1972 at Pachalkta Spring, at the southwest base of Clark Mt., San Bernardino Co. (SC) (San Bernardino Co. Museum No. 5057).

ROSE-BREASTED GROSBEAK (Pheucticus ludovicianus). One immature female collected on 24 September 1972 at the Brock Research Center, Imperial Co. (SC) (San Bernadino Co. Museum No. 5112).

INDIGO BUNTING (Passerina cyanea). One immature male collected on 1 October 1972 at Pachalkta Spring, San Bernardino Co. (SC) (San Bernardino Co. Museum No. 5096).

The Indigo Bunting is a regular visitor to eastern California.

# 1973 UNACCEPTED RECORDS

BROWN BOOBY (Sula leucogaster). One (68-1973) on 1 August 1973 at Point Reyes Beach, Point Reyes National Seashore, Marin Co.

LITTLE CURLEW (Numenius minutus). One (106ABC-1973) on 15 December 1973 in San Diego Bay, San Diego Co.

CRESTED AUKLET (Aethia cristatella). One (75-1973) on 4 July 1973 at Marina del Rey, Los Angeles Co.

# **CONTRIBUTORS**

Peter Alsing (PA), Stephen F. Bailey (SFB), Alan Baldridge (AB), Harold Baxter (HB), Laurence C. Binford (LCB), Bruce Broadbooks (BB), John Butler (JB), Eugene Cardiff (EC), Steve Cardiff (SC), Ted Chandik (TC), Zoe Chandik (ZC), Bill Clow (BC), David DeSante (DDeS), Jon Dunn (JD), Robert Dyer (RD), Art Earle (AE), Peter Egan (PE), Bruce Elliott (BE), Dick Erickson (DE), Mike Evans (ME), Janet Farness (JF), Gary Fredrichsen (GF), Bud Fry (BF), David A.

Gaines (DAG), Kim Garrett (KG), Ron Gerstenberg (RG), Jim Ginestra (JG), Jim Higby (JH), Eugene Hunn (EH), Jerry Johnson (JJ), Lee Jones (LJ), T. James Lewis (TJL), Ron LeValley (RLeV), Steve Liston (SL), Susan Liston (SuL), John Luther (JL), Susanne Luther (SLu), Rich MacIntosh (RM), Bill Manolis (BM), Georgianne Manolis (GM), Tim Manolis (TM), Edward Masthay (EM), Guy McCaskie (GMcC), Peter Metropolis (PM), L. Richard Mewaldt (LRM), Hazel Nichols (HN), Briggs Nisbet (BN), Gary Page (GP), Mike Prather (MP), Nancy Prather (NP), Bill Rapley (BR), Van Remsen (VR), Mike San Miguel (MSM), Carter Schleicher (CS), Tom Schulenburg (TS), C. W. Sexton (CWS), Wayne Shertz (WS), Arnold Small (AS), Richard Stallcup (RS), Lynn Stenzel (LS), Bob Stewart (BS), G. Shumway Suffel (GSS), Steve Summers (SS), Phil Tetlow (PT), Jerry Thompson (JT), Ric Thowless (RT), Peter Warshall (PW), Richard Webster (RW), Ed Winfield (EW), Bob Yutzy (BY), Carol Yutzy (CY), Dale Zimmerman (DZ).

#### LITERATURE CITED

- Atwood, J. L. 1970. Sharp-tailed Sandpiper in Santa Barbara. Calif. Birds 1:153-154.
- Bryant, H. C. 1914. Occurrence of the Black-bellied Tree-duck in California. Condor 16:94.
- Hoffman, W., W. P. Elliott and J. M. Scott. 1975. The occurrence and status of the Horned Puffin in the western United States. West. Birds 6:87-94.
- Jeter, H. H. and R. O. Paxton. 1964. Little Blue Heron collected in California. Condor 66:447.
- Jones, H. L. 1971. Olivaceous Cormorant record for California. Calif. Birds 2:134.
- McCaskie, R. G. 1968. A Broad-winged Hawk in California. Condor 70:93.
- McCaskie, G. 1970. The occurrences of four species of Pelecaniformes in the southwestern United States. Calif. Birds 1:117-142.
- McCaskie, G. 1971. Rusty Blackbirds in California and western North America. Calif. Birds 2:55-68.
- McCaskie, G. 1975. A Rufous-necked Sandpiper in southern California. West. Birds 6:111-113.
- McCaskie, G., S. Liston and W. A. Rapley. 1974. First nesting of a Black Skimmer in California. Condor 76:337-338.
- McCaskie, G. and R. R. Prather. 1965. The Curve-billed Thrasher in California. Condor 67:443-444.
- McCaskie, G., R. Stallcup and P. DeBenedictis. 1967a. The distribution of certain Mimidae in California. Condor 69:310-311.
- McCaskie, G., R. Stallcup and P. DeBenedictis. 1967b. The status of certain Fringillids in California. Condor 69:426-429.
- McLean, D. L. 1969. Some additional records of birds in California. Condor 71:433-434.
- Remsen, J. V., Jr. and L. C. Binford. 1975. Status of the Yellow-billed Loon (Gavia adamsii) in the western United States and Mexico. West. Birds 6:7-20.
- Schulenberg, T. and S. Summers. 1974. A Blue-winged x Golden-winged Warbler in California. West. Birds 5:58.
- Swarth, H. S. 1928. Winter occurrence of Sierra Nevada Rosy Finch and Black Rosy Finch in California. Condor 30:191.
- Unitt, P. 1974. Painted Redstarts attempt to breed in California. West. Birds 5:94-96.
- Winter, J. 1973. The California Field Ornithologists Records Committee report 1970-1972. West. Birds 4:101-106.
- Yadon, V. L. 1970. Four Thick-billed Murre records for Monterey Bay. Calif. Birds 1:107-110

# ARIZONA BIRD RECORDS, 1973, WITH ADDITIONAL NOTES

STEVEN M. SPEICH, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 85721 (present address: Department of Ecology and Evolutionary Biology, University of California, Irvine, California 92717.

JANET L. WITZEMAN, 4619 E. Arcadia Lane, Phoenix, Arizona 85018

This report consists of records of noteworthy occurrences of birds in Arizona submitted to the Arizona Bird Committee. Most of these records are from 1973, with some pre-1973 reports not previously reported by the ABC (see Speich and Parker 1973). There are no changes in the ABC membership since the last report (members are: Russell P. Balda, Bill Harrison, Gale Monson, Stephen M. Russell, Steven M. Speich and Robert A. Witzeman); however, Janet Witzeman is now the secretary of the ABC. All records, under the care of Stephen M. Russell, are deposited in the Bird Collection of the Department of Ecology and Evolutionary Biology at the University of Arizona. Photographs bear University of Arizona Bird Collection numbers. Nomenclature follows that of the AOU Check-list (1957) and its 32nd Supplement (Auk 90: 411-419, 1973), but the identity of "traditionally identifiable forms" is retained.

The ABC has decided that details of observations no longer need be submitted, nor will they be reviewed, for the following species (remove the asterisk after each on the Field Checklist of Arizona Birds): Mexican Duck, Short-billed Dowitcher, Long-billed Dowitcher, Common Flicker (Yellow-shafted Flicker, Colaptes auratus auratus), Winter Wren, Rufous-backed Robin, Black-and-white Warbler, Northern Parula, American Redstart, Indigo Bunting, Harris' Sparrow, Golden-crowned Sparrow, and Swamp Sparrow. However, details are hereafter required for observations of the Roseate Spoonbill and Surf Scoter; add an asterisk after these species' names on the Field Checklist.

The following status changes and additions should be entered on the Field Checklist. The status code of the Osprey (Pandion haliaetus) is incomplete and should read "W-r; s-l" (winter rare; summer local). Mountain Plover (Charadrius montanus) was inadvertently omitted from the Checklist and should be inserted with the status "W" (winter resident). Arctic Tern (Sterna paradisaea) should be inserted with the status code "A-sp\*" (accidental specimen). This species is represented by two specimens taken near Tucson, Pima Co., one each on 4 September 1965 and 4 October 1968, and erroneously reported by Austin et al. (1972) as Common Terns (S. hirundo) but since corrected by Monson and Russell (1975). Black-billed Cuckoo (Coccyzus erythropthalmus) should also

be added with the status "A-s\*" (accidental sight; see Speich and Parker 1973). The status of the Tree Swallow (Iridoprocne bicolor) should read "W; S-l" (winter resident; summer resident local), as it now breeds in the state (see below). The status of Bendire's Thrasher (Toxostoma bendirei) should read "P" (permanent resident). And last, Blackburnian Warbler (Dendroica fusca) should be inserted with the status code "A-s" (accidental sight; see below).

# 1973 ACCEPTED RECORDS

The records listed below were unanimously accepted by the ABC. Where appropriate, additional comments are made concerning past records of the species, their status and distribution in Arizona and surrounding areas, and interesting variances in their occurrence in Arizona and California.

MAGNIFICENT FRIGATEBIRD (Fregata magnificens). One immature on 26 July 1973, east of Yuma, Yuma Co., by A. and H. Guenther (and photographed by H. Guenther; UA12003) is probably of this species, as are probably the four sightings in Phillips et al. (1964) that are considered Fregata sp. The possibility of F. minor occurring here is unlikely (see McCaskie 1970). The species is a rare summer wanderer from the Gulf of California.

YELLOW-CROWNED NIGHT HERON (Nyctanassa violacea). One sub-adult seen 17 April 1973 at Imperial Dam, Yuma Co., by R. Webster is only the second state record.

WOOD STORK (Mycteria americana). Figure 1 (UA12004). Thirty-eight immatures on 30 June 1973 by S. and S. Liston were photographed, and an additional



Figure 1 (UA12004). Wood Storks (Mycteria americana) and Roseate Spoonbills (Ajaia ajaja), 30 June 1973, NE of Yuma, Yuma Co.

Photo by S. Liston

5 adults by R. Webster, 1 July 1973, all northeast of Yuma, Yuma Co. further document the presence of this species along the lower Colorado River and Gila River in the summer (Phillips et al. 1964).

ROSEATE SPOONBILL (Ajaia ajaja). Six separate reports are as follows: 33 on 4 June through 14 October 1973, Picacho Reservoir, Pinal Co., by R. Jolly, G. Bauer and others (one bird was photographed; UA12005); 1 adult on 11 June 1973, Quitobaquito, Organ Pipe Cactus National Monument, Pima Co., by R. Stallcup; 21 immatures, 17 June through 1 July 1973 northeast of Yuma, Yuma Co., by S. and S. Liston and R. Webster were photographed (Figure 1; UA12004); 1 during July 1973, Nogales, Santa Cruz, fide B. Harrison; 13-15 immatures on 24 and 25 August 1973, Gila River, northeast of Yuma, Yuma Co., by W. Deason and D. Wingfield were photographed (UA12006) by W. Deason; and 1 dehydrated adult (UA12007) found 14 November 1973 in Phoenix, Maricopa Co., by R. Norton. The two reports of birds from northeast of Yuma are probably of the same group of birds, at least in part. This species is considered to be an irregular summer visitant occurring in limited numbers. There are only four previous records for Arizona. These are the first since 1951.

BLACK BRANT (Branta nigricans). One on 20 March 1973, north of Topock, Mohave Co., by R. Karges and A. Moskos is only the third state record (see Speich and Parker 1973).

ROSS' GOOSE (Chen rossii). One on 17 February 1973, Sun City, Maricopa Co., by R. Norton and B. Harrison. This species is casual away from the Colorado River.

BARROW'S GOLDENEYE (Bucephala islandica). One male on 29 March 1973, Tanque Verde Ranch, Tucson, Pima Co., by C. Corchran, D. Lamm and J. Luepke is the first record for the state since the hypothetical record listed by Phillips et al. (1964).

SURF SCOTER (Melanitta perspicillata). One female or immature on 12 November 1973, Nelson Reservoir, Apache Co., by D. Danforth and J. Bealer. This species is casual in the fall in Arizona.

AMERICAN GOLDEN PLOVER (*Pluvialis dominica*). Two sightings, 1 on 26 September 1973 near Nogales, Santa Cruz Co., by B. Harrison and others, and 1 on 2 through 14 November 1973, Phoenix, Maricopa Co., by S. Terrill and R. Norton, further document the presence of this casual transient.

RUDDY TURNSTONE (Arenaria interpres). One in breeding plumage seen 5 August 1973 at the Riggs Road Ponds, Chandler, Maricopa Co., by G. Bauer and R. Bradley is the second recorded occurrence of this species in Arizona.

WHIMBREL (Numenius pháeopus). Eight on 1 July 1973 at Imperial Dam, Yuma Co., by R. Webster. This species is a rare migrant in Arizona.

RED KNOT (Calidris canutus). Four on 18 August 1973, Phoenix, Maricopa Co., by R. Bradley. There are very few records of this casual transient in Arizona.

SHORT-BILLED DOWITCHER (Limnodromus griseus). Two records: 3 on 1 July 1973, northeast of Yuma, Yuma Co., by R. Webster; and 1 and 2, 29 August through 5 September 1973, Riggs Road Ponds, Chandler, Maricopa Co., by R. and J. Witzeman. A tape and sonogram of the call notes submitted to the ABC are on file. This species has been found to be an uncommon but regular transient in small numbers.

HERRING GULL (Larus argentatus). Two in advanced second year plumage on 21 October 1973, Phoenix, Maricopa Co., by R. Norton. This species is a casual transient in the state.

LAUGHING GULL (L. atricilla). One adult on 25 August 1973 at Picacho Reservoir, Pinal Co., by J. Morlan and M. Chamberlain is only the third state record. Perhaps more individuals stray up the Colorado River from the Gulf of California and go undetected due to the scarcity of observers in this part of the state. Flocks of several hundred are seen regularly each fall at the Salton Sea, Imperial Co., California.

BLACK-LEGGED KITTIWAKE (Rissa tridactyla). One immature on 24 November 1973, Martinez Lake, Yuma Co., by T. Danielsen and T. and J. Heindel. This is only the second state record.

GULL-BILLED TERN (Gelochelidon nilotica). One adult on 13 May 1973, Martinez Lake, Yuma Co., by S. and S. Liston. This is only the second state record. This species may occur more often along the Colorado River. It breeds at the Salton Sea and is suspected of breeding in the Gulf of California (Friedmann et al. 1950:107).

LEAST TERN (Sterna albifrons). One adult on 1 July 1973, Imperial Dam, Yuma Co., by R. Webster. There are only a few records of this species for Arizona. LUCIFER HUMMINGBIRD (Calothorax lucifer). Figure 2 (UA12008). One adult male, 8 July through 5 September 1973, Ramsey Canyon, Cochise Co., by E. Hunn, V. Rule and others. This Mexican species may be present in southeastern Arizona annually, but probably goes undetected (Speich and Parker 1973).



Figure 2 (UA12008). Lucifer Hummingbird (Calothorax lucifer), 2 September 1973, Ramsey Canyon, Cochise Co.

Photo by V. Rule

WHITE-EARED HUMMINGBIRD (Hylocharis leucotis). One immature male on 18 August through 9 September 1973, Cave Creek Canyon, Portal, Cochise Co., by S. and W. Spofford, K. Kaufman et al. This post-breeding wanderer from Mexico probably occurs annually in the southeastern part of the state.

EASTERN KINGBIRD (Tyrannus tyrannus). One on 7 October 1973, Elgin, Santa Cruz Co., by R. Kellman. This species is a rare summer visitant in northern Arizona, and even more rare in the southeastern part of the state.

THICK-BILLED KINGBIRD (Tyrannus crassirostris). One 17 and 18 December 1972 through 4 January 1973, Laguna Dam, Yuma Co., by R. Todd, S. Burge and R. Witzeman was photographed by R. Todd (UA11974). This is the first winter record, and is the only record of this species in Arizona away from the small breeding colonies along Sonoita Creek, Patagonia, Santa Cruz Co., and Guadalupe Canyon, Cochise Co. (Phillips et al. 1964). It seems likely that this record is of a dispersing bird from Sonora (see Miller et al. 1957 and Phillips et al. 1964).

SCISSOR-TAILED FLYCATCHER (Muscivora forficata). Two records: 1 male on 16 July 1973, near Bisbee Junction, Cochise Co., by M. Wihler; and 1 immature on 24 September 1973 east of San Simon, Cochise Co., by D. Wolf. See Speich and Parker (1973).

WESTERN FLYCATCHER (Empidonax difficilis). One adult on 15 December 1973, southwest Phoenix, Maricopa Co., by K. Kaufman and R. Norton. This species may be going undetected in appropriate habitat in winter.

TREE SWALLOW (Iridoprocne bicolor). Figure 3 (UA12010). Two nests, 1 with two young observed from 15 July 1973 until young fledged 21 July 1973, photographed 18 July 1973; second nest found 21 July 1973; both near Jacob Lake, Kaibab National Forest, Coconino Co., in Quaking Aspen (Populus tremuloides), by R. and M. Wilson. This is the first recorded nesting of this species in Arizona.



Figure 3 (UA12010). Tree Swallow (Iridoprocne bicolor), 18 July 1973, Jacob Lake, Coconino Co. First Arizona nesting record.

Considering the breeding distribution of this species in the West these individuals are probably derived from populations in southern Utah (Grinnell and Miller 1944; Linsdale 1936; and Graber et al. 1972).

WINTER WREN (Troglodytes troglodytes). One on 15 December 1973, southwest Phoenix, Maricopa Co., by S. Terrill. This species is a more common winter resident than past reports indicate.

RUFOUS-BACKED ROBIN (Turdus rufopalliatus). Five records: 1 on 29 December 1972 through 4 January 1973, Tucson, Pima Co., by P. Norton, K. Kaufman et al.; 1 on 21 November 1973, Tucson, Pima Co., by D. Lamm and C. Corchran was photographed (UA12011) by C. Corchran; 1 on 23 December 1973, Patagonia, Santa Cruz Co., by J. Mangum and S. Burge; 1 on 29 December 1973, Carr Canyon, Huachuca Mountains, Cochise Co., by R. Norton, A. Kraynik and J. Mangum; 1 on 6 November 1973 through 14 April 1974, Cave Creek, Maricopa Co., by E. and N. Jones et al.

VARIED THRUSH (Ixoreus naevius). Two records: 1 on 28 August 1973, Prescott National Forest, Yavapai Co., by T. and C. Johnson is the first summer record, and is probably a bird from the invasion of the previous winter (Speich and Parker 1973); 1 on 15 December 1973, southwest Phoenix, Maricopa Co., by S. Terrill.

BLACK-CAPPED GNATCATCHER (Polioptila nigriceps). Two adults, male and female, on 18 and 19 March 1973, Sonoita Creek just below Lake Patagonia, Santa Cruz Co., by T. Parker, K. Kaufman et al. This is only the second record for the United States. This elusive species probably continues to breed in the Sonoita Creek drainage since it was first observed and collected (Phillips et al. 1973).

GOLDEN-WINGED WARBLER (Vermivora chrysoptera). One adult female on 28 June 1973, southwest of Springerville, Apache Co., by S. and E. Cardiff and B. Carlson is the third state record.

YELLOW WARBLER (Dendroica petechia). One adult male on 15 December 1973, Litchfield, Maricopa Co., by S. Demaree, J. Braley et al. is the third winter record.

BLACK-THROATED BLUE WARBLER (D. caerulescens). Two records: 1 adult male on 17 June 1973, Rustler Park, Chiricahua Mountains, Cochise Co., by T. Heindel; 1 adult male, 15 through 20 November 1973, Madera Canyon, Santa Cruz Co., by S. and S. Liston et al. was photographed (UA12012) by S. E. Liston.

BLACK-THROATED GREEN WARBLER (D. virens). One immature, 16 November 1973, southwest Phoenix, Maricopa Co., by S. Terrill.

BLACKBURNIAN WARBLER (D. fusca). One immature on 8 October 1973, Tucson, Pima Co., by G. Monson is the first state record.

BAY-BREASTED WARBLER (D. castanea). One immature on 23 November 1973, Tucson, Pima Co., by G. Monson, W. Anderson, M. Robbins, T. Parker and S. Speich was photographed (UA12013A, B) by W. Anderson and is the second state record.

OVENBIRD (Seiurus aurocapillus). One adult on 15 December 1973, southwest Phoenix, Maricopa Co., by K. Kaufman is the second winter record.

NORTHERN WATERTHRUSH (S. noveboracensis). One on 15 December 1973, southwest Phoenix, Maricopa Co., by R. Bradley.

HOODED WARBLER (Wilsonia citrina). One male on 30 June 1973, Rustler Park, Chiricahua Mountains, Cochise Co., by R. Madding and R. Webster is the fourth state record.

ORCHARD ORIOLE (Icterus spurius). One immature on 16 November 1973, southwest Phoenix, Maricopa Co., by S. Terrill et al.

BLUE GROSBEAK (Guiraca caerulea). One adult male on 15 December 1973, southwest Phoenix, Maricopa Co., by T. Fogle.

INDIGO BUNTING (Passerina cyanea). One male on 27 June 1973, Patagonia, Santa Cruz Co., by R. Webster.

HARRIS' SPARROW (Zonotrichia querula). One immature, 4 through 13 January 1973, Portal, Cochise Co., by S. Spofford, A. Crockett and D. Bogle.

GOLDEN-CROWNED SPARROW (Z. atricapilla). One sub-adult, 1 through 4 April 1973, Portal, Cochise Co., by I. Hicks, S. and W. Spofford and R. E. Cocroft. Photographs by R. E. C. are on file (UA12014).

SWAMP SPARROW (Melospiza georgiana). One immature on 15 December 1973, southwest Phoenix, Maricopa Co., by K. Kaufman. This species is generally regular in small numbers in the state in winter, and this record is the second for central Arizona.

The following 1973 records were submitted to the ABC and were accepted, but were not considered unusual enough to include in the main report: Goshawk (Accipter gentilis), December, Phoenix, Maricopa Co.; Harlan's Hawk (Buteo jamaicensis barlani), February, Phoenix, Maricopa Co.; Zone-tailed Hawk (B. albonotatus), July, Jacob Lake, Coconino Co.; California Gull (Larus californicus), January, Phoenix, Maricopa Co.; Yellow-shafted Flicker (Colaptes auratus auratus), February, Phoenix, Maricopa Co.; Black-and-white Warbler (Mniotilta varia), two individual records, October and December, Phoenix, Maricopa Co.; and Fox Sparrow (Passerella iliaca), two individual records, December, Phoenix, Maricopa Co.

### PRE-1973 ACCEPTED RECORDS

These records are of sightings prior to 1973 that were submitted to the ABC and unanimously accepted.

OLIVACEOUS CORMORANT (Phalacrocorax olivaceus). Figure 4 (UA12015). One on 29 July 1967, Yerba Buena Ranch, Santa Cruz Co., by G. McCaskie, A. Craig et al.

JAEGER SP. (Stercorarius sp.). Figure 5 (UA12017). One immature 7 through 20 September 1970, Phoenix, Maricopa Co., by R. Witzeman et al. The ABC could not unanimously agree that this species was a Parasitic Jaeger (S. parasiticus). P. Devillers, J. Jehl Jr. and G. McCaskie were consulted and "all [independently] concluded that the bird was without question a Parasitic Jaeger" (G. McCaskie pers. comm.) after examination of the color transparencies.

LUCIFER HUMMINGBIRD (Calothorax lucifer). One adult female from 28 August through 12 September 1972, Ramsey Canyon, Cochise Co., by R. Norton, J. and C. Peabody et al.

PLAIN-CAPPED STARTHROAT (Heliomaster constantii). One (female or immature) 20 through 30 September 1969, Nogales, Santa Cruz Co., by B. Harrison, R. Witzeman et al. is the first, and to date the only, record of this Mexican species in the United States. Photographs by R. Witzeman (UA12018A and UA12018B) are published in color (Harrison 1976).

RUFOUS-BACKED ROBIN (Turdus rufopalliatus). One on 23 April 1972, Tucson, Pima Co., by B. Deuel.



Figure 4 (UA12015). Double-crested Cormorant (Phalacrocorax auritus) and Olivaceous Cormorant (P. olivaceus), 29 July 1967, Yerba Buena Ranch, Santa Cruz Co.

Photo by A. Craig



Figure 5 (UA12017). Jaeger sp., probably Parasitic (Stercorarius parasiticus), 20 September 1970, Phoenix, Maricopa Co.

Photo by R. Witzeman

INDIGO BUNTING (Passerina cyanea). One male on 29 July 1972, Patagonia, Santa Cruz Co., by B. Deuel.

The following records prior to 1973 were submitted to the ABC and accepted, but were not considered unusual enough to include in the main report: Harlan's Hawk (Buteo jamaicensis harlani), December 1972, Phoenix, Maricopa Co.; Yellow-shafted Flicker (Colaptes auratus auratus), three individual records, November and December 1972, Phoenix, Maricopa Co.; Black-and-white Warbler (Mniotilta varia), two individual records, February and December 1972, Phoenix, Maricopa Co.

### 1973 UNACCEPTED RECORDS

Arizona Bird Committee decisions are in parentheses. The first number represents the number of members who did not accept the record; the second number represents those who accepted the record.

HORNED GREBE (Podiceps auritus). One, 15 December 1973, Phoenix, Maricopa Co. (6:0).

GREATER SCAUP (Aythya marila). One, 21 December 1973, Kinsley Pond, Pima Co. (6:0).

SWAINSON'S HAWK (Buteo swainsoni). Two, 20 December 1973, Moccasin, Mohave Co. (6:0).

HERRING GULL (Larus argentatus). One, 15 April 1973, Upper Lake Mary, Coconino Co. (5:1).

BLUE-THROATED HUMMINGBIRD (Lampornis clemenciae). One, 21 November 1973, Madera Canyon, Santa Cruz Co. (6:0).

ANNA'S x BLUE-THROATED HUMMINGBIRD (Calypte anna x Lampornis clemenciae). One, 27 August 1973, Portal, Cochise Co. Identification of hybrids is difficult at best without a specimen, and is generally beyond the scope of this committee.

SCISSOR-TAILED FLYCATCHER (Muscivora forficata). One, 10 August 1973, Tucson, Pima Co. (1:4, 1 pass).

WESTERN FLYCATCHER (Empidonax difficilis). One, 15 December 1973, Phoenix, Maricopa Co. (1:4, 1 pass).

WESTERN WOOD PEWEE (Contopus sordidulus). Two records: 1, 15 December 1973, Phoenix, Maricopa Co. (6:0); 1, 22 December 1973, Lake Patagonia, Santa Cruz Co. (6:0).

COMMON CROW (Corvus brachyrhynchos). Forty-four, 8 February 1973, Bermuda City, Mohave Co. (1:5).

AMERICAN (SAN LUCAS) ROBIN (Turdus migratorius confinis). One, 16 August 1973, Cave Creek Canyon, Chiricahua Mountains, Cochise Co. (4:1, 1 pass).

GRAY-CHEEKED THRUSH (Catharus minimus). One, 24 February 1973, Richland, Cochise Co. (6:0).

RED-EYED VIREO (Vireo olivaceus). Two records: 1, 13 September 1973, Santa Catalina Mountains, Pima Co. (5:0, 1 pass); 1, 17 September 1973, south of Phoenix, Maricopa Co. (5:1).

TENNESSEE WARBLER (Vermivora peregrina). One, 8 September 1973, Dragoon Mountains, Cochise Co. (6:0).

HOODED WARBLER (Wilsonia citrina). One, 7 June 1973, Sycamore Canyon, Santa Cruz Co. (5:1).

NORTHERN (BALTIMORE) ORIOLE (Icterus galbula galbula). One, 20 September 1973, Tempe, Maricopa Co. (1:5).

BLACK-HEADED ORIOLE (I. graduacauda). One, 30 April through 1 May 1973, Cave Creek Canyon, Chiricahua Mountains, Cochise Co. (5:0, 1 pass).

ROSE-BREASTED x BLACK-HEADED GROSBEAK (Pheucticus ludovicianus x P. melanocephalus). One, 1 January 1973, Phoenix, Maricopa Co. Identification of hybrids is difficult at best without a specimen, and is generally beyond the scope of this committee.

ROSE-BREASTED GROSBEAK (P. ludovicianus). One, 24 April 1973, Continental, Santa Cruz Co. (2:3, 1 pass).

INDIGO BUNTING (Passerina cyanea). One, 8 June 1973 west of Nogales, Santa Cruz Co. (1:5).

PURPLE FINCH (Carpodacus purpureus). One, 15 December 1973, Phoenix, Maricopa Co. (5:1).

### PRE-1973 UNACCEPTED RECORDS

SNOWY OWL (Nyctea scandiaca). Three, 23 December 1970, south of Seligman, Yavapai Co. (6:0).

GREEN KINGFISHER (Chloroceryle americana). One, 20 July 1972, Patagonia, Santa Cruz Co. (5:1).

MOUNTAIN CHICKADEE (Parus gambeli). Eight, 3 June 1971, Miller Canyon, Huachuca Mountains, Cochise Co. (6:0).

BLUE MOCKINGBIRD (Melanotis caerulescens). One, 15 October 1971, Altar Valley, Pima Co. (5:1).

BLACK-VENTED ORIOLE (Icterus wagleri). One, 16 July 1971, Cave Creek Canyon, Chiricahua Mountains, Cochise Co. (6:0).

### ACKNOWLEDGMENTS

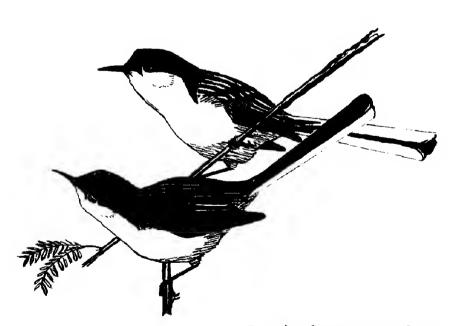
We wish to express our thanks to those people who prepared written descriptions of their sightings and submitted them to the ABC, and are allowing us to use their records. The submission of photographs is especially appreciated. The pride felt by most reporting observers is evident in the thoroughness and clarity of their reports.

### LITERATURE CITED

Austin, G. T., E. L. Smith and S. Speich. 1972. New Arizona bird records. Calif. Birds 3:43-44.

Friedmann, H., L. Griscom and R. T. Moore. 1950. Distributional check-list of the birds of Mexico, part I. Pac. Coast Avif. No. 29.

- Graber, R. R., J. W. Graber and E. L. Lirk. 1972. Illinois birds: Hirundinidae. Biological Notes No. 80, Illinois Nat. Hist. Survey, Urbana.
- Grinnell, J. and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avif. 27.
- Harrison, B. 1976. Plain-capped Starthroat in Arizona. Birding 8:74-75.
- Linsdale, J. M. 1936. The birds of Nevada. Pac. Coast Avif. No. 23.
- McCaskie, G. 1970. The occurrences of four species of Pelecaniformes in the southwestern United States. Calif. Birds 1:117-142.
- Miller, A. H., H. Friedmann, L. Griscom and R. T. Moore. 1957. Distributional check-list of the birds of Mexico, part II. Pac. Coast Avif. No. 33.
- Monson, G. and S. M. Russell. 1975. Arctic Tern in Arizona. Auk 92:153-154.
- Phillips, A. R., J. Marshall and G. Monson. 1964. The birds of Arizona. Univ. Arizona Press, Tucson.
- Phillips, A. R., S. Speich and W. Harrison. 1973. Black-capped Gnatcatcher, a new breeding bird for the United States; with a key to the North American species of *Polioptila*. Auk 90:257-262.
- Speich, S. and T. A. Parker III. 1973. Arizona bird records, 1972. West. Birds 4:53-57.



Drawing by Kenn Kaufman

### TREASURER'S REPORT

### CALIFORNIA FIELD ORNITHOLOGISTS

Cash Flow Statement, 1 January 1975 to 31 December 1975

Cash on hand, 1 January 1975		\$ 8,411.17
Imperial Savings and Loan (savings)	\$5,560.55	
San Diego Trust and Savings (checking)	2,850.62_	
RECEIPTS		
Membership	\$3,715.00	
Boat Trips	2,350.50	
Back Issues-Western Birds	521.50	
Reprints-Western Birds	145.00	
Advertising	204.00	
Interest	299.71	
Donations	2.00	7,237.71
		\$15,648.88
DISBURSEMENTS		
Western Birds	\$4,452.51	
Postage	696.10	
Boat Trips	1,799.82	
Annual Convention	212.61	
Advertising	44.37	
Miscellaneous	358.20	\$ 7,563.61
Cash on hand, 31 December 1975		\$ 8,085.27
Imperial Savings & Loan (savings)	\$5,860.26	- <b>,</b> -
San Diego Trust & Savings (checking)	2,225.01	
(prepared without audit)		

Philip P. Schaeffer, Treasurer

## BIRD RECORDS OF INTEREST FROM SOUTHWESTERN NEW MEXICO

DALE A. ZIMMERMAN, Department of Biological Science, Western New Mexico University, Silver City, New Mexico 88061

MARIAN A. ZIMMERMAN, 1011 W. Florence Street, Silver City, New Mexico 88061

Several of our recent New Mexican observations seem worthy of more detailed treatment than the brief mention generally possible in various seasonal record publications. Some of these are presented here, supplemented by related observations of others. All records are from Grant County unless otherwise stated. These accounts are based on sight identifications; however, both of us have enjoyed extensive prior field experience with all of the species discussed. For information contributing to this note we are grateful to Dr. and Mrs. Kenneth Able, William Baltosser, Donna Cole, Ralph Fisher, Mr. and Mrs. Norman Jette, Myra McCormick, Capt. and Mrs. George Moseley, May and Stuart O'Byrne, Margaret Oliphant, William Principe, Lowell Sumner, Paul Wilmeth and Allan Zimmerman. The authors' names are abbreviated D.A.Z. and M.A.Z. throughout the following accounts.

Sharp-shinned Hawk, Accipiter striatus. On 4 July 1974 we discovered a nest containing an undetermined number of small young 14 km northeast of Silver City in a narrow canyon north of Pinos Altos in the Pinos Altos Mountains. This is the first reported breeding from these mountains although we have recorded Sharp-shinned Hawks there at intervals during late spring and summer for several years. The nest was 5 m above ground in a thinly leaved Gambel's Oak (Quercus gambelli) among a dense stand of Ponderosa Pines (Pinus ponderosa) and Gray Oaks (Quercus grisea). The male bird swooped at us, loudly protesting, while we were still 40 m or more from the site. As we neared the nest tree his efforts intensified and several times he came very near our heads. His mate was vocal but far less aggressive. Both birds eventually perched in full view only a few paces away. Their size, square-cut tails and very slender tarsi were obvious. Additionally, their kik-kik-kik calls were distinct from the corresponding cackling notes of Cooper's Hawks (Accipiter cooperii). When we were near the nest tree the female uttered some unique cries, high-pitched and piercing-presumably the same mentioned by Brown (in Bent 1937:107) with reference to nesting Sharp-shins after the young have hatched. This call is dissimilar to any we have ever heard from nesting Cooper's Hawks.

Ralph Fisher has informed us of a nest from which he flushed a small Accipiter, believed to have been a Sharp-shin, in another canyon of the Pinos Altos Mountains on 13 June 1971. The site was but three or four km from that mentioned above. Elevation at both localities is 2100 m. The nest found by Fisher was in a dense stand of Limber Pine (Pinus flexilis), Ponderosa Pine, Douglas-fir (Pseudotsuga menziesii) and Gambel's Oak. Twice during May 1971 he had observed a Sharp-shinned Hawk there, and he believed the individual associated with the nest to have been the same. In view of our record from nearby, and the apparent absence of breeding Cooper's Hawks in this habitat, Fisher's identification doubtless was correct. Allan Zimmerman saw a Sharp-shin near this site on 13 August 1975.

All three New Mexican Accipiter species now are known to breed in the Pinos Altos range, although the Goshawk (A. gentilis) does so only rarely. Here, Cooper's Hawk largely confines its breeding activities to riparian sites or broader, more "open" canyons, usually at elevations lower than those occupied by the other two species.

Long-eared Owl, Asio otus. This species has long been known as a local winter resident in southwestern New Mexico. However, Bailey (1928), Ligon (1961), and Hubbard (1970) mention no records of breeding or summering birds from any southern county. During May 1973 Jeff Turner found a Long-eared Owl's nest with young near Cliff in the Gila River Valley, but no further observations were made. The species summered elsewhere in the region that year as evidenced by an adult found injured at Central on 29 July and photographed by us.

Near Fort Bayard on 14 April 1975 we discovered a Long-eared Owl brooding three small young in a nest 9 m above ground in an Alligator Juniper (Juniperus deppeana). Donna Cole and Paul Wilmeth, who also observed this nest, found another containing five newly-hatched young a few kilometers northeast of Redrock on 19 April. This nest, like that observed by Turner, was in a thickly foliaged Emory's Oak (Quercus emoryi).

Williamson's Sapsucker, Sphyrapicus thyroideus. A pair nesting on Signal Peak in the Pinos Altos Mountains during June 1974 provided a slight extension of this species' known breeding range in New Mexico. Dr. and Mrs. Kenneth Able discovered the birds entering a cavity in a Quaking Aspen (Populus tremuloides) at an elevation of 2400 m on 11 June. (In the same tree a Flammulated Owl, Otus flammeolus, occupied another cavity about 2 m below that used by the sapsuckers. This appeared to be a roosting site rather than a nesting cavity, and we did not regularly find the owl present.) We watched the parent sapsuckers feeding young in their nest on 16 June, on which date we saw a second male Williamson's Sapsucker 4.5 km from this site and higher on the mountain. The first summer records of the species in the Pinos Altos Range were made by Barbara McKnight during 1973 (Hubbard et al. 1973b:36). Williamson's Sapsucker was also present in these mountains during early June 1975 (William Baltosser pers. comm.).

Anna's Hummingbird, Calypte anna. Until recently there were but two reports of Calypte anna in New Mexico (Zimmerman 1973). Now, two years later, there are acceptable records of at least 11 birds in the southern part of the state. These include: an adult male seen near Silver City 22 September 1973 (M. and S. O'Byrne, M.A.Z.); im. male photographed at Glenwood, Catron County, and observed 30 September-11 October 1973 (L. Sumner); a singing male, possibly without full red gorget but with red crown, in Fillmore Canyon of the Organ Mountains, Doña Ana County, 13 September 1974 (W. Principe); an im. male singing at Silver City on 7 October (M.A.Z.) and 8 October (D.A.Z.) 1974 but not frequenting our feeder; a female, a singing im. male and an adult male 5 km north of Silver City 3-19 October 1974 (G. and M. Moseley, D.A.Z.); an im. male, frequently heard singing, at a Silver City feeder 12 October-26 November 1974 (M. Oliphant, D.A.Z.), possibly the same individual observed at our residence one km distant on 7-8 October; an adult male at our residence in Silver City on 4 November 1975 (M.A.Z., D.A.Z.).

Rivoli's Hummingbird, Eugenes fulgens. No longer a stranger to Silver City area feeders, this species now appears at intervals between 23 April (1975) and 19 October (1966). Most observations have been after mid-July. During 1974, for example, M. Moseley saw an adult male on 24 and 25 July; Allan Zimmerman observed an immature male on the same dates. The Moseleys had a female at their feeder on 3 August of that year, but none of these birds remained for more than a day or two. In the nearby Pinos Altos Mountains where they doubtless breed, Rivoli's Hummers may be seen regularly from May to October, although they are rare.

Blue-throated Hummingbird, Lampornis clemenciae. Apart from the specimens apparently collected by Mearns in the San Luis Mountains on the Mexican boundary in 1892 (see Bailey 1928), and a female seen in the southern Peloncillo Mountains near the Arizona line on 9 May 1973 (Hubbard et al. 1973a:11), there are no unquestioned reports of this species from southern New Mexico. On 29 June 1974 an adult male Blue-throated Hummingbird visited feeders at the George Moseley residence about 5 km north of Silver City. There we watched the bird at varying distances, mostly under 5 m, with close focusing 8x,40 binoculars and with the unaided eye for nearly one hour. Other observers (all possessing prior field experience with the species) included the Moseleys, M. McCormick and A. Zimmerman. Circumstances permitted detailed examination of the bird from all angles. At times it perched less than an arm's length from us. Its blue gorget, large white rectrix spots and postocular mark were conspicuous. It dwarfed the Selasphorus hummers which fed close by. Distinctive, too, were its manner of flight and its high pitched squeaking notes so familiar to us from long acquaintance with the species in Arizona.

Winter Wren, Troglodytes troglodytes. Among downed timber in a riparian Box-elder (Acer negundo) and cottonwood (Populus) grove near Cliff, William Baltosser discovered a Winter Wren on 10 March 1975. Although unfamiliar with this species he studied the bird at distances of under 2 m for several minutes and made detailed notes on its plumage and vocalizations. He saw the wren again on 29 March and 5 April, but he and D.A.Z. failed to find it between those dates. However, on 20 April the authors and Allan Zimmerman saw it clearly at the site of Baltosser's initial observation. This wren appeared to represent the race pacificus, being considerably brighter and more uniformly colored both above and below, than the eastern subspecies. Its lower back and rump seemed almost chestnut in color when the bird entered patches of sunlight. Its barring (especially that on the flanks) was less pronounced than in hiemalis and the anterior underparts more reddish in tone. The light superciliary line was particularly prominent.

The first author saw another similarly plumaged Winter Wren in a cottonwood bosque along the Mimbres River east of Silver City on 2 May 1975. In late December that year, Baltosser (pers. comm.) again found a Winter Wren in the Gila Valley near Cliff, at the precise location occupied by the bird mentioned in detail above.

T. t. pacificus was ascribed to Cooney (Catron Co.), New Mexico by the AOU Check-list (1957:411) although Hubbard (1970:63) mentions but one state specimen (from near Albuquerque, November 1969). Certainly the species is very rare in New Mexico, and it is almost unknown in the southern counties. The 1975 records cited and another undocumented report from the Gila Valley in December 1974 followed a season marked by a notable migration of Winter Wrens into unusual localities in the West, including Colorado (Zimmerman 1975:27).

Sage Thrasher, Oreoscoptes montanus. On 5 June 1975, with Thase Daniel, John Minot and others, we discovered Sage Thrashers breeding on the San August-in Plains astride the Socorro County-Caton County line east of Datil. The birds inhabited a moderately extensive stand of low shrubs dominated by Fourwing Saltbush (Atriplex canescens) adjacent to U.S. Highway 60. Of the three pairs of Sage Thrashers seen, one was feeding at least three short-tailed, recently fledged young. A second pair had a nest containing two eggs which apparently were being incubated. During the hour we spent in the area we twice flushed an adult from the nest and it returned again thereto prior to our departure. If complete, the small clutch size is remarkable; sets of Oreoscoptes normally consist of at least four eggs. The nest itself was well concealed, approximately 2.5 dm above ground in a dense low shrub, possibly a species of Baccharis, surrounded by tall saltbushes. The specific site of this nest was 150 m east of the county line

in Socorro County. We noted two Sage Thrashers (one a heavily molting adult) there as late as 11 August. Until 1975 the southern limits for the breeding of this species in New Mexico have remained as outlined by Bailey (1928:560)—Gallup, Santa Fe and the Grants-Mt. Taylor area. These points lie 75 to 100 miles north of the present site. The last locality is atypical in that it is not representative of the habitat normally occupied by *Oreoscoptes*. They in fact share it in this locality with Bendire's Thrasher (*Toxostoma bendirei*). Perhaps continued destruction of sagebrush in northern New Mexico's traditional Sage Thrasher range has resulted in southern displacement of some birds. On the other hand, this may be a long-established population heretofore overlooked. Present at this site with the thrashers both in June and August were several pairs of Brewer's Sparrows (*Spizella breweri*), another bird characteristic of sagebrush. Some years ago Raymond Fleetwood (Monson 1953:322) found this sparrow breeding at nearby Socorro, so the species' occurrence here is not unprecedented. However, I am unaware of other summer records so far south in the state.

Prothonotary Warbler, *Protonotaria citrea*. At Silver City on 4 October 1973, the second author observed a male of this species from a distance of 3 m. She noted its large bill as well as plumage details including the completely yellow head, olive back and unmarked slate-gray wings. The five previous state records are from localities east of the Rio Grande.

Tennessee Warbler, Vermivora peregrina. Almost certainly this bird occurs more frequently in New Mexico than the few records indicate, but observers either fail to recognize it or report it so inadequately as to produce uncertain and unacceptable records. Three of the four positive state occurrences are from Grant County, including one collected 5 October 1964 in Silver City (Zimmerman 1969). To these may be added a sight record of an immature at the same locality on 11 September 1973, by the second author. The Vermivora-type bill, single indistinct wing-bar, unstreaked yellowish breast and whitish crissum all were visible as she viewed the bird with 8x,40 binoculars from distances of about 5 m.

Olive Warbler, Peucedramus taeniatus. Although this species has long been known from its limited range in southwestern New Mexico, apparently no eggs or young have ever been reported there. During 1974 Olive Warblers were unusually numerous in the Pinos Altos Mountains, where we recorded them in five separate localities. On 11 June Dr. and Mrs. Kenneth Able saw a female feeding a full-sized juvenal bird capable of strong flight in Cherry Creek Canyon north of Pinos Altos. A few kilometers away, at an elevation of 2500 m on Signal Peak, we located three singing males that day and on 16 June we found a female feeding two fledged young, bob-tailed and regularly begging for food. We could not find the nest but it surely was close by. The birds remained in a very limited area for several hours and were incapable of sustained flight.

Black-throated Blue Warbler, Dendroica caerulescens. We failed to encounter this bird in 17 years of residence in southwestern New Mexico until 13 October 1974, when, with Allan Zimmerman, we observed a female at Mangas Springs, 24 km northwest of Silver City. The bird responded to oral "pishing" and squeaking sounds, flying from thick riparian willow brush to twigs and a fence wire within one meter of us. Displaying the "tameness" often characteristic of this species, it remained very near and permitted detailed study. The distinct wing spot was clearly and repeatedly seen. Later in the day we again lured it from cover and watched it at leisure. The following morning we observed an adult male Black-throated Blue Warbler 3 km north of Silver City. This individual also allowed prolonged viewing at very close range; we watched it for 20 minutes. Seven hours later we revisited the site with Allan Zimmerman, promptly located the bird and observed it for another quarter hour.

### NOTES

Black-throated Green Warbler, Dendroica virens. To the comparatively few records of this parulid in New Mexico should be added that of a female or immature watched for several minutes by the second author in a small canyon 14 km northeast of Silver City on 14 October 1973. The bird was distinguished from a Hermit Warbler (D. occidentalis) by its unstreaked olive back and less sharply defined, less evenly yellow face (i.e. with darker auricular area); and from Townsend's Warbler (D. townsendi) by less distinct auricular patch and lack of yellow on the throat. The belly, however, was yellowish and not clear white as in the Golden-cheeked Warbler (D. chrysoparia). It associated with Ruby-crowned Kinglets (Regulus calendula), Red-breasted Nuthatches (Sitta canadensis) and other migrants about 10 m from the observer in a streamside alder thicket. Other state records of D. virens west of the Rio Grande include a female photographed by Barbara McKnight near Hermanas, Luna County, on 20 April 1973 (Hubbard et al. 1973a:18) and one killed against a window in San Juan County in October 1974 (Univ. of New Mex. collection).

Hooded Warbler, Wilsonia citrina. On 29 May 1974 Allan Zimmerman and the authors discovered a singing male Hooded Warbler near the entrance to Cherry Creek Canyon in the Pinos Altos Mountains northeast of Silver City. Despite the bird's reluctance to perch in exposed situations, each of us observed its bright yellow face, black hood and throat, and white rectrix spots. Effort expended over a 45-minute period several times revealed the bird as it sang from the depths of a thorny Robinia neomexicana thicket but it was at all times shy. It largely ignored our vocal attempts to lure it into the open. This is the seventh Hooded Warbler record for New Mexico, three of which have been from the southwestern corner of the state.

### LITERATURE CITED

- American Ornithologists' Union. 1957. Check-list of North American birds. Fifth ed. Am. Ornithol. Union, Baltimore, Md.
- Bailey, F. M. 1928. Birds of New Mexico. New Mex. Dept. of Game and Fish, Santa Fe.
- Bent, A. C. 1937. Life histories of North American birds of prey, part I. U. S. Natl. Mus. Bull. 167.
- Hubbard, J. P. 1970. Check-list of the birds of New Mexico. New Mex. Ornith. Soc. Publ. 3. Albuquerque.
- Hubbard, J. P., D. M. Niles and B. C. McKnight, eds. 1973a. New Mex. Ornith. Soc. Field Notes 12:1-24.
- Hubbard, J. P., D. M. Niles and B. C. McKnight, eds. 1973b. New Mex. Ornith. Soc. Field Notes 12:25-47.
- Ligon, J. S. 1961. New Mexico birds and where to find them. New Mex. Dept. of Game and Fish, Santa Fe.
- Monson, G. 1953. The nesting season. Southwest region. Aud. Field Notes 7:320-322.
- Zimmerman, D. A. 1969. New records of wood warblers in New Mexico. Auk 86:346-347.
- Zimmerman, D. A. 1973. Range expansion of Anna's Hummingbird. Am. Birds 27:827-835.
- Zimmerman, D. A. 1975. The changing seasons. Am. Birds 29:23-28.

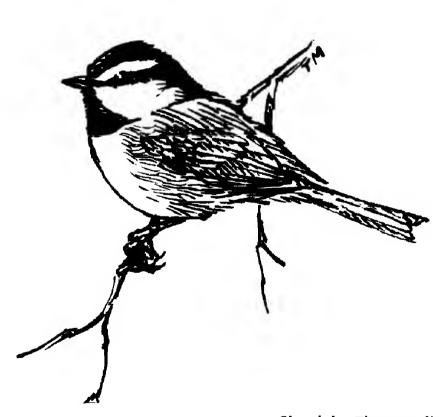
### MOUNTAIN CHICKADEE SURVIVES FOR A DECADE

KEITH L. DIXON, Department of Biology, Utah State University, Logan, Utah 84322

Although the mean longevity of small passerines is not impressive (Farner, pages 397-449 in A. Wolfson, ed., Recent studies in avian biology, Univ. Illinois Press, Urbana, 1955), interest in exceptional cases persists (e.g., Kennard, Bird-Banding 46:55-73, 1975). Noteworthy in this respect is a Mountain Chickadee (Parus gambeli) banded 106-74819 by F. N. Folks at the Beaver Mountain Ski Area, 7400 feet elevation, in Cache County, Utah, on 13 May 1965. This individual was judged to be a male from his breeding behavior in 1965. I recaptured him last on 11 December 1969, and identified him by his distinctive color-band combination as he was feeding nestlings on 6 July 1974. I was unable to locate this bird on several visits in the subsequent autumn and winter. If we assume a hatching date of 20 June 1964, this individual had begun his eleventh year. His territory from 1967 onward was situated some 600 m from the ski resort parking lot. Thus, incidental feeding on scraps of food discarded by humans could not have been a factor in his survival in winter.

The longevity of this male was approached by that of two others among the 31 resident males banded in the area from 1961 through 1968. Their minimum ages at disappearance were 7 years, 11 months and 7 years, 9 months. The minimum age of the oldest resident female (n=25) was 5 years, 7 months.

Considering the small sample size, these records from an environment with severe winters compare favorably with the maximums reported by Kennard (op. cit.) for the Black-capped Chickadee, *P. atricapillus* (12 years, 5 months) and the Carolina Chickadee, *P. carolinensis* (10 years, 11 months).



Sketch by Tim Manolis

## INDEX TO VOLUME 6

Compiled by Virginia P. Johnson and Mildred Comar

aalge, Uria, 13, 120-122, 128	Arenaria interpres, 48, 54, 147
Accipiter gentilis, 151, 158	argentatus, Larus, 120-122, 127, 147, 153
striatus, 157	Asio otus, 158
Actitis macularia, 4	ater, Molothrus, 70, 72, 77
acuminata, Calidris, 49, 140	atrata, Leucosticte, 139
adamsii, Gavia, 7-20, 139	atricapilla, Zonotrichia, 151
aedon, Troglodytes, 103	atricapillus, Parus, 67, 162
Troglodytes a., 75	atricilla, Larus, 148
Aegolius funereus, 21-23	Auklet, Cassin's, 120-122, 129
Aeronautes saxatalis, 110	Crested, 143
aethereus, Phaethon, 130, 143	Parakeet, 14, 90, 130
Aethia cristatella, 143	Rhinoceros, 120-122, 129
Aimophila botterii, 81	auratus, Colaptes, 103
Ajaja ajaja, 137, 140, 147	Colaptes auratus, 151, 153
alba, Calidris, 49, 54	auritus, Phalacrocorax, 140
Albatross, Black-footed, 119-122	Podiceps, 153
Laysan, 122	auro capillus, Seiurus, 114, 139, 150
Short-tailed, 119	autumnalis, Dendrocygna, 137
Shy, 130	Avocet, American, 4, 52
albatrus, Diomedea, 119	Aythya marila, 153
albifrons, Sterna, 148	bairdii, Calidris, 49, 54
albonotatus, Buteo, 151	beali, Oceanodroma leucorboa, 125
aleuticus, Ptychoramphus, 120-122, 129	bellii, Vireo, 69
alexandri, Archilochus, 73, 74	bendirei, Toxostoma, 146, 160
alexandrinus, Charadrius, 47, 53	bicolor, Iridoprocne, 146, 149
alnorum, Empidonax, 82	Binford, Laurence C., see Remsen, J. V.,
alpina, Calidris, 49	Jr.
americana, Chloroceryle, 154	Blackbird, Rusty, 142
Mycteria, 146	Yellow-headed, 1-6
Parula, 141	Bluebird, Eastern, 79
Recurvirostra, 4, 52	Bock, Carl E. and Larry W. Lepthien,
Spiza, 143	Patterns of bird species diversity re-
americanus, Numenius, 48	vealed by Christmas counts versus
Ammodramus savannarum, 65	breeding bird surveys, 95-100
Ammospiza caudacuta, 139	Booby, Blue-footed, 136
leconteii, 65-66	Brown, 137, 143
Anas crecca crecca, 140	botterii, Aimophila, 81
cyanoptera, 70-71	Brachyramphus marmoratus, 130
c. septentrionalium, 71	brachyrhynchos, Corvus, 153
discors, 4, 70-71	Brant, Black, 147
anna, Calypte, 82, 158	Branta nigricans, 147
Calypte x Lampornis clemenciae, 153	brevirostris, Rissa, 92, 130
aeneus, Molothrus, 70	breweri, Spizella, 80, 160
anthonyi, Butorides virescens, 73	Bubo virginianus, 103
Anthus cervinus, 29-30	Bucephala islandica, 147
gustavi, 30	bulleri, Puffinus, 120-123
spinoletta, 29, 72, 76, 80	bullockii, Icterus, 77
spragueii, 29-30	Bunting, Indigo, 143, 151, 153, 154
antiquus, Synthliboramphus, 90, 129	Painted, 139
Archilochus alexandri, 73, 74	Buteo, albonotatus, 151
colubris, 73, 74	jamaicensis calurus, 55-57
arctica, Fratercula, 92	j. harlani, 55-62, 151, 153
Gavia, 12	lago pus. 56. 57

platypterus, 137, 140	Catoptrophorus semipalmatus, 48, 54
regalis, 57	caudacuta, Ammospiza, 139
swainsoni, 153	cauta, Diomedea cauta, 130
Butorides anthonyi, 73	celata, Vermivora, 76, 103
v. virescens, 73	Cepphus columba, 128
caerulea, Florida, 137, 140	Cerorbinca monocerata, 120-122, 129
Guiraca, 151	Certhia familiaris, 24, 72, 75, 79, 103
Polioptila, 75	cervinus, Anthus, 29-30
caerulescens, Dendroica, 31, 141, 150, 160	Chaetura vauxi, 110
Melanotis, 154	Charadrius alexandrinus, 47, 53
Calcarius lapponicus, 72	montanus, 47, 145
ornatus, 29, 139, 143	semipalmatus, 47
calendula, Regulus, 76, 103, 104, 161	vociferus, 4, 47
Calidris acuminata, 49, 140	Chat, Yellow-breasted, 77
alba, 49, 54	Chen rossii, 147
alpina, 49	Chickadee, Black-capped, 67, 162
bairdii, 49, 54	Carolina, 162
canutus, 49, 54, 147	Chestnut-backed, 67
ferruginea, 137	Mountain, 83, 103, 154, 162
mauri, 13, 49, 50, 111	chilensis, Catharacta skua, 126
melanotos, 49, 54	Chlidonias niger, 4
minuta, 112	Chloroceryle americana, 154
minutilla, 49, 50, 111	Chlorura chlorura, 104
	Chondestes g. grammacus, 78
pusilla, 83, 111	Chordeiles minor, 72
ruficollis, 111-113, 136	chrysoparia, Dendroica, 161
californicus, Larus, 120-122, 127, 151	chrysoptera, Vermivora, 141, 150
Calothorax lucifer, 148, 151	
calurus, Buteo jamaicensis, 55-57	cinerascens, Myiarchus, 80
Calypte anna, 82, 158	ciris, Passerina, 139
anna x Lampornis clemenciae, 153	cirrhata, Lunda, 90, 120-122, 129
costae, 82	Cistothorus palustris, 75
canadensis, Sitta, 103, 161	platensis, 75
caniceps, Junco, 103	citrea, Protonotaria, 160
canus, Larus, 127	citrina, Wilsonia, 142, 150, 154, 161
canutus, Calidris, 49, 54, 147	clemenciae, Lampornis, 153, 159
Capella gallinago, 48, 82	Coccyzus erythropthalmus, 145
Caprimulgus vociferus, 63-64	Colaptes auratus, 103
Cardellina rubifrons, 103	a. auratus, 151, 153
carneipes, Puffinus, 120-123	Collins, Charles T., A further record of
carolinensis, Parus, 162	the Western Whip-poor-will in Califor-
Sitta, 72, 103	nia, 63-64
carolinus, Euphagus, 142	colubris, Archilochus, 73, 74
Carpodacus mexicanus frontalis, 33-44	columba, Cepphus, 128
purpureus, 154	columbarius, Falco, 72
p. purpureus, 78	columbiana, Nucifraga, 103
cassini, Vireo solitarius, 76	confinis, Turdus migratorius, 153
castanea, Dendroica, 142, 150	constantii, Heliomaster, 151
castro, Oceanodroma, 143	Contopus pertinax, 138
Catharacta maccormicki, 120-122, 126	sordidulus, 153
skua chilensis, 126	virens, 73, 108
s. lonnbergi, 126	cooperi, Piranga rubra, 70, 78, 80
Catharus fuscescens, 75, 143	Cormorant, Double-crested, 140
guttatus, 69, 75, 103	Olivaceous, 140, 151
minimus, 75, 138, 153	corniculata, Fratercula, 14, 87-94, 129,
ustulatus, 69, 75, 80	141
was minus and, and, and	***

coronata, Dendroica, 31, 70, 103	discors, Anas, 4, 70-71
Corvus brachyrhynchos, 153	Dixon, Keith L., Mountain Chickadee
costae, Calypte, 82	survives for a decade, 162
Cowbird, Bronzed, 70	domesticus, Passer, 41
Brown-headed, 70, 72, 77	dominica, Pluvialis, 34, 48, 53, 147
Red-eyed, 70	dominicensis, Progne, 81
crassirostris, Tyrannus, 149	Dowitcher, Long-billed, 49
craveri, Endomychura, 109, 138, 164	Short-billed, 49, 147
creat opus, Puffinus, 120, 123	Dunlin, 49
crecca, Anas c., 140	Elliott, William P., see Hoffman, W.
Creeper, Brown, 24, 72, 75, 79, 103	Empidonax alnorum, 82
crinitus, Myiarchus, 73	difficilis, 73, 103, 149, 153
crissalis, Vermivora, 81	hammondii, 26, 73
cristatella, Aethia, 143	minimus, 73, 141
Crockett, Allen B., see Hubbard, J. D.	oberholseri, 26
Crossbill, Red, 72, 78	traillii, 73
Crow, Common, 153	wrightii, 25-27
cryptoleuca, Progne, 81	Endomychura craveri, 109, 138
Cuckoo, Black-billed, 145	hypoleuca, 109, 128
cucullatus, Icterus, 77	erythropthalmus, Coccyzus, 145
Icterus c., 79	Pipilo, 78
Curlew, Little, 143	Eugenes fulgens, 158
Long-billed, 48	Euphagus carolinus, 142
curvirostra, Loxia, 72, 78	Falco columbarius, 72
curvirostre, Toxostoma, 141	familiaris, Certhia, 24, 72, 75, 79, 103
cyanea, Passerina, 143, 151, 153, 154	fedoa, Limosa, 52, 54
Cyanocitta stelleri, 103	ferruginea, Calidris, 137
cyanoptera, Anas, 70-71	Finch, Black Rosy, 139
Cyclorrhynchus psittacula, 14, 90, 130	House, 33-44
Cypseloides niger, 110	Purple, 78, 154
delawarensis, Larus, 127	flammeolus, Otus, 158
Dendrocopos villosus, 103	flava, Piranga, 77
Dendrocygna autumnalis, 137	flavipes, Tringa, 48
Dendroica caerulescens, 31, 141, 150,	Flicker, Common, 103
160	Yellow-shafted, 151, 153
castanea, 142, 150	Florida caerulea, 137, 140
chrysoparia, 161	Flycatcher, Alder, 82
coronata, 31, 70, 103	Ash-throated, 80
discolor, 142	Coues', 138
fusca, 138, 142, 146, 150	Dusky, 26
magnolia, 141	Gray, 25-27
occidentalis, 80, 161	Great-crested, 73
pensylvanica, 142	Hammond's, 26, 73
petechia, 69, 76, 150	Kiskadee, 80, 108
pinus, 142	Least, 73, 141
striata, 69	Nutting's, 80, 82
townsendi, 80, 161	Scissor-tailed, 149, 153
virens, 31, 81, 138, 142, 150, 161	Traill's, 73
Dickcissel, 143	Vermilion-crowned (Social), 108
difficilis, Empidonax, 73, 103, 149, 153	Western, 73, 103, 149, 153
Diomedea albatrus, 119	forficata, Muscivora, 149, 153
c. cauta, 130	Franzreb, Kathleen E., Avian densities
immutabilis, 122	in a mixed-coniferous forest, Thomas
nigripes, 119-122	Creek, White Mountains, Arizona,
discolor Dendroica 142	101-105

Fratercula arctica, 92	Laughing, 148
corniculata, 14, 87-94, 129, 141	Mew, 127
Fregata magnificens, 137, 146	Ring-billed, 127
Frigatebird, Magnificent, 137, 146	Sabine's, 120-122, 128
frontalis, Carpodacus mexicanus, 33-44	Thayer's, 127
fulgens, Eugenes, 158	Western, 120-122, 127
fulicarius, Phalaropus, 52, 120-122, 125	gustavi, Anthus, 30
Fulmar, Northern, 120-123	guttatus, Catharus, 69, 75, 103
Fulmarus glacialis, 120-123	haemastica, Limosa, 140
funereus, Aegolius, 21-23	haliaetus, Pandion, 145
furcata, Oceanodroma, 120-122, 124	hammondii, Empidonax, 26, 73
fusca, Dendroica, 138, 142, 146, 150	Hansley, Paula L., see Hubbard, J. D.
fuscescens, Catharus, 75, 143	harlani, Buteo jamaicensis, 55-62, 151,
galbula, Icterus, 70	153
Icterus g., 77, 154	Hawk, Broad-winged, 137, 140
gallinago, Capella, 48, 82	Ferruginous, 57
gambeli, Parus, 83, 103, 154, 162	Harlan's, 55-62, 151, 153
Garrott, Robert A., see Kuchel, C. R.	Red-tailed, 55-57
Gavia adamsii, 7-20, 139	Rough-legged, 56, 57
arctica, 12	Sharp-shinned, 157
immer, 7, 12	Swainson's, 153
stellata, 12	Zone-tailed, 151
Gelochelidon nilotica, 148	Heliomaster constantii, 151
gentilis, Accipiter, 151, 158	Heron, Green, 73
georgiana, Melospiza, 65, 151	Little Blue, 137, 140
Geothlypis trichas, 76	Yellow-crowned Night, 146
gilvus, Vireo, 69, 76, 103	Hesperiphona vespertina, 72, 78
glacialis, Fulmarus, 120-123	hiemalis, Troglodytes t., 159
glaucescens, Larus, 120-122, 126	Himantopus mexicanus, 52, 54
Gnatcatcher, Black-capped, 150	himantopus, Micropalama, 52, 54
Blue-gray, 75	Hirai, Lawrence T., The nesting biology
Godwit, Bar-tailed, 140	of the House Finch in Honolulu,
Hudsonian, 140	Hawaii, 33-44
Marbled, 52, 54	hirundo, Sterna, 128, 145
Goldeneye, Barrow's, 147	Hoffman, Wayne, William P. Elliott and
Goldfinch, American, 76, 78	J. Michael Scott, The occurrence and
Goose, Ross', 147	status of the Horned Puffin in the
Goshawk, 151, 158	western United States, 87-94
graduacauda, Icterus, 154	Hubbard, Joel D., Allen B. Crockett and
grammacus, Chondestes g., 78	Paula L. Hansley, Second record for
Grebe, Eared, 12	the Phainopepla in Colorado, 28
Horned, 13, 153	Hummingbird, Allen's, 81
griseus, Limnodromus, 49, 147	Anna's, 82, 158
Puffinus, 120-122, 124	Anna's x Blue-throated, 153
Grosbeak, Blue, 151	Black-chinned, 73, 74
Evening, 72, 78	Blue-throated, 153, 159
Rose-breasted, 139, 142, 143, 154	Broad-tailed, 73, 103
Rose-breasted x Black-headed, 154	Costa's, 82
Guillemot, Pigeon, 128	Lucifer, 148, 151
	Rivoli's, 158
Guiraca caerulea, 151	Ruby-throated, 73, 74
Gull, Black-headed, 138	White-eared, 149
Bonaparte's, 127	hyemalis, Junco, 67
California, 120-122, 127, 151	Hylocharis leucotis, 149
Glaucous-winged, 120-122, 126	hypoleuca, Endomychura, 109, 128
Herring, 120-122, 127, 147, 153	"The second of the second of t
166	

Icteria virens, 77	canus, 127
Icterus bullockii, 77	delawarensis, 127
cucullatus, 77	glaucescens, 120-122, 126
c. cucullatus, 79	occidentalis, 120-122, 127
galbula, 70	philadelphia, 127
g. galbula, 77, 154	ridibundus, 138
graduacauda, 154	thayeri, 127
parisorum, 77	Lavers, Norman, Status of the Harlan's
pustulatus, 80	Hawk in Washington, and notes on its
spurius, 77, 139, 142, 143, 151	identification in the field, 55-62; The
wagleri, 154	status of the Gray Flycatcher in Wash-
Ictinia misisippiensis, 81, 140	ington State, 25-27
iliaca, Passerella, 72, 78, 80, 151	Lawson, C. S., Fish catching by a Black
immer, Gavia, 7, 12	Phoebe, 107-109
immutabilis, Diomedea, 122	leconteii, Ammospiza, 65-66
inexpectata, Pterodroma, 130	Lederer, Roger J., Walter S. Mazen and
interpres, Arenaria, 48, 54, 147	Peter J. Metropulos, Population fluc-
Iridoprocne bicolor, 146, 149	tuation in a Yellow-headed Blackbird
islandica, Bucephala, 147	marsh, 1-6
Ixoreus naevius, 150	Lepthien, Larry W., see Bock, C. E.
Jacksnipe, European, 48	leucogaster, Sula, 137, 143
Jaeger, Long-tailed, 120-122, 126, 138	leucorhoa, Oceanodroma, 120-122, 125
Parasitic, 120-122, 126, 151	Leucosticte atrata, 139
Pomarine, 120-122, 125	tephrocotis, 139
jamaicensis, Buteo, 55-62	leucotis, Hylocharis, 149
Jay, Steller's, 103	Limnodromas griseus, 49, 147
I .	scolopaceus, 49
Jehl, Joseph R., Jr., A Craveri's Murrelet	Limosa fedoa, 52, 54
from Oregon, 109  Junco caniceps, 103	haemastica, 140
byemalis, 67	lapponica, 140
Junco, Dark-eyed, 67	lincolnii, Melospiza, 65
Gray-headed, 103	Littlefield, Carroll D. and Eldon L. Mc-
Kautesk, Brian, see Weber, W. C.	Laury, Ovenbird records for Oregon,
Killdeer, 4, 47	114
Kingbird, Eastern, 108, 149	Lobipes lobatus, 51, 52, 54, 120-122,
Thick-billed, 149	125
Kingfisher, Green, 154	lomvia, Uria, 13, 14, 92, 130, 138
Kinglet, Golden-crowned, 67, 72, 76, 79,	longicaudus, Stercorarius, 120-122, 126,
103	138
Ruby-crowned, 76, 103, 104, 161	Longspur, Chestnut-collared, 29, 139,
Kite, Mississippi, 81, 140	143
Kittiwake, Black-legged, 90, 120-122,	Lapland, 72
127, 148	Loon, Arctic, 12
Red-legged, 92, 130	Common, 7, 12
Knot, Red, 49, 54, 147	Red-throated, 12
Kuchel, Craig R. and Robert A. Garrott,	Yellow-billed, 7-20, 139
Boreal Owl sighting in Yellowstone	lonnbergi, Catharacta skua, 126
National Park, 21-23	loyei, Molothrus aeneus, 70
	Loxia curvirostra, 72, 78
lagopus, Buteo, 56, 57	lucifer, Calothorax, 148, 151
Lampornis clemenciae, 153, 159	ludoviciana, Piranga, 77, 103
lapponica, Limosa, 140	ludovicianus, Pheucticus, 139, 142, 143,
lapponicus, Calcarius, 72	154
Larus argentatus, 120-122, 127, 147, 153	Pheucticus x P. melanocephalus, 154
atricilla, 148	Lunda cirrhata, 90, 120-122, 129
californicus, 120-122, 127, 151	Lunau Cirratu, 70, 120-122, 127

Molothrus aeneus loyei, 70 Lymnocryptes minimus, 48 McCaskie, Guy, A Rufous-necked Sandater, 70, 72, 77 piper in southern California, 111-113; monocerata, Cerorbinca, 120-122, 129 Leconte's Sparrow in California and montanus, Charardius, 47, 145 the western United States, 65-66; The Oreoscoptes, 159 Murre, Common, 13, 120-122, 128 Sprague's Pipit reaches California, 29-30; also see Winter, J. Thick-billed, 13, 14, 92, 130, 138 McClelland, B. Riley, Effectiveness of Murrelet, Ancient, 90, 129 Brown Creeper's concealment behav-Craveri's, 109, 138 Marbled, 130 ior, 24 McLaury, Eldon L., see Littlefield, C. D. Xantus', 109, 128 Muscivora forficata, 149, 153 McNicholl, Martin K., Sight record of Myadestes townsendi, 28, 104 White-throated Swift on Vancouver Mycteria americana, 146 Island, 110 Myiarchus cinerascens, 80 maccormicki, Catharacta, 120-122, 126 crinitus, 73 macropterus, Spinus pinus, 78 nuttingi, 80 macularia, Actitis, 4, 48 Myiozetetes similis, 108 magna, Sturnella, 72 naevius, Ixoreus, 150 magnificens, Fregata, 137, 146 nebouxii, Sula, 136 magnolia, Dendroica, 141 nelsoni, Icterus cucullatus, 78 major, Parus, 39 Vireo, 81 Manolis, Tim and Gerald V. Tangren, niger, Chlidonias, 4 Shorebirds of the Sacramento Valley, Cypseloides, 110 California, 45-54 Rynchops, 141 marila, Aythya, 153 Nighthawk, Common, 72 marmoratus, Brachyramphus, 130 nigricans, Branta, 147 mauri, Calidris, 13, 49, 50, 111 Sayornis, 107-109 Mazen, Walter S., see Lederer, R. J. Meadowlark, Eastern, 72 nigriceps, Polioptila, 150 nigripes, Diomedea, 119-122 Melanitta perspicillata, 147 nilotica, Gelochelidon, 148 melano cephalus, Pheucticus, 154 melanoleuca, Tringa, 48 nitens, Phainopepla, 28 noveboracensis, Seiurus, 150 Melanotis caerulescens, 154 melanotos, Calidris, 49, 54 Nucifraga columbiana, 103 Numenius americanus, 48 melodia, Melospiza, 78 minutus, 143 Melospiza georgiana, 65, 151 phaeopus, 48, 147 lincolnii, 65 Nutcracker, Clark's, 103 melodia, 78 Nuthatch, Red-breasted, 103, 161 Merlin, 72 White-breasted, 72, 103 Metropulos, Peter J., see Lederer, R. J. nuttingi, Myiarchus, 80 mexicanus, Himantopus, 52, 54 Nyctanassa violacea, 146 Micropalama himantopus, 52, 54 Nyctea scandiaca, 154 migratorius, Turdus, 72 oberholseri, Empidonax, 26 milleri, Tangavius aeneus, 70 occidentalis, Dendroica, 80, 161 minimus, Catharus, 75, 138, 153 Larus, 120-122, 127 Empidonax, 73, 141 oceanicus, Oceanites, 136 Lymnocryptes, 48 Oceanites oceanicus, 136 minor, Chordeiles, 72 Oceanodroma castro, 143 minuta, Calidris, 112 furcata, 120-122, 124 minutilla, Calidris, 49, 50, 111 leucorhoa, 120-122, 125 minutus, Numenius, 143 l. beali, 125 misisippiensis, Ictinia, 81, 140 l. leucorhoa, 125 Mniotilta varia, 151, 153 olivacea, Piranga, 77-78 Mockingbird, Blue, 154 olivaceous, Regulus satrapa, 79

olivaceus, Phalacrocorax, 140, 151	Pewee, Eastern Wood, 73, 108
Vireo, 76, 138, 141, 153	Western Wood, 153
Oporomis philadelphia, 76-77	phaeopus, Numenius, 48, 147
tolmiei, 76-77	Phaethon aethereus, 130, 143
oregonus, Pipilo erythrophthalmus, 78	Phainopepla, 28
Oreoscoptes montanus, 159	Phainopepla nitens, 28
oriantha, Zonotrichia leucophrys, 78	Phalacrocorax auritus, 140
Oriole, Baltimore, 77	olivaceus, 140, 151
Black-headed, 154	Phalarope, Northern, 51, 52, 54, 120-
Black-vented, 154	122, 125
Bullock's, 77, 80	Red, 52, 54, 120-122, 125
Hooded, 77, 79	Wilson's, 4, 51, 52
Northern, 70, 154	Phalaropus fulicarius, 52, 54, 120-122,
Orchard, 77, 139, 142, 143, 151	125
Scarlet-headed, 80	Pheucticus ludovicianus, 139, 142, 143,
Scott's, 77	154
ornatus, Calcarius, 29, 139, 143	ludovicianus x P. melanocephalus, 154
Osprey, 145	philadelphia, Larus, 127
	Oporornis, 76-77
otus, Asio, 158	Phillips, Allan R., Why neglect the dif-
Otus flammeolus, 158	ficult?, 69-86
Ovenbird, 114, 139, 150	Phoebe, Black, 107-109
Owl, Boreal, 21-23	Eastern, 108, 138
Flammulated, 158	
Great Horned, 103	phoebe, Sayornis, 108, 138
Long-eared, 158	picta, Setophaga, 67, 142
Snowy, 154	pinus, Dendroica, 142
pacificus, Troglodytes t., 159	Spinus, 78, 103
pallida, Spizella, 65, 139, 143	Vermivora x V. chrysoptera, 141
palustris, Cistothorus, 75	Pipilo erythrophthalmus, 78
Pandion baliaetus, 145	Pipit, Pechora, 30
paradisaea, Sterna, 120-122, 128, 145	Red-throated, 29-30
parasiticus, Stercorarius, 120-122, 126,	Sprague's, 29-30
151	Water, 29, 72, 76, 80
parisorum, Icterus, 77	Piranga flava, 77
Parula americana, 141	ludoviciana, 77-78, 103
Parula, Northern, 141	olivacea, 77-78
Parus atricapillus, 67, 162	rubra cooperi, 70, 78, 80
carolinensis, 162	r. rubra, 70, 78, 80
gambeli, 83, 10 <b>3</b> , 15 <b>4</b> , 162	Pitangus sulphuratus, 80, 108
major, 39	platensis, Cistothorus, 75
rufescens, 67	platycercus, Selasphorus, 73, 103
Passer domesticus, 41	platypterus, Buteo, 137, 140
Passerculus sandwichensis, 29, 65, 78	Plover, American Golden, 34, 48, 53, 147
Passerella iliaca, 78, 80, 151	Black-bellied, 48
iliaca stephensi, 72	Mountain, 47, 145
Passerina ciris, 139	Semipalmated, 47
cyanea, 143, 151, 153, 154	Snowy, 47, 53
passerina, Spizella, 65, 104	plumbeus, Vireo solitarius, 76
pensylvanica, Dendroica, 142	Pluvialis dominica, 34, 48, 53, 147
peregrina, Vermivora, 153, 160	squatarola, 48
perspicillata, Melanitta, 147	Podiceps auritus, 13, 153
	nigricollis, 12
pertinax, Contopus, 138	Polioptila caerulea, 75
petechia, Dendroica, 69, 76, 150	nigriceps, 150
Petrel, Mottled, 130	pomarinus, Stercorarius, 120-122, 125
Peucedramus taeniatus, 160	pointainas, steitorainas, 120-122, 125

Sandpiper, Baird's, 49, 54 Porter, Richard D. and Larry C. Pritchett, Black-throated Blue Warbler in Utah, Curlew, 137 Least, 49, 50, 111 31 Pritchett, Larry C., see Porter, R. D. Pectoral, 49, 54 Rufous-necked, 111-113, 136 Progne cryptoleuca, 81 Semipalmated, 83, 111 dominicensis, 81 Protonotaria citrea, 160 Sharp-tailed, 49, 140 Solitary, 48, 73 psittacula, Cyclorrhynchus, 14, 90, 130 Spotted, 4, 48 Pterodroma inexpectata, 130 Ptychoramphus aleuticus, 120-122, 129 Stilt, 52, 54 Western, 13, 49, 50, 111 Puffin, Common, 92 sandwichensis, Passerculus, 29, 65, 78 Horned, 14, 87-94, 129, 141 Sapsucker, Williamson's, 103, 158 Tufted, 90, 120-122, 129 Yellow-bellied, 72, 103 Puffinus bulleri, 120-123 sasin, Selasphorus s., 81 carneipes, 120-123 satrapa, Regulus, 67, 72, 76, 103 creatopus, 120-123 Regulus s., 76, 79 griseus, 120-122, 124 savannarum, Ammodramus, 65 puffinus, 130 saxatalis, Aeronautes, 110 tenuirostris, 124 Sayornis nigricans, 107-109 puffinus, Puffinus, 130 phoebe, 108, 138 purpureus, Carpodacus, 154 scandiaca, Nyctea, 154 Carpodacus, p., 78 Scaup, Greater, 153 pusilla, Calidris, 83, 111 scolopaceus, Limnodromus, 49 Wilsonia, 69, 76 Scoter, Surf, 147 pustulatus, Icterus, 80 Scott, J. Michael, see Hoffman, W. querula, Zonotrichia, 151 Seiurus aurocapillus, 114, 139, 150 Recurvirostra americana, 4, 52 noveboracensis, 150 Redstart, American, 69 Selasphorus platycercus, 73, 103 Painted, 67, 142 s. sasin, 81 regalis, Buteo, 57 semipalmatus, Catoptrophorus, 48, 54 Regulus calendula, 76, 103, 104, 161 Charadrius, 47 satrapa, 67, 72, 76, 103 septentrionalium, Anas cyanoptera, 71 s. satrapa, 76, 79 Setophaga picta, 67, 142 Remsen, J. V., Jr. and Laurence C. Binruticilla, 69 ford, Status of the Yellow-billed Loon Shearwater, Buller's, 120-123 (Gavia adamsii) in the western United States and Mexico, 7-20 Flesh-footed, 120-123 Manx, 130 ridibundus, Larus, 138 Pink-footed, 120-123 Rissa brevirostris, 92, 130 tridactyla, 90, 120-122, 127, 148 Short-tailed, 124 Sooty, 120-122, 124 Robin, American, 72 Sialia sialis, 79 American (San Lucas), 153 s. sialis, 79 Rufous-backed, 150, 151 similis, Myiozetetes, 108 rossii, Chen, 147 Siskin, Pine, 78, 103 rubifrons, Cardellina, 103 Sitta canadensis, 103, 161 rubra, Piranga r., 70, 78, 80 carolinensis, 72, 103 rufescens, Parus, 67 Skimmer, Black, 141 ruficapilla, Vermivora, 69, 76, 80 Skua, South Polar, 120-122, 126 ruficollis, Calidris, 111-113, 136 Snipe, Common, 48 rufo palliatus, Turdus, 150, 151 Wilson's, 82 ruticilla, Setophaga, 69 Solitaire, Townsend's, 28, 104 Rynchops niger, 141 solitaria, Tringa, 48 sabini, Xema, 120-122, 128 Tringa s., 73 Sanderling, 49, 54 solitarius, Vireo, 69, 76

sordidulus, Contopus, 153	striata, Dendroica, 69
Sparrow, Botteri's, 81	striatus, Accipiter, 157
Brewer's, 80, 160	Sturnella magna, 72
	Sula leucogaster, 137, 143
Chipping, 65, 104	nebouxii, 136
Clay-colored, 65, 139, 143	sulphuratus, Pitangus, 108
Fox, 72, 78, 80, 151	swainsoni, Buteo, 153
Golden-crowned, 151	Swallow, Tree, 146, 149
Grasshopper, 65	Swift, Black, 110
Harris', 151	Vaux's, 110
House, 41	White-throated, 110
Lark, 78	
LeConte's, 65-66	Synthliboramphus antiquus, 90, 129
Lincoln's, 65	taeniatus, Peucedramus, 160
Savannah, 29, 65, 78	Tanager, Hepatic, 77
Sharp-tailed, 139	Scarlet, 77-78
Song, 78	Summer, 70, 77-78, 80
Swamp, 65, 151	Western, 77-78, 103
White-crowned, 78	Tangavius aeneus milleri, 70
Speich, Steven M. and Janet L. Witze-	Tangren, Gerald V., see Manolis, T.
man, Arizona bird records, 1973, with	Teal, Blue-winged, 4, 70-71
additional notes, 145-155	Cinnamon, 70-71
Sphyrapicus thyroideus, 103, 158	Green-winged, 140
varius, 72, 103	tenuirostris, Puffinus, 124
spinoletta, Anthus, 29, 72, 76, 80	tephrocotis, Leucosticte, 139
Spinus pinus, 103	Tern, Arctic, 120-122, 128, 145
pinus macropterus, 78	Black, 4
tristis, 76	Common, 128, 145
t. tristis, 78	Gull-billed, 148
Spiza americana, 143	Least, 148
Spizella breweri, 80, 160	thayeri, Larus, 127
pallida, 65, 139, 143	Thrasher, Bendire's, 146, 160
passerina, 65, 104	Curve-billed, 141
Spoonbill, Roseate, 137, 140, 147	Sage, 159
spragueii, Anthus, 29-30	Thrush, Gray-cheeked, 75, 138, 153
spurius, Icterus, 77, 139, 142, 143, 151	Hermit, 69, 75, 103
squatarola, Pluvialis, 48	Swainson's, 69, 75, 80
Starthroat, Plain-capped, 151	Varied, 150
Steganopus tricolor, 4, 51, 52	thyroideus, Sphyrapicus, 103, 158
stellata, Gavia, 12	Tit, Great, 39
stelleri, Cyanocitta, 103	tolmiei, Oporornis, 76-77
stephensi, Passerella iliaca, 72	Towhee, Green-tailed, 104
Stercorarius longicaudus, 120-122, 126,	Rufous-sided, 78
138	townsendi, Dendroica, 80, 161
parasiticus, 120-122, 126, 151	Myadestes, 28, 104
pomarinus, 120-122, 125	Toxostoma bendirei, 146, 160
Sterna albifrons, 148	curvirostre, 141
birundo, 128, 145	traillii, Empidonax, 73
paradisaea, 120-122, 128, 145	Tree Duck, Black-bellied, 137
Stilt, Black-necked, 52, 54	trichas, Geothlypis, 76
	tricolor, Steganopus, 4, 51, 52
Stint, Little, 112 Stork Wood 146	tridactyla, Rissa, 90, 120-122, 127, 148
Stork, Wood, 146 Storm Potrol. Fork toiled, 120, 122, 124	Tringa flavipes, 48
Storm-Petrel, Fork-tailed, 120-122, 124	melanoleuca, 48
Leach's, 120-122, 125	solitaria, 48
Harcourt's, 143	
Wilson's, 136	s. solitaria, 73

tristis, Spinus, 76	Black-throated Green, 81, 138, 142,
Spinus t., 78	150, 161
Troglodytes aedon, 103	Blue-winged x Golden-winged, 141
a. aedon, 75	Chestnut-sided, 142
troglodytes, 72, 75, 150, 159	Colima, 81
Tropicbird, Red-billed, 130, 143	Golden-cheeked, 161
Turdus migratorius, 72	Golden-winged, 150
m. confinis, 153	Hermit, 80, 161
rufopalliatus, 150, 151	Hooded, 142, 150, 154, 161
Turnstone, Ruddy, 48, 54, 147	MacGillivray's, 76-77
Tyrannus crassirostris, 149	Magnolia, 141
tyrannus, 108, 149	Mourning, 76-77
Uria aalge, 13, 120-122, 128	Nashville, 69, 76, 80
lomvia, 13, 14, 92, 130, 138	Olive, 160
ustulatus, Catharus, 69, 75, 80	Orange-crowned, 76, 103
varia, Mniotilta, 151, 153	Pine, 142
varius, Sphyrapicus, 72, 103	Prairie, 142
vauxi, Chaetura, 110	Prothonotary, 160
Veery, 75, 143	Red-faced, 103
Vermivora celata, 76, 103	Tennessee, 153, 160
chrysoptera, 150	Townsend's, 80, 161
crissalis, 81	Wilson's, 69, 76
peregrina, 153, 160	Yellow, 69, 76, 150
pinus x V. chrysoptera, 141	Yellow-rumped (Audubon's), 31, 70,
ruficapilla, 69, 76, 80	103
vespertina, Hesperiphona, 72, 78	Waterthrush, Northern, 150
villosus, Dendrocopos, 103	Weber, Wayne C. and Brian Kautesk, A
violacea, Nyctanassa, 146	sight record of the Painted Redstart
virens, Contopus, 73, 108	near Vancouver, British Columbia, 67
Dendroica, 81, 138, 142, 150, 161	Whimbrel, 48, 147
Icte <b>ri</b> a, 77	Whip-poor-will, 63-64
Vireo bellii, 69	Willet, 48, 54
gilvus, 69, 76, 103	Wilsonia citrina, 142, 150, 154, 161
nelsoni, 81	pusilla, 69, 76
olivaceus, 76, 138, 141, 153	Winter, Jon and Guy McCaskie, 1973 re-
solitarius, 69, 76	port of the California Field Ornithol-
Vireo, Bell's, 69	ogists Records Committee, 135-144
Dwarf, 81	Witzeman, Janet L., see Speich, S. M.
Red-eyed, 76, 138, 141, 153	Woodpecker, Hairy, 103
Solitary, 69, 76	Wren, Eastern House, 75
Warbling, 69, 76, 103	House, 103
virescens, Butorides v., 73	Long-billed Marsh, 75
virginianus, Bubo, 103	Short-billed Marsh (Sedge), 75
vociferus, Caprimulgus, 63-64	Winter, 72, 75, 150, 159
Charadrius, 4, 47	wrightii, Empidonax, 25-27
wagleri, Icterus, 154	Xanthocephalus xanthocephalus, 1-6
Wahl, Terence R., Seabirds in Washing-	Xema sabini, 120-1 <b>2</b> 2, 128
ton's offshore zone, 117-134	Yellowlegs, Greater, 48
Warbler, Bay-breasted, 142, 150	Lesser, 48
Black and White, 151, 153	Yellowthroat, Common, 76
Blackburnian, 138, 142, 146, 150	Zimmerman, Dale A. and Marian A. Zim-
Blackpoll, 69	merman, Bird records of interest from
Black-throated Blue, 31, 141, 150,	southwestern New Mexico, 157-161
160	Zonotrichia atricapilla, 151
200	leucophrys, 78
172	querula, 151

# WESTERN BIRDS

Quarterly Journal of California Field Ornithologists

President: Guy McCaskie Treasurer: Clifford R. Lyons

Membership Secretary: Glenda Hightower Secretary, Records Committee: Jon Winter

Editor: Alan M. Craig

Editorial Board: Alan Baldridge, William H. Behle, Andrew J. Berger, Laurence C. Binford, Jeanne Conry-Webb, David F. DeSante, Joseph Greenberg, Ned K. Johnson, Virginia P. Johnson, Brina Kessel, Charles S. Lawson, Clifford R. Lyons, Tim Manolis, Guy McCaskie, M. Timothy Myres, Harry B. Nehls, J. V. Remsen, Jr., Thomas L. Rodgers, Stephen M. Russell, Oliver K. Scott, P. David Skaar, Arnold Small, Richard W. Stallcup, David Stirling, G. Shumway Suffel, Charles Trost, Terence R. Wahl, Roland H. Wauer, Bruce Webb, Dale A. Zimmerman

Layout and cover design by Virginia P. Johnson

## TABLE OF CONTENTS VOLUME 6, 1975

### Volume 6, Number 1, 1975

Population Fluctuation in a Yellow-headed Blackbird Marsh Roger J. Lederer, Walter S. Mazen, and Peter J. Metropulos	1
Status of the Yellow-billed Loon (Gavia adamsii) in the Western United States and Mexico J. V. Remsen, Jr. and Laurence C. Binford	7
NOTES	
Boreal Owl Sighting in Yellowstone National Park  Craig R. Kuchel and Robert A. Garrott	21
Effectiveness of Brown Creeper's Concealment Behavior  B. Riley McClelland	24



The Status of the Gray Flycatcher in Washington State Norman Lavers	25
Second Record for the Phainopepla in Colorado Joel D. Hubbard, Allen B. Crockett, and Paula L. Hansley	28
The Sprague's Pipit Reaches California Guy McCaskie	29
Black-throated Blue Warbler in Utah Richard D. Porter and Larry C. Pritchett	31
BULLETIN BOARD	32
Volume 6, Number 2, 1975	
The Nesting Biology of the House Finch in Honolulu, Hawaii <i>Lawrence T. Hirai</i>	33
Shorebirds of the Sacramento Valley, California  Tim Manolis and Gerald V. Tangren	45
Status of the Harlan's Hawk in Washington, and Notes on Its Identification in the Field Norman Lavers	55
NOTES	
A Further Record of the Western Whip-poor-will in California Charles T. Collins	63
LeConte's Sparrow in California and the Western United States Guy McCaskie	65
A Sight Record of the Painted Redstart Near Vancouver, British Columbia Wayne C. Weber and Brian Kautesk	67

## Volume 6, Number 3, 1975

Why Neglect the Difficult? Allan R. Phillips	69
The Occurrence and Status of the Horned Puffin in the Western United States Wayne Hoffman, William P. Elliott and J. Michael Scott	87
Patterns of Bird Species Diversity Revealed by Christmas Counts Versus Breeding Bird Surveys Carl E. Bock and Larry W. Lepthien	95
Avian Densities in a Mixed-coniferous Forest, Thomas Creek, White Mountains, Arizona Kathleen E. Franzreb	101
NOTES	
Fish Catching by a Black Phoebe C. S. Lawson	107
A Craveri's Murrelet from Oregon Joseph R. Jehl, Jr.	109
Sight Record of White-throated Swift on Vancouver Island Martin K. McNicholl	110
A Rufous-necked Sandpiper in Southern California Guy McCaskie	111
Ovenbird Records for Oregon Carroll D. Littlefield and Eldon L. McLaury	114
Volume 6, Number 4, 1975	
Seabirds in Washington's Offshore Zone  Terence R. Wahl	117
1973 Report of the California Field Ornithologists Records Committee Jon Winter and Guy McCaskie	135
Arizona Bird Records, 1973, with Additional Notes Steven M. Speich and Janet L. Witzeman	145
	156
Treasurer's Report Phil Schaeffer	
Treasurer's Report Phil Schaeffer  NOTES	
•	157
NOTES  Bird Records of Interest from Southwestern New	157 1 <b>62</b>

Manuscripts should be sent to Alan M. Craig, Box 98 Nimshew Stage, Chico, CA 95926. For matters of style consult Suggestions to Contributors to Western Birds (6 pp. mimeo available at no cost from the Editor) and CBE Style Manual, 3rd ed., 1972 (available from American Institute of Biological Sciences, 3900 Wisconsin Ave. NW, Washington, DC 20016 for \$6.00).

Papers are desired that are based upon field studies of birds, that are both understandable and useful to amateurs, and that make a significant contribution to scientific literature. Appropriate topics include distribution, migration, status, behavior, ecology, population dynamics, habitat requirements, the effects of pollution, and techniques for identifying, censusing, sound recording and photographing birds in the field. Papers of general interest will be considered regardless of their geographic origin, but particularly desired are papers dealing with studies accomplished in or bearing on Rocky Mountain states and provinces westward, including Alaska and Hawaii; adjacent portions of the Pacific Ocean and Mexico; and western Texas.

Authors are provided 50 free reprints of each paper. Additional reprints can be ordered at author's expense from the Editor when proof is returned or earlier.

Good photographs of rare and unusual birds, unaccompanied by an article but with caption including species, date, locality and other pertinent information, should be submitted to Arnold Small, 608 N. Camden Drive, Beverly Hills, CA 90210.

Send rare bird reports for California to Jon Winter, Point Reyes Bird Observatory, Box 321, Bolinas, CA 94924; see Calif. Birds 2:109-110. For Arizona, send reports to Robert A. Witzeman, 4619 E. Arcadia Lane, Phoenix, AZ 85018. For Colorado, send reports to Jack Reddall, 4450 South Alton Street, Englewood, CO 80110.

Membership dues and orders for back issues of California Birds/Western Birds should be sent to Phil Schaeffer, 376 Greenwood Beach Road, Tiburon, California 94920. Make checks payable to California Field Ornithologists.

Membership dues, for individuals and institutions, including subscription to Western Birds: Patron, \$1000; Life \$150; Supporting, \$20 annually; Contributing, \$10 annually; Regular, \$5 annually. Dues and contributions are tax deductible to the extent allowed by law. Back issues are available at \$4 for Volume 1 (Numbers 2, 3 and 4; 1970), \$6 for Volume 2 (1971), and \$5 per volume for Volume 3 (1972) and subsequent volumes.

Changes of address should be sent to Carol Yutzy, Ramsey Canyon Preserve, Box 84, Hereford, Arizona 85615.

### WESTERN BIRDS ADVERTISING RATES AND SPECIFICATIONS

Full Page	4 x 6-3/4 inches	\$60 per issue	\$200 per year
Half Page	4 x 3-3/8 inches	\$40 per issue	\$130 per year
Quarter Page	4 x 1-11/16 inches	\$30 per issue	\$110 per year

Offset printing, one column per page, 4 inches wide. Glossy, black and white photos are acceptable; half tone screen size: 133 line. Photo-ready copy is requested. If this is not possible, extra charges for typesetting will be made as follows: \$15 full page, \$10 half page, \$5 quarter page. Send copy with remittance to Phil Schaeffer, 376 Greenwood Beach Road, Tiburon, California 94920. Make checks payable to California Field Ornithologists. A 15% commission is allowed for agencies.

