## RECENT RECORDS OF LAND BIRDS FROM SOUTH FARALLON ISLAND, CALIFORNIA

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In the summers of 1964 and 1965 I obtained specimens of 62 species of land birds on South Farallon Island, located in the Pacific Ocean about 30 miles west of San Francisco, California. Among these are 27 species comprising new records for South Farallon, and thus adding considerably to the list of 74 species of land birds previously known to have occurred on the island (see Townsend, 1885; Bryant, 1888; Dawson, 1911a, 1911b; Thoreson, 1960; and Bowman, 1961).

South Farallon Island (known also as Southeast Farallon) is the southernmost and largest exposed projection of a granitic ridge running southeastward from the vicinity of Pt. Reyes, and is the site of the largest sea-bird rookery on the Pacific coast of the United States. The island is approximately 3/4 miles long by 1/2 mile wide, and reaches an altitude of 343 feet at the top of Light House Hill. The nearest mainland is Pt. Reyes, 20 miles to the north. On the south and east sides of the island, from an old coastline 50 feet above present sea level, a wave-cut terrace slopes gently down to the water's edge. About 30 species of introduced and native grasses and herbs grow on the terrace, and it supports the island's only trees, two Monterey Cypresses (Cupressus macrocarpa) with overlapping canopies, and a densely foliated seven-foot-tall Monterey Pine (Pinus radiata), which has been forced by the winds to grow almost horizontally. The pine is about 160 yards east of the cypresses. The rest of the island is predominantly bare granite.

While studying cormorant behavior, I resided on South Farallon from 3 to 17 June 1964, and for the following periods in 1965: 19 May to 2 June, 19 to 30 June, 3 to 10 July, 17 to 28 July, 31 July to 11 August, and 25 August to 8 September. An annotated list of the land birds I collected during these periods is given below. Species that have not previously been reported from South Farallon Island are marked with an asterisk. Both scientific and vernacular nomenclatures follow the American Ornithologists' Union Check-list (1957). Specimens are deposited in the Vertebrate Museum, San Francisco State College.

## ANNOTATED LIST OF SPECIES

Falco sparverius. Sparrow Hawk. One specimen was obtained on 18 July 1965: male, testis  $2.5 \times 5$  mm, 74 g, no fat. I saw another Sparrow Hawk on 7 August 1965. Thoreson (1960) reports a Sparrow Hawk seen on South Farallon in January.

Spectyto cunicularia. Burrowing Owl. The feathered remains of two birds of this species were found, one in June 1964 and the other in May 1965. Both birds had been dead for several months. Bryant (1888), Dawson (1911b), and Bowman (1961) report this species from South Farallon.

Chordeiles acutipennis.\* Lesser Nighthawk. Two specimens were obtained in 1965: 23 June, male, testis  $3 \times 5$  mm, 50.5 g, no fat; 30 June, female, largest ovum 2.5 mm, 42.1 g, no fat. In 1965 I observed two birds flying together at dusk on 22 June, two birds (including the male collected) on 23 June, one bird on 29 June, and one bird on 3 and 4 July.

Selasphorus sasin.\* Allen's Hummingbird. Two specimens, both males, were obtained in 1965: 22 June, testis 0.8 mm, 3.5 g, moderately fat; 7 July, testis 0.5 mm, 3.6 g, moderately fat.

Tyrannus verticalis. Western Kingbird. One specimen was obtained on 29 May 1965: male, testis  $6 \times 12$  mm, 42 g, moderately fat; the same bird (presumably) was present on 27 and 28 May. I saw another bird on 22 June 1965. Bryant (1888) reports that the species was seen on 28 May.

Myiarchus cinerascens. Ash-throated Flycatcher. Five specimens were obtained: 12 June 1964, female, ova minute, 28.5 g, moderately fat; 23 June 1965, male, testis  $2.5 \times 5$  mm, 28 g, little fat; 25 July 1965, male, testis  $2 \times 4$  mm, 25 g, little fat, skull fully ossified; 25 July 1965, female, largest ovum 0.5 mm, 24.5 g, little fat, skull fully ossified; 31 August 1965, male, testis  $1 \times 2$  mm, 27.3 g, little fat, skull fully ossified. In 1965 I saw one bird on 2 September, and at least 10 birds on both 5 and 6 September. Dawson (1911b) reports two Ash-throated Flycatchers seen and one collected on South Farallon on 1 and 2 June, respectively.

Sayornis saya.\* Say's Phoebe. Two specimens, both males with fully ossified skulls and little fat, were obtained on 5 September 1965: testis  $1 \times 2$  mm, 22.4 g; testis 0.5 mm, 24.3 g. I saw four other birds on 5 September 1965, and one on 7 September 1965.

Empidonax traillii. Traill's Flycatcher. Two specimens were obtained in 1965: 23 June, male, testis 3 × 6 mm, 13 g, moderately fat; 31 August, sex undetermined, 12.7 g, little fat, skull not fully ossified. A specimen of E. traillii is reported by Grinnell and Miller (1944:257) to have been obtained on South Farallon on 29 May 1911.

Empidonax wrightii.\* Gray Flycatcher. One specimen was obtained on 27 May 1965: male, testis  $2 \times 4$  mm, 12.2 g, moderately fat.

Empidonax difficilis. Western Flycatcher. One specimen was obtained on 23 June 1965: female, largest ovum 1 mm, 10.2 g, little fat. This was probably the most abundant species on the island during the fall migration in 1965. On 2 September I noted 15 to 20 birds, and by 5 September I estimated that the number had grown to "several hundred." Dawson (1911b) reports two birds (one obtained as a specimen) on South Farallon on 29 May, and Bryant (1888) took one specimen but does not give the date.

Contopus sordidulus. Western Wood Pewee. Three specimens were obtained: 12 June 1964, male, testis  $4 \times 6$  mm, 11.5 g, little fat; 27 May 1965, male, testis  $3 \times 5.5$  mm, 12.2 g, little fat; 27 May 1965, female, ova minute, 14 g, little fat. In 1965 I observed three to four birds daily from 27 May to 2 June, four or five birds daily from 19 to 22 June, one bird on 1 September, and 10 to 12 birds on 5 September. Dawson (1911b) reports "a dozen or more" birds seen on South Farallon on 29 May, and Bryant (1888) states that the species was "seen on a number of different days during the month of May."

Nuttallornis borealis. Olive-sided Flycatcher. Three specimens were obtained in 1965: 22 June, male, testis  $4 \times 8$  mm, 29.1 g, little fat; 31 July, female, ova minute 28.8 g, no fat, skull fully ossified; 7 September, female, ova minute, 29.6 g, little fat, skull not fully ossified. I saw four birds on 5 September 1965. Dawson (1911b) reports "several" birds seen and one collected on 2 June.

Stelgidopteryx ruficollis.\* Rough-winged Swallow. One specimen was obtained on 4 September 1965: sex undetermined, 15.6 g, little fat, skull not fully ossified; this was one of six birds seen on this date. On 7 September 1965 I saw a flock of about 25 birds flying about near the top of Light House Hill, and watched several of these individuals land to catch flies on the rocky, windswept hillside.

Hirundo rustica. Barn Swallow. One specimen was obtained on 6 September 1965: sex undetermined, 16.8 g, little fat, skull not fully ossified. I saw one bird on 16 June 1964, and a flock of five on 7 September 1965. Bryant (1888) reports the presence of two birds on South Farallon from 21 May to 2 June 1887.

Petrochelidon pyrrhonota.\* Cliff Swallow. Two specimens, both males with unossified skulls, no fat, and 1.5 mm testes, were obtained on 24 June 1965. They weighed 17.5 g and 18.5 g respectively. The two birds were flying together when shot.

Sitta canadensis. Red-breasted Nuthatch. Four specimens were obtained: 12 June 1964, male, testis 4.5 × 6 mm, 11.9 g, moderately fat; 2 September 1965, female, ova minute, 10 g, no fat, skull not fully ossified; 3 September 1965, male, testis 0.5 mm, 10.3 g, skull not fully ossified; 4 September 1965, female, 10.5 g. I saw one bird on 5 September 1965. Bryant (1888) reports "a number" of birds seen on South Farallon in September 1885, and one specimen, a female, was obtained.

Troglodytes aedon.\* House Wren. One specimen was obtained on 7 September 1965: male, testis 0.8 mm, 9.1 g, little fat, skull not fully ossified.

Troglodytes troglodytes\* Winter Wren. One specimen was obtained on 5 September 1965: sex undetermined, 7.6 g, little fat, skull not fully ossified; this was one of two birds seen on this date. On 6 September 1965 I saw four Winter Wrens.

Mimus polyglottos.\* Mockingbird. One specimen was obtained on 29 May 1965: female, largest ovum 2.5 mm, 46.4 g, no fat. A Mockingbird, presumbably the one I collected, was seen on 27 and 28 May 1965.

Hylocichla ustulata. Swainson's Thrush. Two specimens were obtained in 1965: 1 June, male, testis 8 × 11 mm, 30 g, little fat, skull fully ossified; 4 September, sex undetermined, 40.4 g, heavy fat deposits, skull not fully ossified. In 1965 I observed nine Swainson's Thrushes on 4 September, 10 or 12 on 5 September, and at least 20 on 6 September. Dawson (1911b) obtained a specimen of H. ustulata on South Farallon on 29 May, and Bowman (1961) reports one Swainson's Thrush seen on 17 June.

Bombycilla cedrorum. Cedar Waxwing. One specimen was obtained on 29 May 1965: male, testis  $4 \times 7$  mm, 27.4 g, no fat. I saw another bird on 1 June 1965. Dawson (1911b) reports "a single bird well seen," but gives no other details.

Vireo gilvus. Warbling Vireo. Four specimens were obtained in 1965: 27 May, female, largest ovum 1 mm, 12.3 g, no fat; 4 September, female, ova minute, 10.1 g, no fat, skull not fully ossified; 5 September, sex undetermined, 10.3 g, no fat, skull not fully ossified; 7 September, sex undetermined, 9.1 g, little fat, skull not fully ossified. I saw one Warbling Vireo on 1 June 1965. A specimen of V. g. swainsonii was obtained on South Farallon on 28 May 1887 (see Grinnell and Miller, 1944:389).

Helmitheros vermivorus.\* Worm-eating Warbler. One specimen was obtained on 5 July 1965: female, ova minute, 14.5 g, moderately fat, skull not fully ossified. I know of only one other record of this species in California, an immature male found dead in Chula Vista, San Diego County, on 18 September 1960 (see Huey, 1961a).

Vermivora peregrina.\* Tennessee Warbler. One specimen was obtained on 22 June 1965: female, ova minute, 7.7 g, little fat. Other records of this species in California have been in San Diego, Los Angeles, Alameda, and Marin counties (see Grinnell and Miller, 1944:391; Duff, 1945; Kinsey, 1945; and McCaskie and Banks, 1964:358).

Vermivora celata. Orange-crowned Warbler. One specimen was obtained on 23 June 1965: male, testis 1 mm, 8.4 g, little fat. Bryant (1888) reports an Orange-crowned Warbler seen on South Farallon on 22 May.

Vermivora ruficapilla.\* Nashville Warbler. Two specimens were obtained in 1965: 28 May, male, testis  $3 \times 6$  mm, 8.7 g, little fat; 3 August, sex undetermined, 7.6 g, little fat, skull not fully ossified.

Dendroica petechia. Yellow Warbler. Adult specimen obtained 5 September 1965: male, 8.8 g, little fat, skull fully ossified. I also obtained two specimens of immature Yellow Warblers in 1965: 31 July, sex undetermined, 9.4 g, little fat, skull not fully ossified; 29 August, sex undetermined, 8.6 g, little fat, skull not fully ossified. Bryant (1888) and Dawson (1911b) both report Yellow Warblers seen on South Farallon in May.

Dendroica magnolia. Magnolia Warbler. Five specimens were obtained in 1965: 21 June, female, largest ovum 1 mm, 6.7 g, no fat, skull fully ossified; 21 June, female, largest ovum 1 mm, 7.9 g, little fat; 23 June, male, testis  $3.5 \times 4.5$  mm, 7.4 g, no fat; 24 June, female, largest ovum 2 mm, 6.5 g, no fat; 4 September, sex undetermined, 9.4 g, little fat, skull not fully ossified. In 1965 I saw one bird on 3 and 4 Juy, and another on 18 July. Dawson (1911b) reports a male and a female obtained as specimens on South Farallon on 29 May and 2 June, respectively.

Dendroica nigrescens.\* Black-throated Gray Warbler. One specimen was obtained on 6 September 1965: male, 8 g, little fat, skull not fully ossified. This bird was found dead at the base of the light house. Another male was seen in the cypresses on 8 September 1965.

Dendroica townsendi. Townsend's Warbler. Two specimens were obtained in 1965: 30 May, female, largest ovum 1 mm, 9.6 g, moderately fat; 31 August, sex undetermined, 9.1 g, little fat,

skull not fully ossified. During fall migration in 1965 the species appeared on South Farallon on 30 August and increased in number daily; on 5 September I saw about 100 birds. Bryant (1888) reports two males seen on South Farallon on 22 May, and Dawson (1911b) reports one male seen on 1 June.

Dendroica virens. Black-throated Green Warbler. One specimen was obtained on 22 June 1965: female, largest ovum 1.5 mm, 8.6 g, no fat. Dawson (1911a) obtained a female specimen on South Farallon on 29 May and saw a second female on 1 June. An adult female of this species was found dead in San Diego on 15 October 1960 (see Huey, 1961b), and I am told by Guy McCaskie that other records appear in Audubon Field Notes.

Dendroica fusca.\* Blackburnian Warbler. One specimen was obtained on 31 May 1965: female, largest ovum 1 mm, 9.7 g, little fat. I know of only one other record of this species in California, an immature bird taken in San Diego County on 21 October 1962 (see McCaskie and Banks, 1964).

Dendroica pensylvanica. Chestnut-sided Warbler. One specimen was obtained on 7 July 1965: female, largest ovum 1 mm, 9.1 g, little fat, skull fully ossified. Bowman (1961) obtained a specimen of an adult female on South Farallon on 17 June.

Dendroica striata.\* Blackpoll Warbler. Five specimens were obtained in 1965: 21 June, male, testis  $5 \times 7$  mm, 13.5 g, moderately fat, skull fully ossified; 22 June, male, testis  $4 \times 5$  mm, 12.6 g, little fat; 22 June, female, largest ovum 1 mm, 11.5 g, little fat; 3 July, male, testis 1 mm, 11.6 g, moderately fat, skull fully ossified; 5 September, sex undetermined, 11.6 g, little fat, skull not fully ossified.

Dendroica palmarum.\* Palm Warbler. One specimen was obtained on 30 May 1965: female, largest ovum 1 mm, 10.3 g, little fat. I saw one bird on 28 May 1965, and another on 31 May 1965.

Seiurus aurocapillus. Ovenbird. Six specimens, all with fully ossified skulls, were obtained in June 1965: 21 June, male, testis  $6 \times 8.5$  mm, 15.5 g, no fat; 21 June, male, testis  $5 \times 7$  mm, 20.9 g, moderately fat; 21 June, female, largest ovum 1 mm, 16.8 g, little fat; 22 June, male, testis  $5 \times 11$  mm, 19.4 g, little fat; 22 June, male testis  $3 \times 8$  mm, 12.8 g; 24 June, female, largest ovum 2 mm, 18.8 g, little fat. S. aurocapillus has been recorded from the Farallons by Dawson (1911a) who obtained an adult male and saw another Ovenbird on 29 May, and by Bowman (1961) who obtained a specimen of an adult male on 17 June.

Oporornis agilis. Connecticut Warbler. Two specimens were obtained on 22 June 1965: male, testis  $4 \times 4$  mm, 13.1 g, moderately fat, skull fully ossified; female, largest ovum 2 mm, 12 g, little fat, skull fully ossified. I saw one bird in male plumage on both 28 and 30 May 1965. Bowman (1961) obtained a specimen of an adult female O. agilis on South Farallon on 16 June 1958, which, to my knowledge, is the only previous record of the species in California.

Oporornis tolmiei.\* MacGillivray's Warbler. Two specimens were obtained: 13 June 1964, male, testis 5 × 6.5 mm, 12.1 g, heavy fat deposits; 29 August 1965, male, testis 1 mm, 10.5 g, little fat, skull not fully ossified. In 1965 I observed one MacGillivray's Warbler on 30 August and six on 5 September.

Geothlypis trichas. Yellowthroat. Four specimens were obtained: 15 June 1964, female, largest ovum 1 mm, 10.2 g, little fat; 31 May 1965, female, largest ovum 1.5 mm, 9.3 g, little fat; 22 June 1965, female, largest ovum 1 mm, 9.6 g, little fat; 30 August 1965, male, testis 1 mm, 9.3 g, no fat, skull not fully ossified. In 1965 I observed one bird on 23 June, one bird on 3 July, one bird on 4 July, and two birds on 5 September (none of the birds observed had the black face mask characteristic of adult males). Bowman (1961) reports a male seen on South Farallon on 13 June.

Wilsonia pusilla. Wilson's Warbler. Four specimens were obtained in 1965: 27 May, male, testis 2.5 × 3 mm, 6.7 g, little fat; 28 May, female, ova minute, 7.4 g, moderately fat; 30 May, female, largest ovum 1 mm, 6.9 g, little fat; 31 August, sex undetermined, 7 g, little fat, skull not fully ossified. During the fall migration in 1965 I first observed Wilson's Warblers on 30 August, saw five birds on 3 September, and by 5 September I estimated that 200 to 300 birds were present on the island. Wilsonia pusilla has been reported from South Farallon by both Dawson (1911b) and Bryant (1888).

Setophaga ruticilla. American Redstart. Six specimens were obtained in 1965: 20 June, female, largest ovum 2 mm, 8 g, no fat, skull fully ossified; 22 June, male, testis 4 × 5 mm, 8.3 g, little fat; 24 June, female, largest ovum 1.5 mm, 7.4 g, little fat; 31 August, male, testis 1 mm, 9.7 g, moderately fat, skull not fully ossified; 5 September, male, 7.4 g, little fat, skull fully ossified; 8 September, male, testis minute, 8.2 g, little fat, skull fully ossified. On 30 June 1965 I observed an individual in female-type plumage flycatching in the cypresses. Dawson (1911b) and Bowman (1961), respectively, report "a second year male" seen on 1 June and a female seen on 16 June.

Dolichonyx oryzivorus.\* Bobolink. One specimen, a female with an incompletely ossified skull, was obtained on 6 September 1965: ova minute, 25.2 g, no fat.

Agelaius phoeniceus. Red-winged Blackbird. One specimen was obtained on 6 September 1965: male, testis 1.2 mm, 66.3 g, skull fully ossified, immature plumage, little fat. Bryant (1888) reports Red-winged Blackbirds from South Farallon.

Icterus galbula.\* Baltimore Oriole. One specimen, a male with fully ossified skull, was obtained on 20 June 1965 (testis  $5 \times 8$  mm, 34 g, no fat). The bird was accompanied by a male Bullock's Oriole when taken. I know of no specimens of Icterus galbula previously obtained in California.

Icterus bullockii.\* Bullock's Oriole. Four specimens were obtained in 1965: 23 June, male, testis 4.5 × 7 mm, 39 g, moderately fat, skull fully ossified (this bird was seen daily from 19 June until it was secured as a specimen); 25 July, male, testis 1.5 mm, 32.2 g, moderately fat, skull not fully ossified; 31 July, sex undetermined, 34.5 g, little fat, skull not fully ossified; 29 August, male, testis 1.5 mm, 30.8 g, moderately fat, skull not fully ossified. In addition, I saw two birds on 2 September and at least six birds on 6 September.

Molothrus ater artemisiae. Brown-headed Cowbird. Two specimens, both males in immature plumage, were obtained in 1965: 3 August, testis 0.8 mm, 37.2 g, little fat; 4 August, testis 1 mm, 55.3 g, heavy fat deposits. These specimens were allocated to M. a. artemisiae on the basis of wing, tail, tarsus, and bill measurements (see Grinnell, 1909). Dawson (1911b) reports a specimen of M. a. artemisiae obtained on South Farallon on 2 June.

Molothrus ater obscurus. Brown-headed Cowbird. Four specimens were obtained in 1965: 27 May, male, testis  $4 \times 4$  mm, 49 g, moderately fat, skull fully ossified (this bird was accompanied by another M. ater in male plumage); 3 August, sex undetermined, 39.3 g, moderately fat, skull not fully ossified, immature plumage; 10 August, sex undetermined, 36 g, moderately fat, skull not fully ossified, immature plumage; 2 September, female, ova minute, 39 g, little fat, skull not fully ossified, immature plumage. These specimens were allocated to M. a. obscurus on the basis of wing, tail, tarsus, and bill measurements (see Grinnell, 1902). From 3 August to 8 September 1965 about 15 immature cowbirds were present daily on the island.

Piranga ludoviciana. Western Tanager. One specimen was obtained on 2 September 1965: female, ova minute, 29.6 g, little fat, skull fully ossified. I saw a male in breeding plumage on 27, 28, and 29 May 1965. In 1965 Western Tanagers were present throughout the first week of September, and I noted about 12 birds on 6 September. Bryant (1888) reports a male in immature plumage obtained on 13 September, and Dawson (1911b) reports an adult female seen on 1 June.

Pheucticus ludovicianus.\* Rose-breasted Grosbeak. Four specimens were obtained in 1965: 28 May, male, testis 8 × 12 mm, 43 g, moderately fat, skull fully ossified; 1 June, male, 48.6 g, moderately fat, skull fully ossified; 21 June, female, largest ovum 2 mm, 39 g, little fat, skull fully ossified; 23 June, female, largest ovum 1.5 mm, 41.8 g, moderately heavy fat deposits, skull fully ossified.

Pheucticus melanocephalus. Black-headed Grosbeak. Two specimens were obtained in 1965: 29 August, male, testis 1 × 2 mm, 38 g, no fat, skull not fully ossified; 2 September, female, largest ovum 0.5 mm, 43.3 g, little fat, skull fully ossified. In 1965 I saw two Black-headed Grosbeaks on 5 September and five or six on 6 September. Bryant (1888) reports a Black-headed Grosbeak taken on South Farallon on 28 May.

Guiraca caerulea.\* Blue Grosbeak. One specimen was obtained on 5 September 1965: male, testis 1 mm, 31.5 g, moderately fat, skull not fully ossified, immature plumage.

Passerina amoena. Lazuli Bunting. One specimen was obtained on 5 September 1965: sex undetermined, 14.2 g, little fat, skull not fully ossified. In 1965 I saw two birds in immature or female plumage on 5 September (including the one thurberi) and two on 6 September. Dawson (1911b) reports a single male seen on 1 and 2 June.

Spinus pinus. Pine Siskin. One specimen was obtained on 7 July 1965: male, testis  $5.5 \times 6$  mm, 11.5 g, little fat, skull fully ossified. Bowman (1961) reports Spinus pinus seen on South Farallon on 18 May.

Spinus tristis.\* American Goldfinch. Two specimens were obtained on 31 May 1965: male, testis  $3.5 \times 4$  mm, 14.3 g, moderately heavy fat deposits; female, largest ovum 1 mm, 12.8 g, moderately heavy fat deposits.

Passerculus sandwichensis.\* Savannah Sparrow. Two specimens were obtained in 1965: 2 September, male, testis 1.5 mm, 17.8 g, little fat, skull fully ossified; 7 September, sex undetermined, 20.6 g, little fat, skull not fully ossified. During the first week of September 1965 I saw groups of three to seven Savannah Sparrows daily on the grassy sea terrace.

Chondestes grammacus.\* Lark Sparrow. One specimen was obtained on 4 September 1965: female, largest ovum 1 mm, 34.5 g, moderately fat, skull fully ossified. On 6 September 1965 I saw six Lark Sparrows on the grassy sea terrace.

Junco oreganus. Oregon Junco. One specimen was obtained on 7 September 1965: female, ova minute, 15 g, little fat, skull not fully ossified. Oregon Juncos have been reported from South Farallon by Bryant (1888). Alden H. Miller identified this specimen as being J. o. thurberi.

Spizella passerina. Chipping Sparrow. Four specimens were obtained in 1965: 29 May, male, testis  $6 \times 8$  mm, 15.2 g, moderately fat; 31 May, male, testis  $6 \times 9$  mm, 15.2 g, moderately fat; 5 September, sex undetermined, 9.6 g, little fat, skull not fully ossified; 5 September, sex undetermined, 12.7 g, moderately fat, skull not fully ossified. In 1965 I saw two Chipping Sparrows on 30 May and one on 31 July. Bryant (1888) reports a Chipping Sparrow seen on South Farallon on 22 May, and Dawson (1911b) reports one seen on 2 June.

Spizella pallida.\* Clay-colored Sparrow. One specimen was obtained on 12 June 1964: male, testis 2.5 × 4 mm, 12 g, moderately fat. Guy McCaskie (personal communication) collected an immature female of this species in San Diego County in September 1963 and has seen the species each fall since then.

Spizella breweri.\* Brewer's Sparrow. One specimen was obtained on 11 June 1964: female, largest ovum 1.3 mm, 10.2 g, no fat.

Zonotrichia albicollis.\* White-throated Sparrow. One specimen was obtained on 13 June 1964: male, testis  $7 \times 9$  mm, 25 g, moderately fat.

Passerella iliaca. Fox Sparrow. One specimen was obtained on 5 September 1965: sex undetermined, 30 g, little fat, skull not fully ossified. A Fox Sparrow ascribed to P. i. fuliginosa has been reported from South Farallon (see Grinnell and Miller, 1944:531).

The following species of land birds were seen but not collected.

Columba livia. Rock Dove. One bird was present on South Farallon from 18 to 27 July 1965. It was caught and banded by Elden James-Veitch on 25 July when it wandered into a building.

Zenaidura macroura. Mourning Dove. 16 June 1964, one seen; 26 May 1965, one seen; 1-7 September 1965, one to three seen daily.

Coccyzus americanus. Yellow-billed Cuckoo. On 8 July 1965 I saw one bird leave the cypress trees and fly eastward over the sea until it disappeared from sight.

Megaceryle alcyon. Belted Kingfisher. I saw one bird on 4 and 5 June 1964. Sayornis nigricans. Black Phoebe. I saw one bird on 4 and 5 June 1964.

Mniotilta varia. Black-and-White Warbler. I saw a single bird daily from 29 to 31 May 1965.

The House Sparrow (Passer domesticus), House Finch (Carpodacus mexicanus), and Rock Wren (Salpinctes obsoletus) are resident on South Farallon, and I saw all three species nesting and feeding young in both 1964 and 1965.

In May 1965 I found the feathered remains of two Black-legged Kittiwakes (Rissa tridactyla). One of these was in a pile of drift a few yards from the shoreline and was probably washed ashore during a storm. The second carcass was about 100 yards from the nearest shoreline and probably died on the island. On 4 September 1965 I saw a Semipalmated Plover (Charadrius semipalmatus), and on 7 September I collected a male of this species. Neither the kittiwake nor the Semipalmated Plover has previously been recorded on South Farallon Island.

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