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NUMBER 7

BIRDS OF THE PACIFIC SLOPE OF
SOUTHERN CALIFORNIA

BY

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NOTE

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INTRODUCTION

In February, 1910, at the request of the Southern Division of the Cooper Ornithological Club, I began the compilation of the paper presented herewith. The first idea of the Club was to revise Grinnell's *Birds of the Pacific Slope of Los Angeles County*, published in 1898 by the Pasadena Academy of Sciences. It was finally decided, however, to extend the boundaries of the territory covered by that list so as to take in the Pacific slope of southern California from, and including, Santa Barbara County, to the Mexican line, and from the summit of the mountains to the ocean, also including all the islands of the Santa Barbara group. This territory comprises all of Santa Barbara and Ventura counties, Los Angeles County south and west from the Liebre Mountains, Sierra Pelona and Sierra San Gabriel, San Bernardino County south and west from the Sierra Madre and San Bernardino ranges, all of Orange County, Riverside County west from the San Jacinto Range, and San Diego County west from the Volcan and Cuyamaca ranges; also the eight islands of the Santa Barbara group, namely San Miguel, Santa Rosa, Santa Cruz, Anacapa, Santa Barbara, San Nicolas, Santa Catalina and San Clemente. In some cases I have deemed it advisable to refer to records outside the limits as described above in order to show certain connecting features in distribution or migration.

By vote of the Southern Division of the Club, it was recommended that I adhere closely to the nomenclature employed in the latest edition of the American Ornithologists' Union *Check-List of North American Birds*, published in 1910. In some instances I have been led to differ from the decisions of the A. O. U. Committee, as given in the *Check-List*, in regard to the distribution of certain species and subspecies. In such cases I have given reasons for my contrary opinion.

I have endeavored to treat conservatively all instances of unusual occurrence recorded without absolute evidence of their authenticity. Some of these that have appeared to me to be most unlikely, and probably the result of misidentification, I have omitted entirely, and others whose occurrence in this locality, although appearing doubtful, is supported by a certain amount of apparently authentic evidence, I have assigned to the hypothetical list.

In the case of the rarest breeding birds, I have attempted to give all, or at least several, breeding records. In case of species that breed commonly, I have given the earliest and latest nesting dates that have come to my attention.

The dates given for migration and nesting are, I believe, practically correct.

However, there will be found exceptional instances, particularly as to times of migration, which will not come within the dates as given here. This, of course, is to be expected, as it is a well-known fact that individuals or small companies of many species either precede or straggle behind the main migratory body.

Especially is this true in the case of many of the water-birds, which are frequently noted along our coast at times when, according to the general dates as given here for their migrations, they should be engaged in incubating their eggs or raising their young in a more northern latitude. Some of these stragglers may have dropped behind the main body of their species as the result of wounds or disease which render them incapable of making the long northward journey to their breeding grounds. In some instances where the species does not mature the first year, many of the immature birds may remain with us, while the mature birds of their species go north to perform their reproductive duties. This is particularly noticeable in the case of the scoters.

In some other species, ordinarily migratory, there seem to be a considerable number of individuals that are non-breeders. These non-breeding birds are frequently noted with us during the summer months. Especially is this true with the turnstones, tattlers and many other waders. There is also a considerable variation from year to year in the dates of the migrations of many species, probably due principally to the condition of the weather and the food supply. Some species, also, maintain different routes of migration in spring and fall. They may be abundant in a certain locality during the fall migration and rare in the spring, or vice-versa.

Taking all these facts into consideration, it is easily seen that migration dates, while they may be substantially correct, are bound to be far from infallible, and exceptional instances, instead of being regarded as surprising, are to be expected.

The number in parenthesis at the right of the running number in the list is that given the species in the A. O. U. *Check-List*.

I have aspired to make this list as complete and as correct as possible; and with this end in view I have gone over all obtainable literature on the birds of this region and have culled thoroughly my own notes and those of many other students of the birds of the region. For all errors of commission or omission I ask the indulgence of the reader, and freely invite correction or criticism, realizing that absolute freedom from error in a list of this kind is an impossibility.

ACKNOWLEDGMENTS

I am under great obligations to Joseph Grinnell, G. Frean Morcom, Robert Ridgway and Harry S. Swarth, who have at all times been ready with advice on perplexing questions, many of which I would have been entirely unable to solve without their help.

I am deeply indebted to W. Lee Chambers and Harry J. Lelande for the unrestricted use of their fine libraries, to the Los Angeles Public Library and to the Library of the University of California for the loan of books, and to William and George Cline of Los Angeles for the privilege of examining their fine collection of mounted birds.

To the following members of the Cooper Club my thanks are due for the use of specimens and notes: J. S. Appleton, Louis B. Bishop, J. Hooper Bowles, William Brewster, Homer C. Burt, W. Lee Chambers, Wells W. Cooke, Frank S. Daggett, Evan Davis, W. Leon Dawson, Edwin W. Gifford, M. French Gilman, Joseph Grinnell, Alfred B. Howell, Ozra W. Howard, Albert M. Ingersoll, Alphonse Jay, Antonin Jay, W. B. Judson, J. Eugene Law, Harry J. Lelande, Clarence B. Linton, Leverett M. Loomis, Loye H. Miller, Harry C. Oberholser, Virgil W. Owen, Richard M. Perez, Lawrence Peyton, Sidney Peyton, Wright M. Pierce, Roth Reynolds, Howard Robertson, Frank Stephens, Kate Stephens, Harry S. Swarth, John E. Thayer, Adriaan van Rossem, Harry E. Wilder and Howard W. Wright.

GEORGE WILLETT.

*Los Angeles, California,
February 1, 1912.*

BIRDS OF THE PACIFIC SLOPE OF SOUTHERN CALIFORNIA

1. (1) **Æchmophorus occidentalis** (Lawrence). WESTERN GREBE.

Common winter visitant to the ocean and salt lagoons along the coast. Occasional on bodies of water inland. Arrives about September and leaves generally by the latter part of April, but may be seen occasionally during the summer. A single Western Grebe was noted by Bradford Torrey on the ocean near Santa Barbara on several occasions during the months of June, July and August, 1910 (Condor XII, 1910, 204).

2. (2) **Colymbus holboelli** (Reinhardt). HOLBOELL GREBE.

Rare winter visitant. Observed at Santa Barbara by A. L. Heermann (Pac. R. R. Rep. x, 1859, 76), and C. B. Nordhoff records finding the remains of an immature bird at Elsinore Lake, Riverside County, in February, 1902 (Auk. XIX, 1902, 212).

3. (3) **Colymbus auritus** Linnaeus. HORNED GREBE.

Probably a fairly common winter visitant on the ocean, less plentiful on inland bodies of water. C. P. Streater took a specimen at Santa Barbara in 1885 (Orn. & Ool. XI, 1886, 90). I have taken specimens at Hyperion, Los Angeles County, as follows: Adult female, March 10, 1911; adult male, January 3, 1912; and adult male, January 8, 1912. C. B. Linton took an immature female at Alamitos, Los Angeles County, January 14, 1907, and an adult female at San Diego Bay, November 4, 1906 (Condor IX, 1907, 110). E. Heller took a specimen near Riverside in the winter of 1893 (Condor III, 1901, 100).

4. (4) **Colymbus nigricollis californicus** (Heermann). EARED GREBE.

Common breeding bird on some of the lakes of higher altitudes, less common on ponds in the lower country, south to San Diego County. In winter may be found plentifully on ponds of the lower country, on the salt lagoons along the coast, and on the ocean. Breeds at Elizabeth Lake, northern Los Angeles County, and abundantly at Bear Lake in the San Bernardino Mountains. At the latter place I took fresh sets of eggs on June 22, 1907, at which date most of the nests contained incomplete sets.

According to Alphonse and Antonin Jay, a few pairs of these birds nest every year at Railroad Lake, a small lagoon near Wilmington, Los Angeles County, a short distance from the ocean. H. J. Leland found a colony of about fifteen pairs nesting at Nigger Slough, Los Angeles County, July 8, 1911. All of the nests contained eggs at this date.

A colony of more than a hundred birds was found by A. M. Ingersoll and W. B. Judson at San Jacinto Lake, Riverside County, in 1897. On June 8, they examined upwards of forty nests containing eggs. C. S. Sharp found a nest of the Eared Grebe, containing seven partly incubated eggs, in the San Pasqual Valley, near Escondido, San Diego County, April 22, 1906 (Condor IX, 1907, 85).

5. (6) **Podilymbus podiceps** (Linnaeus). PIED-BILLED GREBE.

Common breeding species on fresh water ponds and lakes of the lower

country. In winter occurs along the coasts as well as on inland bodies of water. Breeds mostly in May.

Antonin Jay took a set of eight eggs, advanced in incubation, at Nigger Slough, Los Angeles County, May 17, 1903, and a set of seven, incubation commenced, in the same locality, June 7, the same year. I found the species breeding plentifully at San Jacinto Lake, Riverside County, May 27 and 28, 1911. At this date most of the eggs were hatched (Condor XIII, 1911, 157). C. S. Sharp has taken fresh eggs in the vicinity of Escondido, San Diego County, from May 3 to June 24 (Condor IX, 1907, 86).

6. (7) **Gavia immer** (Brünnich). COMMON LOON.

Fairly common winter visitant along the coast south to Lower California; sometimes on inland lakes and ponds. Arrives in October and leaves during the latter part of April and first part of May. Occasional in summer. I have an adult female in winter plumage taken at Bolsa Chica, Orange County, November 10, 1907, and an adult male in almost full breeding plumage taken at Alamitos, Los Angeles County, May 4, the same year. I also saw two birds of this species in immature plumage fishing near the pier at Manhattan Beach, Los Angeles County, July 6, 1911, and noted one bird at Bolsa Chica, July 24, 1911. J. G. Cooper found the Loon abundant in winter in San Diego Bay, some remaining as late as May (B., Br. & Ridg., W.B.N.A. II, 1884, 447).

7. (10) **Gavia pacifica** (Lawrence). PACIFIC LOON.

Common winter visitant on the ocean. Particularly abundant around the Santa Barbara Islands. Arrives in September and remains until late in May.

8. (11) **Gavia stellata** (Pontoppidan). RED-THROATED LOON.

Regular winter visitant along the coast. Arrives at about the same time as the preceding species, but the majority appear to depart about a month earlier in the spring (Beck, Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 58). I have taken several specimens of this loon along the Los Angeles County coast in winter. A. L. Heermann obtained one example at San Diego (Pac. R. R. Rep. x, 1859, 76), and J. G. Cooper secured a male at Santa Barbara, April 27, 1863 (B., Br. & Ridg., W.B.N.A. II, 1884, 458).

9. (12) **Lunda cirrhata** (Pallas). TUFTED PUFFIN.

Common resident on Anacapa, Santa Cruz and San Miguel islands and probably also on Santa Rosa. Less common on Santa Barbara and San Nicolas. H. W. Henshaw noted this species nesting on Santa Cruz Island in the summer of 1875 (Ann. Rep. Ch. En. U. S. G. S., App. JJ, 1876, 278). J. S. Appleton and H. C. Burt took fresh eggs on San Miguel Island, June 6, 1906, and in June, 1910, I found them breeding commonly there and also on Anacapa, (Condor XII, 1910, 172). C. B. Linton saw a Tufted Puffin on San Nicolas Island in May, 1910, and I saw one in the same locality, June 23, 1911. The species has been noted on Santa Barbara Island by various observers.

10. (15) **Cerorhinca monocerata** (Pallas). RHINOCEROS AUKLET.

Common winter visitant along the coast, south to Lower California. Arrives in October and may be found until early May. I have taken many specimens

of this bird around the Santa Barbara Islands where they are particularly numerous. Frequently found dead along the beaches. Noted by H. W. Henshaw as abundant off San Diego during the winter of 1884 (Auk II, 1885, 387).

11. (16) **Ptychoramphus aleuticus** (Pallas). CASSIN AUKLET.

Common resident along the coast. Breeds on Santa Barbara, Santa Cruz and San Miguel islands and probably also on Santa Rosa. In winter may be found on the ocean everywhere. J. Grinnell and H. A. Gaylord took four nearly hatched eggs of this species on Santa Barbara Island, May 16, 1897. At this date the majority of the nests found contained young of various ages (Pub. 1, Pasadena Acad. Sci., 1897, 22). On visiting Santa Barbara Island in June, 1911, I found that the old breeding colony of these birds was entirely abandoned. From the bones and feathers of the birds found all over the island, I concluded that they had been exterminated by the cats with which the island is infested. On a detached rocky islet about a quarter of a mile from the main island, I found a colony of about a hundred pairs of Auklets nesting. Nine nests examined on June 14 contained far incubated eggs. R. H. Beck found incubated eggs and young near Scorpion Harbor, Santa Cruz Island, June 5, 1895 (Bull. Cooper Orn. Club I, 1899, 85). I found the Cassin Auklet breeding abundantly on small islands lying off San Miguel Island in the summer of 1910. On June 15 I took two fresh eggs, but most of the nests contained young (Condor XII, 1910, 172).

12. (21) **Synthliboramphus antiquus** (Gmelin). ANCIENT MURRELET.

Regular winter visitant along the coast, south at least to San Diego County. C. B. Linton took two birds at Santa Cruz Island December 17 and 18, 1907 (Condor x, 1908, 125). Linton also took several specimens at San Clemente Island in December, 1908 (Condor xi, 1909, 102). A. van Rossem took a specimen from a flock of eight birds at Catalina Island, February 13, 1910 (Osburn, Condor XIII, 1911, 76). I found a bird of this species dead on the beach at Hyperion, Los Angeles County, March 17, 1910, and Howard Wright found two dead at Terminal Island, Los Angeles County, January 23, 1908, and another on February 8, the same year (Condor xi, 1909, 64). A male was found dead by H. W. Marsden at Pacific Beach, San Diego County, April 25, 1904 (Bishop, Condor VII, 1905, 141).

13. (23) **Brachyramphus marmoratus** (Gmelin). MARBLED MURRELET.

Winter visitant on the ocean, south at least to Santa Barbara. The A.O.U. *Check-List* and other lists have repeatedly given the range of this species as "south to San Diego in winter." There seems to be, however, no authentic record south of Santa Barbara.

Clark P. Streater took several specimens near Santa Barbara during the winter of 1885-6 (Orn. & Ool. xi, 1886, 90). J. H. Bowles has a specimen taken in the same locality. He found it dead on the beach July 30, 1910. On another occasion he saw a bird of this species fishing around one of the piers at Santa Barbara. L. M. Loomis and R. H. Beck have noted the Marbled Murrelet at Monterey from late July (1894) until April 2 (1907). The birds were very irregular in their movements, being plentiful at certain seasons during some

years and rare at the same seasons during other years (Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 59-60).

14. (25) **Brachyramphus hypoleucus** Xantus. XANTUS MURRELET.

Fairly common on the ocean throughout the year. Breeds in small numbers on several of the Santa Barbara Islands, north at least to Anacapa.

Howard Wright has noted this bird in summer at San Clemente Island and believes that they were breeding there, although he failed to locate the nests. J. G. Cooper states that he found it breeding rarely on Santa Barbara Island in the 60's (Proc. Cal. Acad. Sci. iv, 1868, 12). In June, 1911, I noted several birds near this island and on June 15, I found an egg, the contents of which had been eaten by a raven or gull. On June 5, 1910, I saw two pairs of these Murrelets near the east end of Anacapa Island (Condor XII, 1910, 170); and H. C. Burt took a slightly incubated egg on this island, May 15, 1911. Another fresh egg and a set of three eggs, also fresh, were taken for Mr. Burt in the same locality by H. B. Webster, May 29, the same year.

15. (29) **Cepphus columba** Pallas. PIGEON GUILLEMOT.

Common resident on Santa Barbara, Anacapa, Santa Cruz, Santa Rosa and San Miguel islands, breeding in May and June. Recorded south to San Nicolas and San Clemente.

Noted breeding on Santa Cruz Island by H. W. Henshaw in the summer of 1875 (Ann. Rep. Ch. En. U. S. G. S., 1876, App. JJ, 278). J. Grinnell and H. A. Gaylord took four slightly incubated sets of eggs on Santa Barbara Island May 15, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 23); and I found fresh eggs on San Miguel Island as late as June 23 (1910) (Condor XII, 1910, 172). On June 26, 1911, I saw three birds at San Nicolas Island, where they were probably breeding, and J. G. Cooper recorded the species from San Clemente (Proc. Cal. Acad. Sci. iv, 1869, 79).

16. (30a) **Uria troille californica** (H. Bryant). CALIFORNIA MURRE.

Breeds on San Miguel Island in moderate numbers. South in winter at least to coast of Orange County. Noted by C. P. Streater as rather rare at Santa Barbara in 1885 (Orn. & Ool. XI, 1886, 107). Seen once in summer by B. W. Evermann near the wharf at Ventura (Auk III, 1886, 88). W. Lee Chambers found a Murre in dying condition on the beach at Santa Monica, Los Angeles County, November 3, 1900 (Swarth, Condor III, 1901, 17); and I found one dead on the beach at Bay City, Orange County, March 9, 1910.

In June, 1906, J. S. Appleton and H. C. Burt found a colony of about a hundred pairs of Murres breeding on a small island about half a mile from the main island of San Miguel. On June 6, they took fresh and slightly incubated eggs. In June, 1910, I visited this colony accompanied by Mr. Appleton and other members of the Cooper Ornithological Club, and we found that the colony had not appreciably increased or diminished since Mr. Appleton's first visit. By June 15, some of the eggs had hatched and most of the others were advanced in incubation (Condor XII, 1910, 172). This is, by far, the most southern breeding record for the species.

17. (36) **Stercorarius pomarinus** (Temminck). POMARINE JAEGER.

Jaegers are frequently seen along our coast, but, as few specimens have been taken, it is hardly possible to estimate the comparative abundance of this species and the next. According to the last A.O.U. *Check-List*, the Pomarine Jaeger is a common fall migrant on the coast of California, wintering south to the Galapagos Islands. It occurs at Point Pinos, Monterey County, every month in the year, but is really common only during the passage southward in August, September and October (Beck, Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 61). We may safely conclude from the above that the species is rather common on the ocean in the fall, and may occasionally be found at other times of the year.

18. (37) **Stercorarius parasiticus** (Linnaeus). PARASITIC JAEGER.

Fairly common fall and winter visitant along the coast. According to R. H. Beck, most numerous on the coast of Monterey County in August and September (Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 61). Noted by H. W. Henshaw as common in December, 1884, from Santa Barbara north (Auk II, 1885, 232). Recorded by B. W. Evermann as frequently seen in winter along the coast above Ventura (Auk III, 1886, 88). H. S. Swarth took a female at Santa Monica, Los Angeles County, September 29, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 6). I took a male at Hyperion, Los Angeles County, December 15, 1911; and on December 18, following, I took two more specimens and Antonin Jay secured one, in the same locality.

19. (38) **Stercorarius longicaudus** Vieillot. LONG-TAILED JAEGER.

One record, that of a young male taken by H. W. Marsden at Pacific Beach, San Diego County, September 19, 1904 (Bishop, Condor VII, 1905, 141). Now no. 11682, collection L. B. Bishop.

20. (40a) **Rissa tridactyla pollicaris** Ridgway. PACIFIC KITTIWAKE.

Regular winter visitant in small numbers, south to Lower California. A female in first winter plumage was sent to J. Grinnell from Playa del Rey, Los Angeles County, where it was found dead on the beach, January 9, 1906 (Condor VIII, 1906, 57). Antonin Jay has an immature male found dead on the beach in the same locality, December 30, 1911. C. B. Linton took a female at Alamitos Bay, Los Angeles County, April 14, 1907 (Condor IX, 1907, 199). A. W. Anthony noted the Kittiwake as of regular, though not common, occurrence, off San Diego and about the Coronados Islands (Auk XV, 1898, 267). He took a specimen near San Diego February 26, 1895 (Auk XII, 1895, 177).

21. (44) **Larus glaucescens** Naumann. GLAUCOUS-WINGED GULL.

Regular winter visitant in small numbers, south at least to San Diego. Recorded by B. W. Evermann as a winter visitant at Ventura, though not common (Auk, III, 1886, 88). J. Grinnell noted it at Catalina Island in December, 1897, and W. B. Judson took an immature bird at Redondo, Los Angeles County, in winter (Pub. 2, Pasadena Acad. Sci., 1898, 6). Several immatures were noted by G. F. Breninger at San Clemente Island in February, 1903 (Auk XXI, 1904, 219). I have an immature female taken by Antonin Jay at Hyperion, Los Angeles County, July 4, 1910, and I saw an adult bird in the same locality.

December 22, 1911. Recorded from San Diego by J. G. Cooper (B., Br. & Ridg., W. B. N. A. II, 1884, 224) and A. W. Anthony (Auk XXIII, 1906, 131).

22. (49) **Larus occidentalis** Audubon. WESTERN GULL.

Abundant resident. Breeds in May and June on all the Santa Barbara Islands. Occasional inland in winter. During the breeding season most of the Western Gulls seen along the shore of the mainland are immature birds.

23. (51) **Larus argentatus** Pontoppidan. HERRING GULL.

Fairly common in winter along the coast, south to Lower California. Occasional on inland lakes and ponds. Arrives about September and remains until May.

24. (53) **Larus californicus** Lawrence. CALIFORNIA GULL.

Common along the coast from September until early May. Occasional inland. One bird was noted by J. Grinnell off Catalina Island, May 12, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 23).

25. (54) **Larus delawarensis** Ord. RING-BILLED GULL.

Abundant winter visitant along the coast from September to May. Occasional inland. I found this species common at Alamitos Bay, Los Angeles County, September 17, 1907, and abundant at Hyperion, Los Angeles County, April 25, 1910. Immature birds were rather plentiful in the latter locality as late as May 24 (1910).

26. (55) **Larus brachyrhynchus** Richardson. SHORT-BILLED GULL.

Rather rare winter visitant along the coast, south at least to San Diego. I have never met with this species in southern California, but it has been recorded as follows: B. W. Evermann found a specimen dead on the beach near Ventura in December, 1879 (Auk III, 1886, 88). According to H. W. Henshaw, it was not uncommon along the coast of southern California during the winter of 1884 (Auk II, 1885, 232). In the Salvin-Godman collection in the British Museum are a male adult collected by Mr. Henshaw at Ventura in November and a pair of juvenals collected at San Diego in December (Saunders, Cat. Birds Brit. Mus. xxv, 1896, 284).

According to E. W. Gifford, of the California Academy of Sciences, the specific characters ascribed to this form are all to be found in *Larus canus* (Beck, Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 63).

27. (57) **Larus heermanni** Cassin. HEERMANN GULL.

Very common along the coast and among the islands from the last week in May until the middle of March. Originally described from San Diego (Proc. Acad. Nat. Sci. Phil. VI, 1852, 187). This interesting species may be found along our coast every month in the year. The majority, however, leave for their breeding grounds off the Mexican coast during the month of March and return during the last week in May and the month of June. This is the only species of the genus on our coast that goes south to breed.

28. (60) **Larus philadelphia** (Ord). BONAPARTE GULL.

Common along the coast in fall, winter and spring. Frequently seen on in-

land bodies of water, mostly during migrations. I have found this gull plentiful along the Los Angeles County coast from August 20 (1910) to May 10 (1910), and have noted immature birds common at Nigger Slough, Los Angeles County, as late as June 2 (1910). Recorded by H. W. Henshaw as not uncommon in San Diego Bay during the winter of 1884 (Auk II, 1885, 232).

29. (62) **Xema sabini** (Sabine). SABINE GULL.

Probably a fairly common migrant on the ocean; so far not noted along our mainland coast. Howard W. Wright took a male and female near Santa Cruz Island, August 6, 1909, and a female near Los Coronados Islands, August 20, 1910: now nos. 2466, 2467, 2468, collection of Howard W. Wright. This species breeds in the far north and is known to winter in abundance on the Pacific coast of South America. L. M. Loomis and R. H. Beck have found it to occur in considerable numbers at Monterey during the fall migration. They have noted it at this season from July 22 (1907) to October 6 (1909). Their only spring record is of eleven birds, all seen between the 15th and 21st of May, 1907 (Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 63).

30. (64) **Sterna caspia** Pallas. CASPIAN TERN.

Although the A. O. U. *Check-List* gives the winter range of this species as "from the coast of Central California to Lower California," it is apparently rare in southern California. C. B. Linton took a specimen at Buena Vista Lake, Kern County, May 26, 1907 (Condor x, 1908, 196), and M. A. Frazar took an adult female at La Paz, Lower California, January 25, 1887 (Brewster, Bull. Mus. Comp. Zool. xLI, 1902, 23). So far as I know, the only specimen of the Caspian Tern taken in the territory covered by this list is an immature female, now in the British Museum, taken by H. W. Henshaw at San Diego in December (Saunders, Cat. Birds Brit. Mus. xxv, 1896, 32). C. B. Linton records seeing eight of these birds at Alamitos Bay, Los Angeles County, December 27, 1908 (Condor xi, 1909, 68). Mr. Linton tells me that he was very close to the birds and is not likely to have been mistaken as to their identity. H. S. Swarth saw one bird in the same locality, May 16, 1901.

31. (65) **Sterna maxima** Boddaert. ROYAL TERN.

Common along the coast from September to May. Occasional in summer. J. Grinnell noted one bird at Catalina Island, June 9, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 24), and C. B. Linton saw several at San Nicolas Island, June 17, 1910. The Royal Tern has been reported as breeding on San Miguel Island, but I consider this very doubtful. In June, 1910, I went over that island thoroughly and am positive that it was not breeding there at that time. The only birds seen were a few immatures noted on June 17, one of which was secured (Condor xII, 1910, 173). I believe that the birds seen along our coast during the summer months are mostly immature.

32. (66) **Sterna elegans** Gambel. ELEGANT TERN.

As this species breeds on the Mexican coast and was found by L. M. Loomis to be fairly common off Monterey, California, in September and October, 1906

(Beck, Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 64), it is probably of more or less regular occurrence along our whole coast. So far as I know, only one specimen has been recorded from southern California, an adult male taken by H. W. Marsden at Pacific Beach, San Diego County, September 21, 1904 (Bishop, Condor VII, 1905, 31); now no. 11683, collection of Louis B. Bishop.

33. (69) ***Sterna forsteri*** Nuttall. FORSTER TERN.

Common along the coast and on inland lakes and ponds in fall, winter and spring. Occasional during the summer. Most abundant along the Los Angeles County coast in the fall from September 1 to October 20, and in the spring from March 10 to May 15. I saw several birds at Nigger Slough, Los Angeles County, May 25, 1907, and E. Heller found them common at Elsinore Lake, Riverside County, June 2, 1896 (Condor III, 1901, 100). J. Grinnell noted them daily at Bear Lake in the San Bernardino Mountains, from July 28 to August 2, 1905 (Univ. Calif. Publ. Zool., v, 1908, 52). Although the Forster Tern has been reported as breeding in southern California, I know of no authentic records.

34. (70) ***Sterna hirundo*** Linnaeus. COMMON TERN.

This species on sight being so easily confused with the last, its comparative abundance is difficult to determine accurately, but it is probably a regular migrant along our coast in limited numbers. The fall migration appears to take place principally in September and the spring migration in May. A. B. Howell and J. H. Bowles found the Common Tern fairly plentiful at Santa Barbara during September, 1911. C. B. Linton took five specimens at Alamitos Bay, Los Angeles County, September 25, 1907 (Willett, Condor x, 1908, 50). H. W. Marsden took three adult males at Pacific Beach, San Diego County, September 8, 12 and 15, 1904 (Bishop, Condor VII, 1905, 31). I took a pair of adults from a flock of fifteen or twenty birds that were feeding around the Los Angeles out-fall sewer at Hyperion, May 24, 1910 (Condor XII, 1910, 174).

35. (71) ***Sterna paradisaea*** Brünnich. ARCTIC TERN.

Occurs along the coast during migrations. H. S. Swarth took a male at Terminal Island, Los Angeles County, October 30, 1901, and F. S. Daggett took three specimens near San Pedro, September 13, 1902 (Condor v, 1903, 17).

36. (74) ***Sterna antillarum*** (Lesson). LEAST TERN.

Common summer resident along the coast. Arrives in April and leaves mostly in September. Nests in suitable localities along the sandy beaches. Eggs are generally deposited in June and July. There are substantial breeding colonies at Hueneme, Playa del Rey, Sunset Beach, Newport and Pacific Beach. Evan Davis has found fresh eggs at Newport, Orange County, as early as May 20 and as late as August 12 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 8).

37. (77) ***Hydrochelidon nigra surinamensis*** (Gmelin). BLACK TERN.

Common migrant along the coast and on inland lakes and ponds. I found this species abundant at Hyperion, Los Angeles County, from August 20 to September 10, 1910; and the birds were plentiful at Nigger Slough, Los Angeles County, from April 22 to May 9, 1910, a few remaining as late as May 18. E. Heller observed the Black Tern at Elsinore Lake, Riverside County, June

2, 1896 (Condor III, 1901, 100), and one bird was noted by J. Grinnell at Bear Lake, San Bernardino Mountains, July 30, 1905 (Univ. Calif. Publ. Zool. v, 1908, 52).

This bird has been reported as breeding at Elsinore and San Jacinto lakes, but I know of no authentic nesting records. I saw two birds at San Jacinto Lake, May 28, 1911. They gave no signs of breeding and were probably stragglers (Condor XIII, 1911, 158). There are nesting colonies at Buena Vista and Tulare lakes.

38. (81) **Diomedea nigripes** Audubon. BLACK-FOOTED ALBATROSS.

Common out at sea during the entire year. Birds seen during spring and early summer are probably immature.

39. (82) **Diomedea albatrus** Pallas. SHORT-TAILED ALBATROSS.

Fairly common on the ocean. Occasionally seen close in-shore during severe weather. Two specimens taken near Santa Barbara are recorded by C. P. Streater. One of them, which was in his collection, was taken fifty miles at sea about the middle of March, 1885 (Orn. & Ool. XI, 1886, 90). Recorded by B. W. Evermann from Ventura as frequently seen along the coast and in the bay in winter (Auk III, 1886, 89). A specimen taken at San Pedro by C. Rutter, April 3, 1898, was presented to the Zoological Department at Stanford University (McLain, Auk xv, 1898, 267). M. L. Wicks, Jr., found a bird of this species dead in the surf near Long Beach, Los Angeles County, July 26, 1892 (Oologist x, 1893, 88). Evan Davis has a specimen that was killed near Newport, Orange County (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 8). C. B. Linton has the head of a Short-tailed Albatross that was captured alive by his camp cook on San Nicolas Island, April 1, 1909. Mr. Linton was absent at the time of the capture and his man killed the bird and cooked it. He afterwards stated that he did not find it particularly appetizing. J. G. Cooper noted this species at San Nicolas Island July first, and at San Diego Bay in December (B., Br. & Ridg., W. B. N. A. II, 1884, 354).

40. (86b) **Fulmarus glacialis glupischa** Stejneger. PACIFIC FULMAR.

Common on the ocean in fall, winter and spring. Generally arrives in September and October, and leaves in April. I have taken many specimens of this bird along the Los Angeles County coast and around the Santa Barbara Islands. Those in the dark plumage generally greatly out-number the light ones. Large numbers of this and the following species are frequently seen dead on the beaches during the winter and spring.

41. (86.1) **Fulmarus rodgersi** Cassin. RODGERS FULMAR.

Irregular fall, winter and spring visitant on the ocean, south at least to San Diego. Not nearly so numerous as the last. I have two specimens of this bird that I picked up dead on the beach near Anaheim Landing, Orange County, March 1, 1908. Many more were seen at the same time in different stages of decomposition (Condor XII, 1910, 46). I also took an adult female at Hyperion, Los Angeles County, December 29, 1911, and Antonin Jay took two specimens in the same locality the following day.

Many ornithologists are of the opinion that *Fulmarus rodgersi* is the extreme light phase of *Fulmarus glacialis glupischa* and is not entitled to recognition as a separate form. I am inclined to believe that this conclusion is the correct one, as I have seen birds in every stage of plumage from the lightest of the former to darkest of the latter.

42. (91) **Puffinus creatopus** Coues. PINK-FOOTED SHEARWATER.

Common along the coast in summer and fall. Leaves in December and January, and returns during the latter part of May and the month of June. Originally described from San Nicolas Island (Proc. Acad. Nat. Sci. Phil. xvi, 1864, 131). H. S. Swarth has a male that he found dead on the beach at Redondo, Los Angeles County, May 10, 1901. I have frequently found them dead on the southern California beaches in summer and fall, and saw them near Anacapa and Santa Cruz islands in November and December, 1907. During the first part of June, 1910, I saw occasional birds of this species in company with Sooty Shearwaters, around the northern islands of the Santa Barbara group. By June 23 they had become quite numerous (Condor xii, 1910, 173). J. G. Cooper saw the species near San Nicolas Island in July, 1863 (Proc. Cal. Acad. Sci. iv, 1868, 11).

43. (93) **Puffinus opisthomelas** Coues. BLACK-VENTED SHEARWATER.

At the close of their breeding season on the islands off the coast of Lower California, these birds migrate in large numbers northward along the coast of southern California. They are very irregular as to the time of their arrival, sometimes appearing as early as May 10, and at other times not being noted until July or August. They also vary a great deal in numbers, some years being much more abundant than others. A. W. Anthony says: "Their presence along the coast of southern and Lower California seems to be governed very largely by the food supply. They are particularly abundant during late July, August and September, when they follow the large schools of herring and other small fish that come in-shore at that season" (Auk xiii, 1896, 223). The return journey to the breeding grounds is made in February, March and April.

J. Grinnell observed immense numbers of these birds resting on the water about a mile out from San Pedro Harbor, May 11, 1897. Ten specimens were secured. They all, males as well as females, had bare spaces on their breasts, and the state of the reproductive organs showed that they must recently have bred (Pub. 1, Pasadena Acad. Sci., 1897, 24). H. S. Swarth took a specimen at Redondo, Los Angeles County, May 26, 1899, and W. Lee Chambers found them abundant at Santa Monica, December 21 to 25, 1900. Several specimens were secured. There are four eggs of the Black-vented Shearwater in the National Museum, supposed to have been collected on Santa Barbara Island in 1873 by Captain C. M. Scammon. This record is regarded as doubtful by most ornithologists of this section.

44. (95) **Puffinus griseus** (Gmelin). SOOTY SHEARWATER.

Common on the ocean throughout the year. Most abundant from late

April until November. I have taken many specimens of this bird along the southern California coast and around the Santa Barbara Islands.

45. (96) **Puffinus tenuirostris** (Temminck). SLENDER-BILLED SHEARWATER.

An inhabitant of southern oceans, occurring irregularly north along the California coast in winter. It was noted at Monterey by J. Mailliard, December 17, 18 and 19, 1895 (Auk xv, 1898, 197), and by R. H. Beck, October 14 and December 2, 1907, and January 30, 1908 (Proc. Cal. Acad. Sci., ser 4, vol. III, 1910, 66). The only record I have seen for southern California is of a specimen taken from a small flock by A. W. Anthony, near San Diego, January 9, 1896 (Auk XIII, 1896, 171).

46. (105) **Oceanodroma furcata** (Gmelin). FORKED-TAILED PETREL.

There has been practically no systematic study of the Petrels along our southern California coast. The birds are very difficult to collect during migrations, and there are not enough specimens in collections from this locality to enable us to arrive at a definite conclusion as to the comparative abundance of the different species. The Forked-tailed Petrel occurs in migrations along the California coast, south at least to Los Angeles County. It was noted by R. H. Beck at Monterey in June, 1895, and November, 1903 (Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 66). It is recorded from off San Pedro by J. G. Cooper, who saw a specimen that was taken there by Mr. Lorquin and presented to the State Museum (Proc. Cal. Acad. Sci., iv, 1868, 10). Mr. Grinnell informs me that this specimen is now no. 4470, collection University of California Museum of Vertebrate Zoology. The label in Dr. Cooper's handwriting says "San Pedro Bay, Cal., 914, J. G. C., Shot by Lorquin. Exch."

47. (105.2) **Oceanodroma kaedingi** Anthony. KAEDING PETREL.

A. W. Anthony described this species from Lower California, and was under the impression that it bred there and occasionally straggled north to southern California in migrations (Auk xv, 1898, 37, 38): Recent investigations have shown, however, that it breeds to the north of us, and occurs in migrations along the whole California coast, south to Lower California. L. H. Miller has an adult male which flew on board the ship *Albatross*, while off San Clemente Island, March 22, 1904.

48. (107) **Oceanodroma melania** (Bonaparte). BLACK PETREL.

Common out at sea during the entire year. Least plentiful during July and August, at which season it breeds on the islands off the coast of Lower California, from Los Coronados southward. Straggles north at least to Monterey.

49. (108) **Oceanodroma homochroa** (Coûes). ASHY PETREL.

Probably occurs on the ocean off the coast of California throughout the year. An adult from San Miguel Island (now in British Museum), was given to H. W. Henshaw by Captain Forney of the Coast Survey, who stated that the species bred on San Miguel in great numbers (Ann. Rep. Ch. En. U. S. G. S., 1876, App. JJ, 277). In June, 1910, I made particular search for this bird on San Miguel but failed to find it. I may possibly have overlooked it or it may not occur there

until later in the season. L. H. Miller has an adult female taken near Santa Barbara Island, April 10, 1904; in June, 1911, I found the species plentiful in the channel between Santa Barbara and San Nicolas islands. Although at this time I made careful search over all of the former island and part of the latter, I was unable to find any evidence of the species breeding.

50. (108.1) **Oceanodroma socorroensis** C. H. Townsend. SOCORRO PETREL.

Breeds on the islands off the coast of Lower California from Los Coronados south. Straggles northward at least to San Diego, where A. W. Anthony found it to be fairly common during April and May, 1895, at which time he took a small series of specimens (Auk XII, 1895, 387). Godman considers this form identical with *Oceanodroma monorhis* (Swinhoe), a race found on the coast of China and Japan (Mon. Petrels, 1907, 32-33).

51. (120c) **Phalacrocorax auritus albociliatus** Ridgway. FARALLON CORMORANT.

Common resident along the coast. Breeds on the Santa Barbara Islands in May and June. J. Grinnell and H. A. Gaylord took two sets of fresh eggs on Santa Barbara Island, May 15, 1897. At this date most of the birds were nest building (Pub. 1, Pasadena Acad. Sci., 1897, 25). June 15, 1910, I found the species breeding commonly on San Miguel Island. Nest contents varied from fresh eggs to half-grown young (Condor XII, 1910, 173). In some instances, probably where previous sets have been destroyed by the gulls, eggs may be found as late as August.

52. (122) **Phalacrocorax penicillatus** (Brandt). BRANDT CORMORANT.

Common resident along the coast. Breeds on the Santa Barbara Islands in April, May and June. C. B. Linton noted incomplete sets on San Nicolas Island, April 3, 1910, and I took four sets of fresh eggs on Catalina Island, April 11, 1904. J. Grinnell and H. A. Gaylord took thirty sets of eggs on Santa Barbara Island, May 15, 1897. They were in all stages of incubation, and several nests contained newly hatched young (Pub. 1, Pasadena Acad. Sci., 1897, 25). I found several large colonies nesting on San Miguel Island in June, 1910. On the 15th of the month, nests contained fresh and incubated eggs and young of various ages (Condor XII, 1910, 173).

53. (123b) **Phalacrocorax pelagicus resplendens** Audubon. BAIRD CORMORANT.

Common resident on the Santa Barbara Islands, but less plentiful than the two preceding species. Occasional along the mainland shores in winter. Breeds in May and June. J. Grinnell and H. A. Gaylord noted this species breeding on Santa Barbara Island, May 15, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 26), and I found them nesting commonly on Anacapa and San Miguel islands in June, 1910. Fresh eggs were taken on the latter island as late as June 19 (Condor XII, 1910, 170, 174).

54. (125) **Pelecanus erythrorhynchos** Gmelin. WHITE PELICAN.

Regular visitant to the marsh lands in fall, winter and spring. Arrives in

October and November and leaves mostly in May. Recorded by B. W. Evermann as often seen on the lagunas of Ventura County in winter (Auk III, 1886, 89). F. S. Daggett noted a flock of about 125 birds flying over Pasadena, November 25, 1900. One of them was secured at long range with a high-power rifle (Condor III, 1901, 15). Howard Robertson saw thirty-five or forty birds flying along the Los Angeles River, near Los Angeles City, April 27, 1900. Alphonse Jay saw about 250 birds flying in a northerly direction over Sierra Madre, Los Angeles County, May 22, 1910, and I saw a single bird at Nigger Slough, Los Angeles County, May 25, 1907.

According to J. G. Cooper, few of this species reach San Diego, most of them veering to the eastward toward the Gulf of California (B., Br. & Ridg., W. B. N. A. II, 1884, 136). A male was taken at San Diego in the early 50's by A. Cassidy (Lawrence, Pac. R. R. Rep. IX, 1858, 869).

55. (127) **Pelecanus californicus** Ridgway. CALIFORNIA BROWN PELICAN.

Common resident along the coast. Breeds irregularly on several of the Santa Barbara Islands, the largest nesting colony north of the Mexican line being undoubtedly the one on Anacapa Island. During some seasons, however, the birds apparently do not nest there at all. The Anacapa colony was first described by C. F. Holder, who visited it in August, 1898. At this time the young were nearly full grown (Museum V, 1899, 71). In June, 1899, H. Robertson and V. W. Owen went over Anacapa thoroughly, but the Pelicans were apparently not nesting there at that time. On June 5, 1910, I visited this island in company with several other members of the Cooper Ornithological Club. We found about 500 nests of the Pelican containing eggs and young. Fresh eggs were taken from some nests, and nearly full-grown young were noted in others (Condor XII, 1910, 170). In May, the following year, H. C. Burt visited this locality and reports that, while there were a few birds present, they were not nesting.

H. Wright found several nests of this species, all of which contained young birds, on Santa Cruz Island, in July, 1909. June 15, 1910, I noted five nests containing young on San Miguel Island (Condor XII, 1910, 173), and on June 14, 1911, I found a colony of about twenty-five pairs breeding on Santa Barbara Island. All of the nests contained newly hatched young at this date.

56. (128) **Fregata aquila** (Linnaeus). MAN-O'-WAR-BIRD.

Resident of southern Lower California and Mexico. Occasionally straggles north along the coast of California. J. G. Cooper was told of a single specimen being shot at San Diego. It had entered the bay and alighted on the mast of an old hulk anchored there. He was also told that the species is common at some seasons outside the bay (B., Br. & Ridg., W. B. N. A. II, 1884, 130). I saw a female that was shot by A. C. Parsons at Alamitos Bay, Los Angeles County, June 17, 1906, and on June 13, 1911, two immature birds were caught with hook and line by a fisherman on the pleasure pier at Long Beach (Linton, Condor XIII, 1911, 168). An immature specimen was shot by L. Price at North Pasadena in August, 1892 (Lawrence, Auk X, 1893, 362), and H. S. Swarth saw three birds circling overhead near Los Angeles in December, 1897 (Grinnell, Pub. 2, Pasa-

dena Acad. Sci., 1898, 10). J. S. Appleton saw the head, wings and tail of one of these birds that was shot by L. Myers from the wharf at Hueneme, Ventura County, about 1895.

57. (129) **Mergus americanus** Cassin. AMERICAN MERGANSER.

Fairly common winter visitant on the ocean and the salt marshes near the coast. F. Stephens took a male at Alamitos Bay, Los Angeles County, December 15, 1879 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 10), and I noted one in the same locality, March 9, 1910. H. S. Swarth saw a male near Long Beach, Los Angeles County, May 17, 1901, and another near Redondo, April 25, 1899, and secured a female from a flock of eight, near Los Angeles, December 27, 1894. H. J. Lelande took a female near Long Beach, January 17, 1912. I have seen the species occasionally on the ocean along the Los Angeles County coast and have seen several specimens that were taken by hunters in various sections of southern California.

58. (130) **Mergus serrator** Linnaeus. RED-BREASTED MERGANSER.

Fairly common along the coast in fall, winter and spring. Arrives in October and leaves mostly in April. J. Grinnell noted this species at Catalina Island in December, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 10), and I noted it in the same locality in March, 1905. C. B. Linton found it fairly common at San Clemente Island during October, 1908, and at San Nicolas Island during January, February and March, 1909. He also saw one at the latter island April 1, 1910, and another on May 3, following. He took a female at Santa Cruz Island, December 2, 1907 (Condor x, 1908, 126). H. S. Swarth took a specimen near Long Beach, May 17, 1901.

59. (131) **Lophodytes cucullatus** (Linnaeus). HOODED MERGANSER.

Rather rare winter visitant. Although B. W. Evermann recorded this species as common in Ventura County during the rainy season (Auk III, 1886, 89), few have been noted of late years. F. Stephens took a male at Alamitos Bay, Los Angeles County, December 23, 1879 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 10), and J. E. Law took two females near Fillmore, Ventura County, December 31, 1905. H. J. Lelande has taken the species occasionally near Los Angeles, and in the Cline collection of mounted birds are several specimens taken in Los Angeles County in the early 80's.

60. (132) **Anas platyrhynchos** Linnaeus. MALLARD.

Common winter visitant, arriving in October and leaving mostly in March. A few remain through the summer and breed around fresh water lakes and ponds. Found breeding near Santa Barbara by C. P. Streater (Orn. & Ool. XI, 1886, 90), and near Saticoy by J. G. Cooper (Auk IV, 1887, 93). H. C. Burt found a nest containing eleven partly incubated eggs, near Hueneme, Ventura County, May 1, 1910. F. Stephens noted the species breeding at Bear Lake in the San Bernardino Mountains, in June, 1886 (Morcom, Bull. Ridg. Orn. Club, no. 2, 1887, 38), and C. S. Sharp records a nest found near Escondido, San Diego County, in 1896 (Condor IX, 1907, 86).

61. (135) **Chaulelasmus streperus** (Linnaeus). GADWALL.

Common winter visitant. Arrives mostly in late September and October and leaves in March. Occasionally remains through the summer and breeds in fresh water marshes. A. M. Shields has taken eggs near Los Angeles (Grinnell, Pub 2, Pasadena Acad. Sci., 1898, 10), and A. M. Ingersoll took a set of twelve eggs, with the female bird, at San Jacinto Lake, Riverside County, June 7, 1897.

62. (136) **Mareca penelope** (Linnaeus). EUROPEAN WIDGEON.

One record, that of a male taken by C. H. Mears at Bixby, Los Angeles County, February 16, 1904. Now in collection of J. Grinnell (Auk xxi, 1904, 383).

63. (137) **Mareca americana** (Gmelin). BALDPATE.

The American Widgeon is a common winter visitant to lakes and ponds everywhere in southern California. A few appear from the north in the latter part of September, but the main body does not generally arrive until well into October. They leave for their breeding grounds mostly in early March.

64. (139) **Nettion carolinense** (Gmelin). GREEN-WINGED TEAL.

Abundant winter visitant. Arrives mostly in the latter part of September and the month of October, and leaves in March.

65. (140) **Querquedula discors** (Linnaeus). BLUE-WINGED TEAL.

Fairly common during some winters and apparently absent during others. In parts of the United States, where it winters abundantly, it is found to be one of the earliest arrivals in the fall and one of the last to leave in the spring (Cooke, U. S. Biol. Surv. Bull. 26, 1906, 33). Seen several times by Bradford Torrey near Santa Barbara from January 21 to May 1, 1908, and from December 6, 1908, to March 16, 1909 (Condor xi, 1909, 173). Two males noted by J. H. Bowles in the same locality, January 5, 1910. I have frequently seen birds of this species that were brought in to Los Angeles taxidermists by local hunters. A female was taken by W. B. Judson near Los Angeles, October 31, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 11), and another female was taken by H. S. Swarth in the same locality, October 3, 1898 (Condor ii, 1900, 14). Mr. Swarth also took a female near Los Angeles, September 28, 1900. F. S. Daggett took a male near El Monte, Los Angeles County, March 12, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 11), and J. Grinnell has a male taken at Bolsa Chica, Orange County, October 16, 1907. L. Belding saw an adult male that was shot in El Cajon Valley, about fifteen miles from San Diego, in April, 1881. F. Stephens took a pair at Agua Caliente, San Diego County, in March, 1886 (Belding, Zoe ii, 1891, 97), and C. B. Linton took a female at National City, October 25, 1906.

66. (141) **Querquedula cyanoptera** (Vieillot). CINNAMON TEAL.

Abundant in spring and fall. Less plentiful in summer and mid-winter. Breeds rather commonly around grass-bordered lakes and ponds, south to San Diego County, and winters in small numbers as far north as Santa Barbara (Torrey, Condor xii, 1910, 80). I have noted young birds in Los Angeles

County by the middle of May, and O. W. Howard found an incomplete set of five fresh eggs at Nigger Slough, Los Angeles County, May 25, 1911. I found the species common at San Jacinto Lake, Riverside County, May 27, 28, 1911 (Condor XIII, 1911, 158), and C. S. Sharp records it as breeding near Escondido, San Diego County (Condor IX, 1907, 86).

67. (142). ***Spatula clypeata*** (Linnaeus). SHOVELLER.

The Shoveller is an abundant winter visitant, arriving mostly in October and leaving in March and early April. A few remain through the summer and undoubtedly breed, but I know of no sets of eggs having been taken in this locality. I have frequently seen the birds on fresh water ponds of Los Angeles County in summer, and on May 27, 28, 1911, I noted several pairs at San Jacinto Lake, Riverside County (Condor XIII, 1911, 158). E. E. Eckdale informed H. J. Lelande that he has seen Shovellers accompanied by young in the vicinity of Los Angeles.

68. (143) ***Dafila acuta*** (Linnaeus). PINTAIL.

The "sprig" is the most abundant of the larger ducks during the winter season. A few arrive from the north in September, but the main body does not show up until well along in October. It leaves mostly in March. Breeds in small numbers at Bear Lake in the San Bernardino Mountains, and also on some of the lakes at lower altitudes, south to San Jacinto Lake, Riverside County. I have noted this bird at Nigger Slough, Los Angeles County, in summer, and found it rather common at San Jacinto Lake in May, 1911. On May 28, a female accompanied by four young was seen at the latter point (Condor XIII, 1911, 158).

69. (144) ***Aix sponsa*** (Linnaeus). WOOD DUCK.

Occasional in winter, but much rarer than formerly. According to C. P. Streater, occasionally met with in 1885, beyond the Santa Ynez Mountains, about ten miles from Santa Barbara (Orn. & Ool. XI, 1886, 90). Formerly recorded by B. W. Evermann as breeding in Ventura County (Auk III, 1886, 89). Antonin Jay informs me that twenty-five or thirty years ago he occasionally saw the species near Los Angeles and shot several specimens. The following records are all that I have seen in late years. Male of the year in nearly adult plumage, received by R. Reynolds, the Los Angeles taxidermist, killed near Oxnard, Ventura County, about November 6, 1905 (Grinnell, Condor VIII, 1906, 29). Adult male, also mounted by Mr. Reynolds, taken by W. B. Powers near Redlands, San Bernardino County, October 2, 1909. Adult male, now in collection of M. F. Gilman, shot by his brother at Banning, Riverside County, in April, 1907. Male, seen by C. S. Sharp, shot at Ramona, San Diego County, in November, 1905 (Condor VIII, 1906, 75).

70. (146) ***Marila americana*** (Eyton). REDHEAD.

Common winter visitant. Less plentiful in summer. The majority arrive in October and leave in March. A few remain through the summer and breed on fresh water marshes in May and June. I found a nest containing nine piped eggs at Nigger Slough, Los Angeles County, May 13, 1911; and Antonin Jay found a nest containing eleven fresh eggs of the Redhead and four eggs of the Ruddy Duck, in the same locality, May 31, 1903. On May 28, 1911, I

found the Redhead breeding commonly at San Jacinto Lake, Riverside County. Four nests examined on that date contained fifteen, seventeen, eighteen and twenty-seven eggs respectively. The last was probably the product of at least two females (Condor XIII, 1911, 158).

71. (147) **Marila valisineria** (Wilson). CANVAS-BACK.

Common winter visitant to the marshes. Arrives late in October and leaves mostly in March.

72. (148) **Marila marila** (Linnaeus). SCAUP DUCK.

The larger "blue-bill" is an occasional winter visitant, mostly near the coast. South at least to San Diego. J. G. Cooper recorded this species as common in his time along the whole coast of California, from October to April (B., Br. & Ridg., W. B. N. A. II, 1884, 19), but in recent years they have been noted only occasionally. H. J. Lelande informs me that he secures a few of these birds each year on the gun clubs of Los Angeles County. F. S. Daggett has a male taken by Ex-Governor Markham at Bixby, Los Angeles County, December 20, 1899 (Condor II, 1900, 19). A specimen was taken near San Diego by A. Cassidy in the early 50's (Baird, Pac. R. R. Rep. IX, 1858, 791), and C. B. Linton took a male at National City, San Diego County, November 9, 1906.

73. (149) **Marila affinis** (Eyton). LESSER SCAUP DUCK.

The smaller "blue-bill" is a common winter visitant along the coast and on larger bodies of water inland. Arrives late in October and remains well into April. Two birds, a drake and duck—or young male—were noted by Bradford Torrey, June 6, 15 and 16, 1910, on a small fresh water lake near Santa Barbara (Condor XII, 1910, 204).

74. (150) **Marila collaris** (Donovan). RING-NECKED DUCK.

Rare winter visitant. H. S. Swarth took a male and three females near Los Angeles, October 15, 1898 (Condor II, 1900, 14). Mr. Swarth also saw one bird in the same locality December 14, following, and took a pair January 8, 1900. These are the only southern California records I have seen.

75. (151) **Clangula clangula americana** Bonaparte. GOLDEN-EYE.

Although J. G. Cooper reported this duck common in his time along the whole coast of California in winter (B., Br. & Ridg., W. B. N. A. II, 1884, 46), it has only been noted occasionally of late years. L. Peyton has taken a few specimens in the marshes of Ventura County, and H. S. Swarth has noted it in the vicinity of Los Angeles (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 12). A. M. Shields took a male at Ballona, Los Angeles County, December 14, 1894 (Grinnell, l. c.), and A. Fenyes took a pair near Newport, Orange County, January 5, 1901 (Daggett, Condor III, 1901, 47). W. B. Judson took a female near Huntington Beach, Orange County, December 28, 1911.

76. (153) **Charitonetta albeola** (Linnaeus). BUFFLE-HEAD.

Generally a common winter visitant, especially on salt water lagoons. Arrives in late October and early November and leaves mostly in March and early

April. Rare during some winters. I found this species fairly common at Nigger Slough, Los Angeles County, April 22, 1910, and saw an adult male in the same locality, May 1, following. J. G. Cooper noted the Buffle-head abundant at San Diego from October to April 20 (B., Br. & Ridg., W. B. N. A. II, 1884, 49).

77. (154) **Harelda hyemalis** (Linnaeus). OLD-SQUAW.

Rare winter visitant, south to San Diego. H. W. Henshaw took a female of this species at Santa Barbara, June 9, 1875 (Ann. Rep. Ch. En. U. S. G. S., 1876, App. JJ, 274). In the Cline collection of mounted birds are two males taken in Los Angeles County in the early 80's. A male and female in the collection of F. S. Daggett, were shot by E. R. Hull near Newport, Orange County, November 28, 1900 (Condor III, 1901, 15). L. Belding took a specimen at San Diego, January 13, 1896 (Anthony, Auk XIII, 1896, 172).

78. (163) **Oidemia americana** Swainson. AMERICAN SCOTER.

Occurs occasionally in winter along the California coast, in company with the other surf ducks. South rarely to Catalina Island. Two pairs were noted by R. H. Beck at Monterey in November, 1909 (Proc. Cal. Acad. Sci., ser. 4, vol. III, 1910, 69). H. W. Henshaw took a specimen at Santa Cruz Island in the summer of 1875 (Ann. Rep. Ch. En. U. S. G. S., 1876, App. JJ, 275). J. G. Cooper records this species as occurring along the whole coast of California (B., Br. & Ridg., W. B. N. A. II, 1884, 89). He informed J. Grinnell that he had taken it at Catalina Island (Pub. 2, Pasadena Acad. Sci., 1898, 12). This is our most southern record.

79. (165) **Oidemia deglandi** Bonaparte. WHITE-WINGED SCOTER.

Very common winter visitant along the coast and around the Santa Barbara Islands. Arrives in September and October and leaves mostly in April. Non-breeding birds of this and the next species are plentiful on the ocean throughout the summer.

80. (166) **Oidemia perspicillata** (Linnaeus). SURF SCOTER.

Most abundant of the surf ducks. The majority of this species arrive from the north in October and November and leave in April. I noted an adult male at Santa Rosa Island, June 8, 1910.

81. (167) **Erismatura jamaicensis** (Gmelin). RUDDY DUCK.

The little "wire-tail" is a common resident of southern California throughout the year. It breeds in tule marshes from the middle of April until June. I found a set of seven half-incubated eggs at Nigger Slough, Los Angeles County, May 1, 1910, and another set of seventeen slightly incubated eggs, in the same locality, June 2, following. Antonin Jay found a nest containing an incomplete set of three eggs near Wilmington, Los Angeles County, June 10, 1900.

82. (169) **Chen hyperboreus hyperboreus** (Pallas). LESSER SNOW GOOSE.

Common winter visitant to the lowlands, south to Lower California. Arrives about the first part of October and leaves mostly in March and April.

This goose, in company with other species, feeds in large numbers on the grain fields and pasture lands, mostly at night, remaining out at sea during the day.

83. (170) **Chen rossi** (Cassin). ROSS GOOSE.

Occurs in winter in limited numbers in company with the last species. South at least to Orange County. I have seen many of these birds in the Los Angeles markets, brought in from the surrounding country. E. Davis has found them fairly common in winter near Santa Ana, and F. S. Daggett records a specimen taken by A. Fenyés near Newport, Orange County, November 10, 1900 (Condor III, 1901, 15).

84. (171a) **Anser albifrons gambeli** Hartlaub. WHITE-FRONTED GOOSE.

This goose, known to hunters as the "checker-breast," is a common winter visitant to suitable localities in the lowlands. According to L. Belding, it is the first goose to arrive in California and the last to leave, appearing early in September and remaining until the first part of May (Zoe III, 1892, 98). The main body, however, does not put in its appearance until November, and it leaves in April.

85. (172) **Branta canadensis canadensis** (Linnaeus). CANADA GOOSE.

According to the last A. O. U. *Check-List*, this species ranges south to southern California in winter. It is not nearly so common, however, as others of the genus. J. Grinnell has a specimen taken near Los Angeles in winter, and F. S. Daggett has found it not uncommon in winter at Bixby, Los Angeles County. W. W. Cooke states that the Canada Goose is more common in the interior of California than along the coast. He says further that it is about the earliest water bird to migrate in the spring (U. S. Biol. Surv. Bull. 26, 1906, 72).

86. (172a) **Branta canadensis hutchinsi** (Richardson). HUTCHINS GOOSE.

Common winter visitant to the lower country. Arrives about the middle of October and remains generally until the middle of April. According to A. W. Anthony, this goose goes at least a hundred miles south of San Diego and is numerous in parts of San Diego County in winter (Belding, Zoe III, 1892, 99).

87. (172b) **Branta canadensis occidentalis** (Baird). WHITE-CHEEKED GOOSE.

Although the A. O. U. *Check-List* and other lists have repeatedly given the range of this sub-species as "south to southern California in winter," I have yet to learn of a typical specimen being taken in this locality. There seems to be need of a revision of this whole group by some one who has plenty of material to work with. H. S. Swarth says: "I have examined hundreds of geese in the California markets, but have yet to see a *large* goose with a white half-collar at the base of the neck, and with a black line dividing the white cheek patches, supposedly the distinguishing characters of this sub-species" (Univ. Calif. Publ. Zool. VII, 1911, 47).

According to L. Belding, the White-cheeked Goose seldom arrives in cen-

tral California before the middle of November, sometimes considerably later, and not until comparatively cold weather sets in. Mr. Belding further states that he did not note this goose as far south as San Diego County, but he was informed that specimens had been taken at La Jolla, twelve miles north of San Diego (Zoe III, 1892, 100).

88. (172c) **Branta canadensis minima** Ridgway. CACKLING GOOSE.

According to L. Belding, this is probably the most abundant of the geese in California in winter. They arrive the first part of October and leave in April. Mr. Belding further states that he has seen this bird in San Diego County and believes that it goes as far south as Hutchins Goose (Zoe III, 1892, 100).

89. (174) **Branta nigricans** (Lawrence). BLACK BRANT.

Regular winter visitant along the coast. Arrives about October 1 and leaves mostly in the latter part of April. According to L. Belding, scatters along the coast to about 300 miles south of San Diego in winter (Zoe III, 1892, 101). H. S. Swarth has found this species common in winter in the kelp beds off San Pedro. J. E. Law has a male taken near Los Angeles, November 23, 1905, and F. S. Daggett records a pair taken by E. R. Hull near Newport, Orange County, January 1, 1901 (Condor III, 1901, 47). In the winter of 1861-62, J. G. Cooper noted these birds in large numbers at San Diego. They appeared in October and remained until April 20 (B., Br. & Ridg., W. B. N. A. I, 1884, 473).

90. (178) **Dendrocygna bicolor** (Vieillot). FULVOUS TREE-DUCK.

Common in the marshes in fall and spring. A few remain through the summer and breed in the latter part of May and the month of June around fresh water ponds and lakes. "While the species as a whole moves north to breed and south to winter—these movements occurring in April and October—a few remain throughout the year in most of the range" (Cooke, U. S. Biol. Surv. Bull. 26, 1906, 83). In the Salvin-Godman collection in the British Museum is an adult female taken at San Diego in December, and an adult specimen taken at Washoe Lake, Nevada, in winter (Salvadori, Cat. Birds Brit. Mus. xxvii, 1895, 152).

Antonin Jay found a nest containing fourteen fresh eggs at Nigger Slough, Los Angeles County, May 30, 1903, and found another nest June 7, the same year, which contained thirteen eggs, incubation commenced. I found the birds fairly plentiful at San Jacinto Lake, Riverside County, May 27, 28, 1911 (Condor XIII, 1911, 158).

91. (180) **Olor columbianus** (Ord). WHISTLING SWAN.

Regular winter visitant in limited numbers to lakes and ponds, mostly near the coast. South at least to Orange County. Generally arrives in November and remains until the first part of April. I have seen several birds of this species that were shot near Los Angeles and have occasionally noted them in small flocks on the sloughs of Los Angeles and Orange counties.

92. (187) **Plegadis guarauna** (Linnaeus). WHITE-FACED GLOSSY IBIS.

Common in the lower country in spring, summer and fall. Said to have been seen in winter, but I know of no authentic records for that season. Rather rare in Ventura and Santa Barbara counties. One specimen was taken by B. W. Evermann at Santa Paula May 14, the only one seen by him in Ventura County (Auk III, 1886, 91). S. Peyton saw six birds on the Sespe River, Ventura County, in July, 1910, and J. S. Appleton has noted the species in the Simi Valley in late summer. It breeds plentifully at San Jacinto Lake, Riverside County, in May. I visited this lake, accompanied by Antonin Jay, May 27, 28, 1911. Two or three hundred nests were noted, about half of which contained young. The others mostly held incubated eggs, but a few fresh sets were found (Condor XIII, 1911, 159). C. S. Sharp found about a dozen birds nesting at Guajome, near Escondido, San Diego County, in 1911 (Condor IX, 1907, 91).

93. (188) **Mycteria americana** Linnaeus. WOOD IBIS.

Irregular summer visitant, north at least to Santa Barbara County. Not known to breed within our limits. Its occurrence has been noted as follows: Flock of about twenty-five birds seen by J. Grinnell and F. S. Daggett near Oceanside, San Diego County, August 5, 1902 (Condor V, 1903, 18). Several birds seen on one occasion in early summer by H. E. Wilder along the Santa Ana River, near Riverside. Eight birds seen by J. B. Feudge near San Bernardino in the summer of 1891. Mr. Feudge also saw three birds in the same locality, June 5, 1902. One of these was taken (Condor V, 1903, 79). A large flock was noted by J. F. Illingworth on barley fields near Claremont, Los Angeles County, in June, 1897. On June 20 a specimen was secured, and a few days later a local hunter shot another (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 14). G. H. Coffin shot one bird at Bixby, Los Angeles County, August 15, 1902, and on August 23 another was taken (Daggett, Condor V, 1903, 18). During June and July, 1911, this species was reported several times from the marshes lying between Los Angeles and the coast. Antonin Jay saw a flock of about twenty-five birds at Watson's Lake on July 2, and J. E. Law secured a specimen at Dominguez the same day (Condor XIV, 1912, 41). H. J. Lelande noted a flock of thirteen birds between Los Angeles and Venice on June 30, and saw them daily in that locality until July 19. H. Robertson saw six or eight birds at Nigger Slough, July 16.

J. S. Appleton has a mounted bird of this species that was shot in the Simi Valley, Ventura County, in the summer of 1904. Lawrence and Sidney Peyton saw a flock of about twenty birds on the Sespe River, Ventura County, in the summer of 1901. According to J. G. Cooper, small flocks came to Saticoy, Ventura County, in June, 1872 and 1873. One also was seen near Santa Barbara (Auk IV, 1887, 90).

94. (190) **Botaurus lentiginosus** (Montagu). AMERICAN BITTERN.

Common in marsh lands in fall, winter and spring. A few remain through the summer and breed. The majority arrive in September and leave in early May. H. Robertson took three fresh eggs at Alamitos Bay, Los Angeles County,

May 14, 1899 (Bull. Cooper Orn. Club 1, 1899, 94). Antonin Jay took five fresh eggs at Nigger Slough, Los Angeles County, May 28, 1903, and O. W. Howard found a nest in the same locality, May 25, 1911. It contained three young and one addled egg. I found the birds fairly common at San Jacinto Lake, Riverside County, May 27, 28, 1911 (Condor XIII, 1911, 159).

95. (191) *Ixobrychus exilis* (Gmelin). LEAST BITTERN.

Fairly common summer resident, but, owing to its secretive habits, easily overlooked. I know of no winter records for the species in this locality, nor have I seen any definite data as to the time of its migrations on the Pacific coast. I took a set of five half-incubated eggs at Nigger Slough, Los Angeles County, May 16, 1911, and Antonin Jay took five fresh eggs in the same locality, June 7, 1903. Mr. Jay and myself also found it nesting rather commonly at San Jacinto Lake, Riverside County, May 27, 28, 1911. Seven nests were found, one of which contained one fresh egg, one five eggs, hatching, and the others held sets, variously incubated (Condor XIII, 1911, 159).

96. (194) *Ardea herodias herodias* Linnaeus. GREAT BLUE HERON.

This bird, generally known as the "blue crane," formerly nested in many localities in southern California. At the present time, although the birds are fairly common in the marshes, nesting colonies are very few in the coast district. J. G. Cooper took eggs near Santa Barbara and San Diego (B., Br. & Ridg., W. B. N. A. I, 1884, 16). A colony formerly nested near Santa Monica, Los Angeles County, but have not done so since about 1901. W. L. Chambers took three sets, each of four heavily incubated eggs, from this colony, May 13, 1895 (Condor IV, 1902, 47). E. Davis has taken eggs near Santa Ana, Orange County, and H. J. Leland and O. W. Howard found two small colonies nesting near San Onofre, San Diego County, in late March, 1905. Two sets of fresh eggs were taken on March 30. A few pairs may be seen at all seasons of the year around the Santa Barbara Islands, where they nest on the cliffs.

97. (196) *Herodias egretta* (Gmelin). EGRET.

Thirty or forty years ago this beautiful bird was a common winter resident of southern California. It was also frequently seen in the summer and may have nested occasionally, as it is known to have bred at Tulare Lake, Kings County. J. G. Cooper found it abundant in his time. He met with it near Santa Barbara in May (B., Br. & Ridg., W. B. N. A. I, 1884, 26). According to B. W. Evermann it was formerly common in the Ventura marshes (Auk III, 1886, 91), and in 1885 C. P. Streater noted it as a winter resident at Santa Barbara, though not very common (Orn. & Ool. XI, 1886, 89).

The deadly and relentless persecution of the plume hunter has resulted in almost complete extermination of the species. At the present time it is seldom met with in this locality, and never seen in great numbers. During the last ten years I have seen three or four birds in the marshes of Los Angeles and Orange counties. I saw a bird in a local taxidermist's shop that was killed at Bolsa Chica, Orange County, October 15, 1906. C. B. Linton and Antonin Jay noted two or three birds at Alamitos Bay, Los Angeles County,

in the spring of 1911. Mr. Linton also saw several birds at Buena Vista Lake, Kern County, in the summer of 1908, and he believes that they were breeding somewhere in that locality. H. S. Swarth noted about a dozen birds at Alamitos Bay, May 16, 1901, and saw several at Bixby, August 12, the same year. I saw one bird of this species at San Jacinto Lake, Riverside County, May 29, 1911 (Condor XIII, 1911, 160).

98. (197) ***Egretta candidissima candidissima*** (Gmelin). SNOWY EGRET.

Like the last species, this bird was formerly common in southern California. J. G. Cooper found it plentiful at all seasons along our coast (B., Br. & Ridg., W. B. N. A. I, 1884, 30). He saw one bird at an elevation of 4500 feet in the Cuyamaca Mountains, San Diego County, in the spring of 1862 (Am. Nat. VIII, 1874, 18). It was noted by B. W. Evermann as formerly common in Ventura County marshes (Auk III, 1886, 91), and by C. P. Streater as a common winter visitant at Santa Barbara in 1885 (Orn. & Ool. XI, 1886, 89). W. H. Wakely, a taxidermist of Pasadena, informed J. Grinnell that in the early 80's he received many specimens from hunters in Los Angeles County (Pub. 2, Pasadena Acad. Sci., 1898, 14).

At the present time the species is rare in southern California. I have never met with it myself, but have been told by hunters that it may be occasionally seen around the more remote lakes of the interior. A rigid enforcement of protecting laws is the only thing that will save this and the preceding species from absolute extinction.

99. (201c) ***Butorides virescens anthonyi*** (Mearns). ANTHONY GREEN HERON.

Common migrant. A few remain through the summer and breed in the willow thickets of the lower country. Occasional in winter, north at least to San Bernardino, where a bird was noted by J. B. Feudge on January 3, 1903 (Condor V, 1903, 80). S. Peyton took a set of six heavily incubated eggs of this bird from an old crow's nest near Sespe, Ventura County, May 12, 1910 (Condor XIII, 1911, 35). Alphonse Jay took four fresh eggs near Whittier, Los Angeles County, May 29, 1898.

100. (202) ***Nycticorax nycticorax naevius*** (Boddaert). BLACK-CROWN-ED NIGHT HERON.

Common resident locally in suitable localities, though not as generally distributed as formerly. Breeds during the latter part of April and early May. Until about 1906, a small colony nested at Bixby, Los Angeles County, and W. Chamberlain has taken eggs near Newport, Orange County. It breeds rather commonly at San Jacinto Lake, Riverside County, in company with the White-faced Glossy Ibis. On May 27, 28, 1911, I found several nests in this locality. They all contained young birds except one, which held three half-incubated eggs. In one case the young were nearly full grown (Condor XIII, 1911, 160). E. A. Mearns and A. W. Anthony noted this species on San Clemente Island in August, 1894 (Bull. 56, U. S. Nat. Mus., 1907, 141).

101. (205) **Grus canadensis** (Linnaeus). LITTLE BROWN CRANE.

As this bird usually migrates over southern California without stopping, it is impossible to estimate its abundance, particularly because at the height that it generally maintains in migration, it can not be differentiated with certainty from the next species. J. Grinnell notes the two following records for the Little Brown Crane in this vicinity. One specimen taken from a flock of twenty-five or thirty birds by R. Reynolds, near Newport, Orange County, some time in the late 90's. Mr. Reynolds stated that he saw another flock of about a hundred birds at the same time and place. Mr. Grinnell saw this bird while it was in the possession of Mr. Reynolds and confirms his identification. The other record noted by Mr. Grinnell is that of an adult male and immature female, now nos. 11440 and 11441 collection of Outram Bangs. These birds were secured fresh in the Los Angeles market by H. S. Swarth, March 21, 1904. They were said to have been shot on the Centinela ranch, about twelve miles southwest of Los Angeles (Condor XI, 1909, 128). W. Frank took an immature bird near Long Beach, Los Angeles County, March 24, 1912. L. H. Miller had a mounted specimen of the Little Brown Crane that was taken with another bird, apparently of the same species, by his brother, Holmes Miller, near Riverside, February 19, 1893.

102. (206) **Grus mexicana** (Müller). SANDHILL CRANE.

Common during migrations, which occur in September and October, and in March and April. Occasional during the winter. This species has been noted plentifully in all parts of southern California during its migrations. I have often seen them flying directly over Los Angeles. F. S. Daggett has observed them on grain fields near Pasadena in winter (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 15).

103. (210.1) **Rallus levipes** Bangs. LIGHT-FOOTED RAIL.

This species, originally described from specimens taken at Newport, Orange County (Proc. New Eng. Zool. Club I, 1899, 45), is a common resident on salt and brackish marshes near the coast, but becoming scarcer every year. At extreme high tides it swims on the water after the fashion of the Coot, and, as it is easily approached, it is killed in large numbers by the hunters. In many marshes where it was formerly common it has been practically exterminated. Eggs are generally deposited in April and early May. I found a set of nine fresh eggs at Bay City, Orange County, March 19, 1910, and a set of nine, half incubated, at Nigger Slough, Los Angeles County, June 14, 1906.

104. (212) **Rallus virginianus** Linnaeus. VIRGINIA RAIL.

Fairly common resident on both salt and fresh water marshes, south at least to San Diego County. Breeds in April and May. W. L. Chambers took two sets of fresh eggs at Ballona, Los Angeles County, April 13, 1902, and O. W. Howard took a set of six eggs near Newport, Orange County, May 13, 1906. L. Peyton found a nest containing two young birds and one egg, near Sespe, Ventura County, in June, 1907. A. M. Ingersoll informs me that the Virginia Rail is rare during the breeding season in San Diego County. He

found a nest containing pieces of egg shells, near Ramona, June 2, 1888. An old bird with several young was seen close by.

105. (214) **Porzana carolina** (Linnaeus). SORA.

Fairly common resident, south at least to San Diego County. Breeds at about the same time as the last species. C. B. Linton took a set of six slightly incubated eggs near Whittier, Los Angeles County, April 18, 1896, and W. L. Dawson took a set of six eggs at Nigger Slough, May 13, 1911. A. M. Ingersoll has seen this rail on fresh water ponds in the vicinity of San Diego in spring, and believes that they breed occasionally in that locality.

106. (215) **Coturnicops noveboracensis** (Gmelin). YELLOW RAIL.

One record. J. H. Henderson took a male at Newport Bay, Orange County, December 12, 1896. Now no. 2077 collection P. I. Osburn (Condor XIII, 1911, 108).

107. (216.1) **Creciscus coturniculus** (Ridgway). FARALLON RAIL.

Rather rare resident, locally, mostly on salt water marshes. J. S. Appleton saw a bird of this species in a marsh near Hueneme, Ventura County, in the latter part of March, 1898. G. F. Morcom saw one at Ballona, Los Angeles County, May 16, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 16), and L. H. Miller took a specimen at Riverside, August 13, 1892 (Orn. & Ool. XVIII, 1893, 104).

So far as I know, the only place in southern California where eggs of the Black Rail have been taken, is in the salt marshes bordering San Diego Bay. A. M. Ingersoll has taken several sets and he informs me that he knows of over twenty sets having been taken by different collectors in that vicinity during the last few years. The sets are usually of from four to eight eggs each, and are deposited between the first and tenth of April.

108. (219) **Gallinula galeata** (Lichtenstein). FLORIDA GALLINULE.

Common resident on tule-bordered ponds and lakes of the lower country. Breeds mostly in May and June. Antonin Jay took eight fresh eggs at Nigger Slough, Los Angeles County, May 5, 1901, and a set of five eggs, incubation commenced, in the same locality, June 30, 1895. A. M. Ingersoll took a set of nine eggs at San Jacinto Lake, Riverside County, June 7, 1897.

109. (221) **Fulica americana** Gmelin. COOT.

The "mud hen" is an abundant resident of all tule-bordered ponds and lakes, breeding in the lower country from April 15 to June 15, later at higher altitudes. J. Grinnell found eggs at Bear Lake, 6750 feet altitude in the San Bernardino Mountains, late in July (Univ. Calif. Publ. Zool. v, 1908, 54).

110. (222) **Phalaropus fulicarius** (Linnaeus). RED PHALAROPE.

Abundant migrant on the ocean, a few remaining throughout the winter. Fall migration, late July to November. Spring migration, early April to early June. Irregular along the mainland coast. Most plentiful around the islands. Occasional on inland bodies of water. C. P. Streater took one specimen at Santa Barbara in the fall of 1885 (Orn. & Ool. XI, 1886, 89). J. H. Bowles

noted the species in the same locality in the fall, from September 26 (1910) to November 30 (1911), and Bradford Torrey saw it May 25 and 31, 1911 (Condor xiv, 1912, 6). I noted two birds dead on the beach at Hyperion, Los Angeles County, November 15, 1911, and found it fairly common at Long Beach, December 11, following. In late November and early December, 1907, C. B. Linton and myself found it very abundant around Santa Cruz and Anacapa islands, feeding in the kelp beds near shore. By December 5, the majority had disappeared to the southward (Condor x, 1908, 126). E. A. Mearns and A. W. Anthony took specimens at San Clemente Island in late August, 1894 (Bull. U. S. Nat. Mus. 56, 1907, 141). Mr. Anthony also took three specimens off San Diego, December 3, 1895 (Swarth, Condor xii, 1910, 108). According to R. H. Beck, a few of these birds linger through December and January as far north as Monterey (Proc. Cal. Acad. Sci., ser. 4, vol. iii, 1910, 70). Specimens were taken in the fall by W. Richardson on a reservoir near Pasadena (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 16); and F. K. Jenks has a mounted bird that was found dead by J. C. Sunby on the shore of the lake at Westlake Park, Los Angeles, November 1, 1911.

111. (223) **Lobipes lobatus** (Linnaeus). NORTHERN PHALAROPE.

Common migrant along the coast and on inland bodies of water. Fall migration, late July to late October. Spring migration, late April to June. Noted at Santa Barbara by Bradford Torrey and J. H. Bowles, in 1911, from August 4 to November 16 and from May 8 to June 16 (Condor xiv, 1912, 6). J. G. Cooper saw the species on ponds in Ventura County every month during the summer except June (Auk iv, 1887, 90). I have found it very common at Nigger Slough, Los Angeles County, in spring. H. S. Swarth has taken specimens in this locality as late as June 19 (1897). F. S. Daggett found it in large flocks on fresh water ponds at Bixby, Los Angeles County, August 10 to August 27, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 16). C. B. Linton took two specimens from a large flock at Santa Cruz Island, October 21, 1908.

112. (224) **Steganopus tricolor** Vieillot. WILSON PHALAROPE.

Occasional migrant. May sometimes breed around mountain lakes. Two of these birds were noted by Bradford Torrey at Santa Barbara from April 30 to May 6, 1909 (Condor xi, 1909, 173), and during the fall of 1910, J. H. Bowles noted them in the same locality as follows: A pair seen on July 22, three birds on August 3 and a pair on September 8. One of the latter was shot (Condor xiii, 1911, 35). Two more birds were seen by Mr. Bowles on May 20, 1911 (Condor xiv, 1912, 7). A specimen was taken by E. Heller near Riverside in the winter of 1891 (Condor iii, 1901, 100). J. Grinnell saw several small flocks at Bear Lake in the San Bernardino Mountains, from July 28 to August 2, 1905. Four specimens out of five taken at this time were birds of the year and Mr. Grinnell believes it possible that they were raised in the immediate vicinity (Univ. Calif. Publ. Zool. v, 1908, 55).

113. (225) **Recurvirostra americana** Gmelin. AVOCET.

Common in marshy districts during migrations, which occur in March

and April and from August to October. I have never seen them in mid-winter, but they probably occur occasionally at that season. They were noted by J. S. Newberry at San Francisco Bay in the winter of 1885 (Pac. R. R. Rep. vi, 1857, 99), and by E. W. Nelson at Lone Pine, Inyo County, in December, 1890, and at Morro Bay, San Luis Obispo County, in November, 1891 (Fisher, N. A. Fauna No. 7, 1893, 22). A few probably breed around the more remote lakes of southern California. They formerly nested commonly at Nigger Slough, Los Angeles County, but have not done so of late years. E. Davis has taken eggs at Alkali Lakes, near Santa Ana, from May 1 to August 1 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 16). Several pairs of birds were seen by H. W. Henshaw on Santa Cruz Island (Ann. Rep. Ch. En. U. S. G. S., 1876, App. JJ, 270), and W. A. Jeffries noted the species at Santa Barbara, April 19, 1883 (Auk vi, 1889, 223). They were also noted in the latter locality by J. H. Bowles, from March 18 to May 20, October 12 and November 1, 1911, and by Bradford Torrey on September 20, the same year (Condor xiv, 1912, 7).

114. (226) **Himantopus mexicanus** (Müller). BLACK-NECKED STILT.

Common summer resident. Rare in winter. Arrives mostly in March and April and leaves during the month of October. Breeds from May 1 through July, most abundantly from May 15 to June 15. I have found the Stilt nesting commonly at Nigger Slough, Los Angeles County, and E. Davis has taken eggs at Alkali Lakes, near Santa Ana. J. Grinnell saw a flock of about twenty-five birds at Bear Lake, San Bernardino Mountains, July 30, 1905 (Univ. Calif. Publ. Zool. v, 1908, 55). Mr. Grinnell also took a male on San Nicolas Island, May 25, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 26). H. Robertson took a specimen at Bixby, Los Angeles County, January 5, 1910.

115. (230) **Gallinago delicata** (Ord). WILSON SNIPE.

Common in fall, winter and spring in grassy swamps and wet pasture lands. Arrives mostly in late August and September, and leaves in March and early April. Noted by J. H. Bowles at Santa Barbara as late as April 27 (1911) (Condor xiv, 1912, 7).

116. (232) **Macrorhamphus griseus scolopaceus** (Say). LONG-BILLED DOWITCHER.

Fairly common during migrations. Occasional in winter, at least as far north as San Diego. Arrives mostly in late August and September and leaves during the latter part of March and the month of April. Noted by J. H. Bowles at Santa Barbara in the fall from July 18 (1910) to November 1 (1911), and in the spring from March 10 to May 2 (1910) (Condor xiv, 1912, 8). H. S. Swarth took a male at Ballona, Los Angeles County, April 19, 1901, and E. A. Mearns and A. W. Anthony noted the species on San Clemente Island in the latter part of August, 1894 (Bull. 56, U. S. Nat. Mus., 1907, 141). C. B. Linton took two specimens in the San Diego marshes, September 3, 1906, and found them fairly common in that locality during the following winter.

117. (234) ***Tringa canutus*** Linnaeus. KNOT.

Probably a regular migrant in small numbers. So far detected only in the fall. A. B. Howell and J. H. Bowles took several specimens at Santa Barbara during late August and early September, 1911 (Condor xiv, 1912, 8). The first noted were two birds taken by Mr. Bowles on August 24 and the latest was a single bird seen by Mr. Howell on September 9. Two males and a female were taken by C. B. Linton from a flock of about thirty birds at Alamitos Bay, Los Angeles County, September 18, 1907, and I took a male in the same locality October 10, following. C. Lamb took a male at Anaheim Landing, Orange County, October 3, 1909 (Condor xi, 1909, 208. H. W. Marsden took two young males at Pacific Beach, San Diego County, September 8, 1904 (Bishop, Condor vii, 1905, 141). Mr. Marsden also took a male and two females in the same locality, October 7 and 9, 1903 (Dwight, Auk xxi, 1904, 78).

118. (239) ***Pisobia maculata*** (Vieillot). PECTORAL SANDPIPER.

Rare migrant. So far noted on our southern California coast only at Santa Barbara. W. W. Cooke says of this species: "A few pass south along the Pacific coast to the state of Washington (Suckley) and there are two records for California—Mill Valley Junction, September 14, 1896 (Mailliard), and Farallon Islands, September 4, 1884 (specimen in U. S. National Museum). The species reappears again in Lower California, where it is fairly common during fall migration in the Cape region (Brewster)" (U. S. Biol. Surv. Bull. 35, 1910, 36). We have the following records for the species in southern California: Two birds seen at Santa Barbara by Bradford Torrey on September 18, three on September 20 and one on September 21 and 23, 1909 (Condor xii, 1910, 44). Several birds noted in the same locality by J. H. Bowles, September 8, and one collected September 9, 1910 (Condor xiii, 1911, 35). Mr. Bowles also saw a bird on August 18 and another on August 20, 1911 (Condor xiv, 1912, 8), and noted it in spring migration April 14, 1910 (Auk xxviii, 1911, 172).

119. (241) ***Pisobia bairdi*** (Coues). BAIRD SANDPIPER.

Migrates mainly east of the Sierras, so far having been detected along our southern California coast only in the fall, as follows: A. B. Howell and J. H. Bowles found the species fairly common on marsh lands near Santa Barbara in the fall of 1911. The earliest specimen, a male, was taken August 11, and they were fairly plentiful from that date until about September 7 (Condor xiv, 1912, 8). H. W. Wright took a young male on Catalina Island, September 1, 1907 (Grinnell, Condor xi, 1909, 139), and H. W. Marsden took a young female at Pacific Beach, San Diego County, September 8, 1904 (Bishop, Condor vii, 1905, 141).

120. (242) ***Pisobia minutilla*** (Vieillot). LEAST SANDPIPER.

Abundant migrant along the coast and on inland bodies of water. Remains through the winter in considerable numbers. Arrives mostly in August and

September and leaves in April and the first part of May. Non-breeding birds are frequently seen during the summer months.

121. (243a) ***Pelidna alpina sakhalina*** (Vieillot). RED-BACKED SAND-PIPER.

Common migrant along the coast, occasional on inland ponds. Less plentiful in mid-winter. Most abundant in fall from September 15 to November 1, and in spring from April 10 to May 7. I saw several birds of this species at Nigger Slough, Los Angeles County, May 19, 1906, and found them common at Alamitos Bay, December 19, the same year.

122. (247) ***Ereunetes mauri*** Cabanis. WESTERN SANDPIPER.

Abundant migrant on both fresh and salt water marshes. A few remain through the winter. The fall migration occurs in September and October, and the spring migration mostly between April 1 and May 10. C. B. Linton found this species fairly common at San Diego Bay during November, December and January, 1906-7. J. H. Bowles noted it at Santa Barbara, December 5, 1909, and February 28, 1910 (Condor xiv, 1912, 9). Mr. Bowles also saw fourteen birds in the same locality, July 11, 1910.

123. (248) ***Calidris leucophaea*** (Pallas). SANDERLING.

Common in flocks on sandy beaches from August 15 to May 15. Occasional in summer. Most abundant in spring and fall, the majority of the species wintering to the southward. C. B. Linton noted this bird on San Nicolas Island as late as May 30, 1910, and I found it fairly common at Hyperion, Los Angeles County, May 31, the same year. H. S. Swarth took a specimen at Redondo, Los Angeles County, June 4, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 17).

- 124 (249) ***Limosa fedoa*** (Linnaeus). MARBLED GODWIT.

Common migrant along the coast, a few remaining in the fall as late as December. The first of the species begin arriving from the north early in July, and they occur along the beaches in spring as late as the middle of June. H. S. Swarth saw this bird at Alamitos Bay, Los Angeles County, May 16, 1901, and Bradford Torrey saw one bird at Santa Barbara, June 4, 1910 (Condor xii, 1910, 204). J. H. Bowles saw a bird in the latter locality, June 15, 1911 (Condor xiv, 1912, 9).

H. S. Swarth saw the Marbled Godwit at Terminal Island, Los Angeles County, in December, 1899, and C. B. Linton found it common around San Diego Bay as late as December 5, 1906. W. W. Cooke informs me that he does not consider the presence of this species in early December to be proof of its wintering in southern California as there is much southward migration after that time. I have seen no California records for January or February.

125. (254) ***Totanus melanoleucus*** (Gmelin). GREATER YELLOW-LEGS.

Common along the coast and on fresh water ponds during migrations. Less common in mid-winter, north at least to Santa Barbara. Seen occasionally during the summer. Arrives in September and October and leaves mostly in April. G. F. Morcom saw this species at Nigger Slough, Los Angeles County,

June 19, 1897, and H. S. Swarth noted it in the same locality in July (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 17). J. H. Bowles saw four birds at Santa Barbara, July 18, 1910, and noted one bird in the same locality, January 2, 1911 (Condor xiv, 1912, 9). C. B. Linton took a male at San Diego Bay, December 5, 1906, and a female at Long Beach, Los Angeles County, January 19, 1907.

126. (256a) **Helodromas solitarius cinnamomeus** (Brewster). WESTERN SOLITARY SANDPIPER.

Fairly common during migrations, mostly along streams of the interior. J. H. Bowles finds the Solitary Sandpiper to occur rather rarely in migrations on the grassy mud flats in the vicinity of Santa Barbara (Condor xiv, 1912, 9). His only spring record for that locality is of one bird seen April 30, 1910. He has noted it in the fall from July 22 (1910) to September 7 (1911). H. S. Swarth has found it fairly numerous along the Los Angeles River. He has seen it in the fall from August 25 (1900) to September 22 (1898), and in the spring from April 10 (1898) to May 14 (1898). It was noted by J. G. Cooper along fresh water streams of Ventura County (Auk iv, 1887, 91), and in the Cuyamaca Mountains, San Diego County (Am. Nat. viii, 1874, 18). A. van Rossem took two birds at Bear Lake, San Bernardino Mountains, August 22, 1910, and E. A. Mearns and A. W. Anthony noted the species on San Clemente Island in late August, 1894 (U. S. Nat. Mus. Bull. 56, 1907, 141).

127. (258a) **Catoptrophorus semipalmatus inornatus** (Brewster). WESTERN WILLET.

Common along the coast and on inland bodies of water from August 15 until the latter part of April. Most abundant during the migrations which take place in August and September and in March and April. Frequently seen during the summer, but, so far, has not been found to breed in southern California. J. G. Cooper records this bird as common in winter in Ventura County marshes (Auk iv, 1887, 91). J. H. Bowles noted it at Santa Barbara, November 1, 1911 (Condor xiv, 1912, 9), and W. L. Dawson saw a bird at Carpinteria, Santa Barbara County, December 23, 1911. C. B. Linton found it common at San Diego Bay from August 18 to December 5, 1906. J. Grinnell found it quite plentiful at Bear Lake, San Bernardino Mountains, from July 28 to August 2, 1905, and took three specimens, all apparently birds of the year and probably migrants (Univ. Calif. Publ. Zool. v, 1908, 55).

I have seen this species in southern California every month during the summer. I noted it in company with Black-necked Stilts—the latter breeding—at Nigger Slough, Los Angeles County, May 17 and 28, June 2 and July 10, 1910, and found it plentiful at Bolsa Chica, Orange County, July 23, 1911. I also saw a small flock on San Miguel Island, June 17, 1910 (Condor xii, 1910, 173).

128. (259) **Heteractitis incanus** (Gmelin). WANDERING TATTLER.

Fairly common on rocky shores in fall, winter and spring. A few, undoubtedly non-breeding birds, remain through the summer. Particularly plentiful on the Santa Barbara Islands in company with Spotted Sandpipers and Turn-

stones. The migrations occur mostly in August and April. C. B. Linton has found the Tattler common on San Clemente, San Nicolas and Santa Barbara islands, from September 1 to June 12. I saw them daily on San Miguel Island from June 9 to June 23, 1910 (Condor xii, 1910, 173), and Antonin Jay noted several birds on Santa Barbara Island, July 3, 1909. J. E. Law has a male taken near Santa Monica, Los Angeles County, December 11, 1905, and I have frequently seen the species on rocky shores of the mainland during the winter months.

129. (263) **Actitis macularius** (Linnaeus). SPOTTED SANDPIPER.

Common along rocky shores from September to May. Occasional inland, mostly during migrations. A few breed as far south as Ventura County and probably even farther south in the higher mountains. I have found this species plentiful in winter around the Santa Barbara Islands and on rocky shores of the mainland, and have seen it in the Los Angeles city parks during migrations. C. B. Linton found it common at San Nicolas Island, May 18, 1909, and I saw two birds on Anacapa Island, June 5, 1910. I also saw one at Nigger Slough, Los Angeles County, May 28, 1910. J. Grinnell saw several birds at Bear Lake, San Bernardino Mountains, August 2, 1905, and a pair was noted at Dry Lake, 9000 feet altitude, July 15, 1906 (Univ. Calif. Publ. Zool. v, 1908, 56).

A set of three eggs was taken by B. Ruggles near Santa Paula, Ventura County, in May, 1892, and another set of three was taken by M. Richardson in the same locality in May, 1900. I have examined these eggs and they are undoubtedly those of the Spotted Sandpiper.

130. (264) **Numenius americanus** Bechstein. LONG-BILLED CURLEW.

This bird may be found along our coast and on inland bodies of water every month in the year. Although it has been reported as breeding in southern California, I doubt the authenticity of the records. The birds seen here in summer are probably non-breeding. It is most plentiful during migrations, but is fairly common during the winter months. Long-billed Curlews begin coming in from the north in considerable numbers the first week in July and continue to arrive until well into September. The spring migration occurs mostly during the month of April.

131. (265) **Numenius hudsonicus** Latham. HUDSONIAN CURLEW.

This species in migrations is much more abundant than the last along the seashore, but is less plentiful inland. According to ornithological authorities it winters entirely south of the United States. The first arrivals from the north appear about the first week in July, and by July 10 they are abundant along the beaches. They have mostly disappeared to the southward by the first of October. The return migration begins about March first and continues well into May. I saw a flock of twenty-five or thirty birds at Nigger Slough, Los Angeles County, May 25, 1907, and J. H. Bowles saw eleven birds at Santa Barbara, June 2, 1911 (Condor xiv, 1912, 10).

132. (270) **Squatarola squatarola** (Linnaeus). BLACK-BELLIED PLOVER.

Common migrant along the coast, less plentiful during the winter. Fall

migration, September 1 to October 20. Spring migration, April 1 to May 15. A. B. Howell saw three birds at Santa Barbara, August 29, 1911, and on September 5, following, a flock of over a hundred was seen. J. H. Bowles noted the species in the same locality, November 25, 1911 (Condor, xiv, 1912, 10). H. S. Swarth saw a flock of six or eight birds, one of which he secured, at Ballona, Los Angeles County, May 18, 1900. He also saw two birds in the same locality, May 22, following. C. B. Linton saw one bird in full summer plumage on San Nicolas Island, June 1, 1910. Mr. Linton has also observed the species during the winter months, as follows: Five birds taken from small flock at Coronado Beach, San Diego County, November 6, 1906; several seen at Santa Cruz Island, December 8, 1907, and noted fairly common at Alamitos Bay, Los Angeles County, January 9-11, 1907.

133. (273) *Oxyechus vociferus* (Linnaeus). KILLDEER.

Common resident of the lowlands. Occurs in summer up to about 7000 feet around mountain lakes. Breeds ordinarily from the latter part of March until late May. Antonin Jay took a set of four slightly incubated eggs near El Monte, Los Angeles County, April 1, 1906, and another set of four, incubation commenced, at Nigger Slough, June 24, 1900. In June, 1907, I found the birds common at Bear and Baldwin lakes, 6750 feet altitude in the San Bernardino Mountains.

134. (274) *Ægialitis semipalmata* (Bonaparte). SEMIPALMATED PLOVER.

Common migrant along the coast, occasional in summer. Most abundant in the fall from September 15 to October 10, and in the spring from April 10 to May 15. J. H. Bowles has noted the species at Santa Barbara in the fall from July 12 (1910) to November 1 (1911), and in the spring from April 18 (1910) to May 16 (1910) (Condor xiv, 1912, 11). It was noted by C. B. Linton at San Nicolas Island, April 18 and May 6, 1910, and by E. A. Mearns and A. W. Anthony on San Clemente Island in late August, 1894 (Bull. U. S. Nat. Mus. 56, 1907, 141). I saw five birds of this species, one of which I secured, at Alamitos Bay, Los Angeles County, June 29, 1907.

135. (278) *Ægialitis nivosa* Cassin. SNOWY PLOVER.

Common resident along the coast. Breeds on sandy beaches of the mainland and on several of the Santa Barbara Islands. Eggs are generally deposited between May 1 and June 15. W. L. Chambers took three eggs, advanced in incubation, at Ballona, Los Angeles County, April 15, 1907, and found a nest containing one fresh egg, in the same locality, August 2, 1903. I found the species fairly common on San Nicolas Island in June, 1911, and O. W. Howard noted it on San Miguel Island in summer.

136. (280) *Ochthodromus wilsonius* (Ord). WILSON PLOVER.

One record. A male was taken by A. M. Ingersoll at Pacific Beach, San Diego County, June 29, 1894 (Nidologist II, 1895, 87). This specimen is now in the collection of J. Grinnell.

137. (281) ***Podasocys montanus*** (J. K. Townsend). MOUNTAIN PLOVER.

Common winter visitant on grassy fields and pasture lands of the lower country. I have never seen any exact data on the time of arrival and departure of this bird in southern California. Antonin Jay found it plentiful near Montebello, Los Angeles County, September 15, 1896, and noted it in considerable numbers at Nigger Slough, February 15, 1897. It was reported by G. F. Breninger as wintering on San Clemente Island (Auk *xxi*, 1904, 222). Being found in large flocks, it is easy prey for the pot hunter and, unless rigidly protected by law, is in danger of extermination.

138. (282) ***Aphriza virgata*** (Gmelin). SURF-BIRD.

Rare migrant, mostly along rocky shores. J. G. Cooper saw birds that he believed to be of this species on Santa Barbara Island, but they were so wild that he could not get a shot at them (B., Br. & Ridg., W. B. N. A. *i*, 1884, 127). I am informed by L. M. Loomis that there were in the collection of the California Academy of Sciences several specimens of the Surf-bird obtained by R. H. Beck on San Miguel Island, some time between March 13 and April 1, 1903. These specimens were destroyed with the rest of the Academy collection, in the conflagration of 1906. C. B. Linton took an adult bird on San Nicolas Island, May 15, 1909. A. B. Howell and W. L. Dawson saw a flock of five of these birds, accompanied by two Marbled Godwits, near Santa Barbara, September 16, 1911 (Condor *xiv*, 1912, 11). A pair was taken by Mr. Howell and Mr. Dawson secured one specimen. F. Gruber procured a specimen at Santa Barbara in the spring (Henshaw, Ann. Rep. Ch. En. U. S. G. S., 1876, App. JJ, 270). H. W. Marsden took an immature male at Pacific Beach, San Diego County, September 8, 1904 (Bishop, Condor *vii*, 1905, 141).

139. (283) ***Arenaria interpres interpres*** (Linnaeus). TURNSTONE.

One record, that of an immature female taken by H. W. Marsden at Pacific Beach, San Diego County, September 8, 1904 (Bishop, Condor *vii*, 1905, 141). This specimen was examined by H. C. Oberholser, who agrees with Dr. Bishop as to its identity. He considers that it is undoubtedly an Eastern Hemisphere bird that wandered out of its course.

140. (283a) ***Arenaria interpres morinella*** (Linnaeus). RUDDY TURNSTONE.

Fairly common migrant along the coast and on the Santa Barbara Islands. A specimen was taken at Santa Barbara by C. P. Streater in the fall of 1885 (Orn. & Ool. *xi*, 1886, 89), and A. B. Howell took several specimens in the same locality in late August and early September, 1911 (Condor *xiv*, 1912, 11). His first specimen was secured August 28. H. Robertson took an immature bird at Long Beach, Los Angeles County, August 24, 1897 (Bull. Cooper Orn. Club *i*, 1899, 94), and I took a female at Sunset Beach, Orange County, September 20, 1901 (Condor *x*, 1908, 50).

C. B. Linton found the species fairly common on the rocky shores of San Nicolas Island from March 30 to May 11, 1910. Nineteen specimens taken by

him at this time are in the collection of J. E. Thayer. Mr. Linton also saw two birds at San Miguel Island, October 15, 1910. H. Wright took an immature male on Catalina Island, September 3, 1907 (Grinnell, Condor XI, 1909, 139), and E. A. Mearns and A. W. Anthony took specimens on San Clemente Island in late August, 1894 (Bull. 56, U. S. Nat. Mus., 1907, 141).

141. (284) **Arenaria melanocephala** (Vigors). BLACK TURNSTONE.

Common in small flocks, mostly along rocky shores, from August to May. Particularly plentiful on the Santa Barbara Islands. The majority arrive in August and leave in April. Non-breeding birds are frequent in summer. C. B. Linton has found the species common on the channel islands as late as June 1, and saw several on San Nicolas and Santa Barbara islands July 4, 5, 1909. I saw a pair on Santa Barbara Island, June 14, 1911, and took a male on San Miguel Island, June 21, 1910. I also saw three birds at Bolsa Chica, Orange County, July 24, 1911, and took a female at Hyperion, Los Angeles County, July 28, 1910.

142. (286.1) **Haematopus frazari** Brewster. FRAZAR OYSTER-CATCHER.

Breeds on the coast of Mexico and Lower California. Straggles rarely north to Ventura County. J. G. Cooper obtained two specimens of this bird, one at San Diego and the other at Santa Barbara Island, in the months of May and June (Proc. Cal. Acad. Sci. IV, 1868, 8). B. W. Evermann noted it on the coast of Ventura County in summer (Auk III, 1886, 92), and P. I. Osburn saw a bird at Catalina Island, February 12, 1910 (Condor XIII, 1911, 76).

143. (287) **Haematopus bachmani** Audubon. BLACK OYSTER-CATCHER.

Resident on the Santa Barbara Islands. Breeds on Santa Barbara, Anacapa, Santa Cruz, Santa Rosa and San Miguel. Most plentiful on the last named. Fresh eggs may be found from May 15 to the latter part of June. I have a juvenile bird taken on San Miguel Island, June 23, 1910, and sets of eggs were taken at the same island in 1910 as follows: Two eggs, incubation one-third, taken by V. W. Owen, June 9; two eggs, fresh, taken by O. W. Howard, June 10; three eggs, fresh, taken by G. Willett, June 17, and two fresh and three slightly incubated eggs taken by J. S. Appleton, June 18 (Condor XII, 1910, 173). Two nests containing eggs were found by H. W. Henshaw on Santa Cruz Island early in June (Ann. Rep. Ch. En. U. S. G. S. 1876, App. JJ, 270), and J. G. Cooper took a set of four fresh eggs on Santa Barbara Island, June 3, 1863 (B., Br. & Ridg., W. B. N. A. I, 1884, 117). H. C. Burt found a nest containing one fresh egg on Anacapa Island, May 15, 1911. The egg was left and the nest was visited by H. B. Webster on May 29. It still contained but the one egg which was heavily incubated.

144. (292a) **Oreortyx picta plumifera** (Gould). PLUMED QUAIL.

Common resident from the Upper Sonoran zone of the foothills up through the Transition zone in the higher mountains. "In times of heavy snow on the mountains these birds appear in considerable numbers in the lower foothills and individuals have been seen in Pasadena, three miles from the base of the mountains" (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 19). H. Robertson

saw a bird in Garvanza, Los Angeles City, April 23, 1900, and on another occasion saw one in a small park in the central part of the city. Eggs are usually deposited in May, but J. Grinnell has taken young, apparently but a day or two old, on Pine Flats in the San Gabriel Range as late as July 15. H. J. Lelande found a nest in the Linda Vista Hills, west of Pasadena, May 7, 1897. It contained ten eggs of the "mountain quail" and four eggs of the valley quail, all of which were fresh (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 19). W. M. Pierce took ten fresh eggs in San Antonio Cañon, May 11, 1907.

Although the A. O. U. *Check-List* assigns the bird occurring from the San Gabriel and San Bernardino Mountains, south, to the form *Oreortyx picta confinis* Anthony, J. Grinnell and H. S. Swarth inform me that, after studying over the case, they are convinced that all southern California birds are referable to *O. p. plumifera* and that *O. p. confinis* has no standing as a bird of California.

145. (294a) **Lophortyx californica vallicola** (Ridgway). VALLEY QUAIL.

Common resident of the lowland and foothill country, except the marsh lands, but not so generally abundant as formerly. This is the principal game bird of southern California and its numbers have been considerably reduced by hunters. If not hunted too persistently it takes kindly to civilization, nesting commonly in grain fields and near farm houses and even breeding in parks and gardens in the cities. It is common on Catalina Island and is occasionally seen on San Clemente. Is said to have been introduced on the latter island. J. Grinnell says that six specimens taken by him on San Clemente in May, 1897, are slightly lighter than birds from Pasadena (Pub. 1, Pasadena Acad. Sci., 1897, 12). Eggs are generally deposited in April and May. Extreme nesting dates are: Thirteen fresh eggs taken by W. M. Pierce near Claremont, Los Angeles County, April 4, 1901, and eleven eggs noted by H. Robertson near Los Angeles, August 9, 1895.

146. (295) **Lophortyx gambeli** Gambel. GAMBEL QUAIL.

Occasional straggler from the desert. H. S. Swarth took an adult male near Los Angeles, September 16, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 19). On several occasions during the past twenty-five years, captive birds of this species are known to have been released in the vicinity of Los Angeles. In at least one instance they are known to have bred after their release. It is possible that the specimen taken by Mr. Swarth was one of these released birds or their stock. A male of this species was sent to E. Wall by J. S. Bright, who killed it near San Bernardino, January 15, 1893 (Auk x, 1893, 204). Where the ranges of *L. gambeli* and *L. c. vallicola* come together, hybrids occur (Henshaw, Auk II, 1885, 247).

147. (297c) **Dendragapus obscurus sierrae** Chapman. SIERRA GROUSE.

Sierra Nevada Mountains, south to Mt. Piños, Ventura County. E. W. Nelson saw a few of these birds around the summit of Mt. Piños, in October, 1891 (Fisher, N. A. Fauna No. 7, 1893, 31). In July, 1904, J. Grinnell saw two birds and found numerous signs of others, on the north side of Mt. Piños among the firs. The two birds seen were an old female and a half-grown

young one (Auk xxii, 1905, 382). L. Peyton saw several birds on Sawmill Mountain, the westward spur of Mt. Piños, in early September, 1911.

148. (312) **Columba fasciata fasciata** Say. BAND-TAILED PIGEON.

Breeds in the mountains, mostly above 3000 feet. Irregular fall, winter and spring visitant to the foothills and occasionally well down into the valleys. Some seasons appears in the lower country in large flocks, and other seasons is not noted at all. Two birds were seen by R. Rogers at Santa Barbara, September 18, 1906 (Condor ix, 1906, 28). W. L. Chambers secured several specimens which were poisoned by a rancher near Santa Monica, Los Angeles County, February 26, 1901. Mr. Chambers states that there were hundreds of the birds around Santa Monica at the time, feeding on the grain fields. H. S. Swarth has noted the species on stubble fields near Los Angeles in winter, and on March 3, he saw several in the oak trees along the Los Angeles River. Flocks were seen by L. Belding at El Cajon, San Diego County, December 15, 1883 (Land Birds Pac. Dist., 1890, 20).

J. Grinnell found Band-tailed Pigeons common around the summit of Mt. Piños in the summer of 1904 (Auk xxii, 1905, 382), and in June, 1906, I found them fairly plentiful in the San Bernardino Mountains above 5000 feet. C. E. Groesbeck found a nest containing one young bird about a week old, on Mt. Wilson, Los Angeles County, July 5, 1894, and W. B. Judson found a nest containing one considerably incubated egg, in the same locality, May 23, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 20). Two nests, each containing one young bird, were found by M. F. Gilman at an elevation of about 6500 feet on San Jacinto Mountain, May 14, 1897 (Condor v, 1903, 134). J. B. Dixon and C. S. Sharp found the species breeding about twenty miles from Escondido, San Diego County, at an elevation of 3250 feet. Sets of eggs were taken as follows: Two eggs, fresh, May 3, 1901; one egg, incubation advanced, May 11, 1902, and one egg, incubation advanced, June 24, 1902 (Condor v, 1903, 16).

149. (316) **Zenaidura macroura carolinensis** (Linnaeus). MOURNING DOVE.

Abundant resident throughout the lower country and on the larger islands of the Santa Barbara group. Occurs in summer up to the summits of the mountains. The breeding season is protracted and eggs may be found from February until September. H. J. Lelande took two slightly incubated eggs near San Gabriel, Los Angeles County, February 9, 1897, and Antonin Jay found two fresh eggs near Santa Monica, September 22, 1894. A. B. Howell found a nest in an orange tree near Covina, Los Angeles County, which contained two heavily incubated eggs, December 5, 1911 (Condor xiv, 1912, 73).

150. (320a) **Chaemepelia passerina pallescens** Baird. MEXICAN GROUND DOVE.

Rare straggler from across the mountains. Several specimens said to have been obtained by Mr. Lorquin at San Gabriel, Los Angeles County, in the 60's (B., Br. & Ridg., N. A. L. B. iii, 1874, 522). They have never been noted in that locality since that time and the record may be erroneous. A bird of this

species was taken by M. F. Gilman at Banning, Riverside County, in October, 1902. A. M. Ingersoll has a specimen that was shot by F. Judson at San Pasqual, San Diego County, about 1900.

151. (324) **Gymnogyps californianus** (Shaw). CALIFORNIA VULTURE.

Tolerably common resident in the mountainous sections of the country, occasionally straggling down into the lowlands in search of food. This great bird, although not nearly so abundant as formerly, is regularly reported from various of the more rugged regions of southern California. The center of its abundance at the present time appears to be the mountains of Santa Barbara and Ventura counties. The average nesting time seems to be in March and the first part of April. O. W. Howard took an egg in Sisquoc Cañon, Santa Barbara County, April 25, 1895 (Shields, Nidologist II, 1895, 148). A fresh egg was taken by F. Ruiz in San Roque Cañon, near Santa Barbara, April 17, 1899 (Redington, Bull. Cooper Orn. Club I, 1899, 75), and another egg was taken for W. F. Webb in the same locality, April 29, 1897 (Museum IV, 1898, 103). In November, 1905, an egg was found in Sespe Valley, back of Nordhoff, Ventura County. The egg was uninjured, but the contents were dried up (Gallagher, Condor VIII, 1906, 57). A fresh egg was found by a little girl in the Santa Monica Mountains, Los Angeles County, April 11, 1900, and is now in the collection of J. E. Law. A nest containing an egg was found by W. L. Finley and H. T. Bohlman in the mountains near Pasadena, March 10, 1906. The egg was allowed to hatch and a most interesting series of photographs was taken of the young and old birds. The young bird was taken from the nest on July 6 and was sent to the New York Zoological Park (Condor VIII, 1906, 135). A fresh egg was taken by W. V. Dyche in the Cuyamaca Mountains, San Diego County, in March, 1900 (Gidney, Condor II, 1900, 124).

152. (325) **Cathartes aura septentrionalis** Wied. TURKEY VULTURE.

Common resident from the mountains to the ocean. Breeds plentifully in the foothills and occasionally in the lower country. Eggs are generally deposited in early April in caves of the foothills or in blackberry thickets in the river bottoms. Antonin Jay took a set of two eggs, incubation commenced, near Whittier, Los Angeles County, March 15, 1903, and I took a set of two, two-thirds incubated, in the same locality, May 8, 1897.

153. (328) **Elanus leucurus** (Vieillot). WHITE-TAILED KITE.

Formerly a fairly common resident of the lowlands, where it bred in the willow timber. Now rare. Fifteen or twenty years ago this bird might be seen frequently in the lower country, but at the present time it is decidedly uncommon. I have not seen one since 1906. There are probably, however, a few pairs left in the more remote willow regions of southern California, but their extinction is only the matter of a short time. C. P. Streator took a set of five eggs near Santa Barbara, April 14, 1886 (Orn. & Ool. XI, 1886, 152). B. W. Evermann located four or five pairs of birds breeding in the Santa Clara Valley, Ventura County, in the early 80's (Auk III, 1886, 92). A. M. Shields took five fresh eggs near Alamitos, Los Angeles County, April 4, 1896,

and took another set, also of five fresh eggs, in the same locality, April 11, the same year (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 20). A. M. Ingersoll informs me that from 1887 to 1892 he saw White-tailed Kites frequently in the vicinity of San Diego and knew of two pairs nesting in that region. Of late years he finds them very scarce. He took two slightly incubated eggs near National City, March 24, 1890, and five, slightly incubated, in the same locality, April 25, following.

154. (331) **Circus hudsonius** (Linnaeus). MARSH HAWK.

Common resident of the lowlands, especially on the salt marshes near the coast. Breeds mostly in late March and early April. I took a set of eight eggs advanced in incubation, near Bay City, Orange County, April 7, 1910, and O. W. Howard took a set of five eggs, two-thirds incubated, at Alamitos Bay, Los Angeles County, April 21, 1906. H. C. Burt took an immature male of this species on Anacapa Island, March 15, 1911 (Condor XIII, 1911, 166).

155. (332) **Accipiter velox** (Wilson). SHARP-SHINNED HAWK.

Common in fall, winter and early spring in the lower country and on the Santa Barbara Islands. Breeds sparingly in the higher mountains. H. J. Lelande found a nest of this bird at Bear Valley, about 7000 feet altitude in the San Bernardino Mountains, June 8, 1904. It contained four young birds about two-thirds grown.

156. (333) **Accipiter cooperi** (Bonaparte). COOPER HAWK.

Fairly common resident from the lower foothills up to 7000 feet in the mountains. Breeds mostly in late April and early May. H. C. Burt informs me that this hawk breeds sparingly in the willow groves bordering the Santa Clara River, Ventura County. He took a set of three eggs in this locality April 17, 1906, and a set of four eggs, April 19, 1907. Antonin Jay took a set of four, slightly incubated eggs near Covina, Los Angeles County, April 22, 1906, and J. Grinnell took a set of four, advanced in incubation, near Seven Oaks, 5000 feet altitude in the San Bernardino Mountains, June 13, 1905 (Univ. Calif. Publ. Zool. v, 1908, 58). A. B. Howell and A. van Rossem saw a pair of these birds on Santa Cruz Island the latter part of April, 1911 (Condor XIII, 1911, 209).

157. (337b) **Buteo borealis calurus** Cassin. WESTERN RED-TAIL.

Common resident from the lowlands to at least 9000 feet in the mountains. Also on the larger Santa Barbara Islands. Breeds most plentifully in the foothill and mesa country, eggs being generally deposited in March. J. B. Dixon took two fresh eggs near Escondido, San Diego County, February 14, 1902 (Condor IV, 1902, 46), and H. A. Gaylord took two eggs advanced in incubation, in the San Fernando Valley, Los Angeles County, April 30, 1892 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 21).

158. (339b) **Buteo lineatus elegans** Cassin. RED-BELLIED HAWK.

Fairly common resident of the lowlands, especially the willow regions. Breeds mostly in late March and the month of April. As the country settles up this bird is becoming scarcer, and before many years will be found only in

the more remote parts of southern California. B. W. Evermann found the Red-bellied Hawk not uncommon in the vicinity of Santa Paula, Ventura County, where he found their nests in sycamores, cottonwoods, live oaks and willows, near the borders of streams (Bendire, Life Hist. N. A. B., 1892, 227). There are still a few pairs breeding in the willow groves of Los Angeles County, but they are becoming scarcer every year. F. Stephens took a set of three partially incubated eggs in San Timoteo Cañon fifteen miles east of Colton, April 7, 1882 (Bendire, Life Hist. N. A. B., 1892, 227). C. S. Sharp found two fresh eggs near Escondido, San Diego County, March 6, 1904, and noted a nest which contained two young, a few days old, in the same locality, July 4, 1906 (Condor VIII, 1906, 147).

159. (340) **Buteo abbreviatus** Cabanis. ZONE-TAILED HAWK.

Rare straggler to the extreme southern end of the state. Recorded as follows: Male taken by J. G. Cooper thirty miles north of San Diego, February 23, 1862 (Land Birds Cal., 1870, 480), now no. 4375 collection University of California Museum of Vertebrate Zoology. Immature male taken by C. B. Linton near National City, San Diego County, November 26, 1906 (Condor x, 1908, 181), now no 16490 collection J. E. Thayer. Unsexed specimen taken by W. J. McClosky thirty miles north of San Diego, September 10, 1907 (Grinnell, Condor XI, 1909, 69), now no 5494 collection University of California Museum of Vertebrate Zoology.

160. (342) **Buteo swainsoni** Bonaparte. SWAINSON HAWK.

Common in spring, summer and fall from the foothills to the ocean. Migrates south in September and October and returns in March and early April. According to L. Belding, winters occasionally in the vicinity of San Diego (Land Birds Pac. Dist., 1890, 36). F. S. Daggett found the species common on Catalina Island August 1 to 16, 1898, and took one specimen. Eggs are generally deposited during the latter part of April and first part of May. Antonin Jay took three fresh eggs in the San Fernando Valley, Los Angeles County, April 24, 1898, and W. L. Chambers took three fresh eggs near Santa Monica the first day of June (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 22).

161. (348) **Archibuteo ferrugineus** (Lichtenstein). FERRUGINOUS ROUGH-LEG.

Frequently seen. Most common in the fall. J. G. Cooper took two specimens near Saticoy, Ventura County, in winter and saw many more (Auk IV, 1887, 91). J. S. Appleton took a male in Simi Valley, Ventura County, February 17, 1912. H. S. Swarth has seen the birds occasionally in the San Fernando and Cahuenga valleys, Los Angeles County, in fall and winter. He took a female at the summit of Cahuenga Pass, October 4, 1897, and noted several birds near Los Angeles, October 16, following (Condor II, 1900, 16). In the University of California Museum of Vertebrate Zoology are three specimens of this bird taken in southern California, as follows: Female collected by J. G. Cooper at San Pedro, October 24, 1861; male, also collected by Dr.

Cooper, fifteen miles north of San Diego, March 5, 1862; and male, collector unknown, taken at San Bernardino, December 12, 1864. F. Paine took a male in the Volcan Mountains, San Diego County, February 25, 1884 (Emerson, Bull. Cal. Acad. Sci. II, 1887, 421), and A. L. Heermann found the species abundant at some seasons in the mountains of San Diego County (Pac. R. R. Rep. x, 1859, 32).

162. (349) **Aquila chrysaëtos** (Linnaeus). GOLDEN EAGLE.

Rather common resident, mostly in mountainous regions. Breeds in February and early March. H. C. Burt took two fresh eggs near Santa Paula, Ventura County, March 18, 1910. W. L. Chambers took two slightly incubated eggs near Covina, Los Angeles County, March 5, 1910. I found a nest, containing two half-incubated eggs, near Highlands, San Bernardino County, April 4, 1897. A. M. Ingersoll has taken many sets of eggs of this bird in the vicinity of San Diego. He informs me that he believes fresh eggs found after March 10 are those of birds which have lost their first laying. His earliest and latest dates for the first laying are, respectively, set of two fresh eggs taken February 9, 1910, and set of two, one-third incubated, March 15, 1895. Mr. Ingersoll states that, upon being robbed, the birds will lay a second and even a third set. He has found third sets as late as May.

163. (352) **Haliaeetus leucocephalus leucocephalus** (Linnaeus). BALD EAGLE.

Common resident of the Santa Barbara Islands, occasional on the mainland coast. Breeds mostly in late February and early March. Recorded by H. W. Henshaw as abundant on the mainland of southern California in 1876 (Ann. Rep. Ch. Eng. U. S. Geol. Surv., 1876, App. JJ, 264), but now common only on the islands. Two considerably incubated eggs taken by W. L. Chambers near Santa Monica, Los Angeles County, March 13, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 22). Two fresh eggs taken by E. Davis near Laguna, Orange County, March 5, 1895, and two young birds about a month and a half old noted by Mr. Davis in the same locality, March 15, following (Nidologist IV, 1897, 78). In June, 1910, I noted many nests of this species, all of which contained nearly full-grown young, on Anacapa, Santa Cruz, Santa Rosa and San Miguel islands. In June, 1911, I saw a pair of birds on Santa Barbara Island, and in March, 1905, I took two sets of eggs on Catalina. C. B. Linton has taken eggs on San Nicolas and San Clemente.

164. (355) **Falco mexicanus** Schlegel. PRAIRIE FALCON.

Resident east of the mountains. Occurs on the Pacific slope in fall, winter and spring. Noted as follows: Adult male taken by J. Dixon at an altitude of 8000 feet on Mt Piños, Ventura County, July 4, 1904 (Grinnell, Auk XXII, 1905, 383). Immature female taken by H. S. Swarth in the San Fernando Valley, Los Angeles County, December 13, 1901, and adult male taken by Mr. Swarth in the same locality, January 20, 1902. Bird seen by F. S. Daggett in the San Fernando Valley, November 1, 1902, and another in the Arroyo Seco, near Pasadena, September 28, 1901. Specimen taken by J. Grinnell in Eaton

Cañon, near Pasadena, November 27, 1896, and female taken by W. B. Judson at Cerritos, Los Angeles County, March 27, 1897. Noted once or twice by J. G. Cooper in the Cuyamaca Mountains, San Diego County, during the spring of 1862 (Am. Nat. VIII, 1874, 16), and recorded by L. Belding as rare in winter in San Diego County (Land Bds. Pac. Dist., 1890, 42).

165. (356a) **Falco peregrinus anatum** Bonaparte. DUCK HAWK.

Common resident on the Santa Barbara Islands. Less plentiful on the mainland. Breeds mostly in March. O. W. Howard took a set of three slightly incubated eggs on Santa Cruz Island, April 5, 1906, and I took a set of four eggs, about one-fourth incubated, on Catalina Island, April 8, 1904. J. Dixon took three eggs, advanced in incubation, at San Onofre, San Diego County, March 28, 1906 (Condor VIII, 1906, 94). A. M. Ingersoll took four slightly incubated eggs near San Diego, March 12, 1897.

166. (357) **Falco columbarius columbarius** Linnaeus. PIGEON HAWK.

Common in the foothill and mesa regions in fall, winter and spring.

167. (357a) **Falco columbarius suckleyi** Ridgway. BLACK PIGEON HAWK.

One record. J. F. Illingworth took a male at Claremont, Los Angeles County, December 6, 1895. This specimen is now in the collection of J. Grinnell.

168. (357b) **Falco columbarius richardsoni** Ridgway. RICHARDSON PIGEON HAWK.

Two records. F. S. Daggett took a bird of the year in fresh fall plumage, in the San Fernando Valley, Los Angeles County, October 31, 1903 (Condor VII, 1905, 82), now no. 5856 collection F. S. Daggett. H. W. Marsden took an immature female at Witch Creek, San Diego County, February 9, 1904 (Bishop, Condor VII, 1905, 142), now no. 10157 collection L. B. Bishop.

169. (360a) **Falco sparverius phalaena** (Lesson). DESERT SPARROW HAWK.

Very common resident. Breeds mostly in April and May. J. Grinnell took five slightly incubated eggs near Pasadena, March 18, 1893, and E. Parker took five half incubated eggs near Claremont, June 27, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 23). On April 16, 1910, H. C. Burt took several sets of eggs of this species from deserted nests of the Yellow-billed Magpie in Alisio Cañon, Ventura County.

170. (364) **Pandion haliaëtus carolinensis** (Gmelin). OSPREY.

Common in spring, summer and fall on several islands of the Santa Barbara group. Occasional on the mainland coast. A few winter as far north as San Diego (Belding, Land Birds Pac. Dist., 1890, 46). J. G. Cooper found the fish hawk common along the coast of Ventura County in the early 70's (Auk IV, 1887, 91). Since that time they have been almost exterminated along the mainland coast. Many have been shot by gunners and most of those remaining have taken refuge on the islands. E. Davis saw a pair at a nest near Laguna Beach, Orange County, March 5, 1895. The Osprey breeds plentifully on San Clemente and

San Nicolas islands and occasionally on Catalina. It has been noted only occasionally on the more northern islands of the group and, so far as I know, has not been found breeding there. Eggs are generally deposited in March. I have a set of three eggs taken by C. B. Linton on San Clemente Island, March 13, 1907, and I saw a pair of birds re-lining a nest on Catalina Island, April 11, 1904. The nest, at this time, was about ready to receive eggs and they were probably deposited a very few days later.

171. (365) **Aluco pratincola** (Bonaparte). BARN OWL.

Common resident from the coast to the base of the mountains. Occasional on some of the Santa Barbara Islands. Breeds mainly in March and April. In southern California, nests found in hollow trees are exceptional, the most of these birds nesting in cavities in dirt banks. C. E. Groesbeck noted half-grown young near Pasadena as early as February 11, 1897, and H. J. Lelande took five fresh eggs in the same locality, June 5, the same year (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 23). I have taken the Barn Owl on Santa Cruz Island, and H. C. Burt took a specimen on Anacapa.

172. (366) **Asio wilsonianus** (Lesson). LONG-EARED OWL.

Fairly common resident of the oak regions of the foothills and the willow thickets of the lower country. Occasional up to 7000 feet in the mountains and on the Santa Barbara Islands. Much less plentiful than formerly. I took an adult female at an altitude of about 7000 feet in the San Bernardino Mountains, June 15, 1907 (Condor XII, 1910, 44). C. B. Linton saw three birds, one of which he collected, on San Clemente Island in December, 1908 (Condor XI, 1909, 194). O. W. Howard found six nearly half-grown young of this species in an old Raven's nest on Catalina Island, in April, 1909. Both parent birds were present. B. W. Evermann found this owl an abundant resident of live oak and willow groves near Santa Paula, Ventura County. He took eggs as early as February 13 (Auk III, 1886, 93). Lawrence and Sidney Peyton and H. C. Burt have found it breeding commonly along the Santa Clara River, Ventura County; E. Rowe found it breeding plentifully near Redlands, San Bernardino County, in 1894-95, and J. G. Cooper recorded it as breeding commonly near San Diego in the early 60's (Land Birds Cal., 1870, 426). J. M. Hatch took a set of eggs near Escondido, San Diego County, February 14, 1896 (Sharp, Condor IX, 1907, 87), and R. Arnold took four fresh eggs in the San Fernando Valley, Los Angeles County, May 1, 1892 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 23).

173. (367) **Asio flammeus** (Pontoppidan). SHORT-EARED OWL.

Common winter visitant to wet meadow lands and fresh water marshes, appearing early in October and remaining fairly common until early March. This bird has been reported as breeding in southern California and, while I have seen no records that I am willing to accept as authentic, I would not be surprised to find that it does occasionally breed in this locality. It is known to nest in central California and there have been so many reports of its nesting farther south, that I believe there may be truth in some of them. J. Grinnell

saw a specimen that was shot on Catalina Island in December, 1897 (Auk xv, 1898, 234).

174. (369) ***Strix occidentalis occidentalis*** (Xantus). SPOTTED OWL.

Resident in small numbers in the foothill and mountain regions up to at least 5000 feet. Owing to its retiring habits, very inconspicuous, but occasionally noted in many different sections of southern California. Specimens taken as follows: Adult female and immature female (collection G. Willett), by A. N. Stone near Fillmore, Ventura County, December 13, 1910. Adult female by L. H. Miller in Fish Cañon, northern Los Angeles County, April 10, 1911. Male and female by H. J. Lelande and O. W. Howard near Newhall, Los Angeles County, May 20, 1906. Female by E. F. Lane in Little Tujunga Canon, Los Angeles County, in June, 1888 (Thurber, Auk XIII, 1896, 265). Adult male by J. Grinnell near Pasadena, August 10, 1894 (Pub. 2, Pasadena Acad. Sci., 1898, 23). Two immature birds by H. Robertson in Millard's Cañon, near Pasadena, in June, 1902. Two males by J. Pringle in the Arroyo Seco, October 22, 1900, and female by W. Bebb on the Mt. Wilson trail, March 21, 1905 (Richardson, Condor VIII, 1906, 57). Female by F. S. Daggett in San Dimas Cañon, February 15, 1903. Fully fledged young by F. J. Illingworth in a cañon near Claremont, July 4, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 23). One specimen by R. B. Herron midway between San Diego and Riverside, fall of 1885 (Bendire, Life Hist. N. Am. Bds., 1892, 343), and pair by Mr. Herron near Banning, Riverside County, in September, 1895 (Thurber, Auk XIII, 1896, 265). Male, female and juvenile by F. Stephens at an elevation of 5000 feet on Smith Mountain, San Diego County, June 20, 1892 (Auk IX, 1892, 392).

Several sets of eggs recorded from southern California, some of them very questionable. The following records are undoubtedly authentic. Two considerably incubated eggs taken by L. Peyton from a cavity in a granite cliff in Fish Cañon, northeastern Los Angeles County, April 1, 1909. Three eggs, with both parent birds, taken by Mr. Peyton from the same nest, March 30, 1910 (Condor XII, 1910, 122). Two slightly incubated eggs taken by A. M. Ingersoll from a nest on a ledge of a cliff, near Oceanside, San Diego County, March 24, 1894. Mr. Ingersoll was able to approach very near to the incubating bird and is positive as to its identity.

175. (372) ***Cryptoglaux acadica acadica*** (Gmelin). SAW-WHET OWL.

One record. F. Stephens took an adult male at Round Valley, 9200 feet elevation on San Jacinto Mountain, August 11, 1898 (Condor IV, 1902, 40). Now no. 3103 collection F. Stephens.

176. (373c) ***Otus asio bendirei*** (Brewster). CALIFORNIA SCREECH OWL.

Fairly common resident of timbered regions from the lowlands up to at least 5000 feet in the mountains. Breeds mostly in April. C. E. Groesbeck found an incomplete set of two fresh eggs near Pasadena, March 14, 1896, and J. Grinnell found a set of three eggs, incubation advanced, in the same locality. June 5, 1895 (Pub. 2, Pasadena Acad. Sci., 1898, 24).

177. (374) *Otus flammeolus flammeolus* (Kaup). FLAMMULATED SCREECH OWL.

Although the last A. O. U. *Check-List* refers our California bird to the form *Otus flammeolus idahoensis* (Merriam), I am inclined to believe that this conclusion was reached without the examination of a sufficient amount of material to justify a final decision. In fact, it seems impossible, at the present time, to get together a large enough series of specimens to enable us to arrive at a definite conclusion as to the range and exact differences of these two subspecies. The natural assumption from a geographical standpoint would be that our bird is referable to *O. f. flammeolus*. It may even be possible that future study of the species will show that *idahoensis* is not entitled to subspecific rank.

Four specimens of the Flammulated Screech Owl are recorded from southern California, where they seem to be confined to the higher mountains, probably not occurring south of the San Bernardino Range. Two of these specimens were originally recorded as *O. f. flammeolus* and are as follows: Male taken by F. Ball near San Bernardino, January 18, 1885 (Stephens, *Condor* iv, 1902, 40), now in collection of Wm. Brewster. Male taken by E. D. Palmer at an elevation of 5000 feet in the San Bernardino Mountains, May 26, 1893 (*Auk* xi, 1894, 78). Mr. Palmer informs me that this specimen was destroyed by fire some years ago. Robert Ridgway, after examining Mr. Brewster's specimen, wrote him as follows: "I have compared your specimen with the few specimens in our collection. The material available is very meager—less than a dozen adult birds altogether—and not nearly sufficient to give any clear idea of the normal individual variation irrespective of locality. Your specimen resembles the type of *idahoensis* very much more closely than it does any other specimen in the lot; in fact, it scarcely differs at all except in the slightly coarser markings of the under parts. On geographical grounds, however, your specimen certainly should not be *idahoensis*—if there really is such a subspecies—as it is hardly probable (though of course possible) for this form to exist in southern California. Really, however, I must confess that I can not make anything out of the matter one way or another from the scant material available, and we will have to wait until a much larger number of specimens can be brought together, and especially a series from some one locality, before we shall be able to understand the species well."

The two following specimens were originally recorded as *O. f. idahoensis*. Adult female taken by M. F. Gilman with a set of two slightly incubated eggs, at an elevation of about 7500 feet, on the side of San Gorgonio Peak, June 3, 1894. The bird was sent to C. Hart Merriam, who pronounced it *O. f. idahoensis* (*Condor* iv, 1902, 85). These eggs are still in the collection of Mr. Gilman, but the bird was destroyed. Adult male taken by J. Grinnell at Bluff Lake, about 7500 feet altitude in the San Bernardino Mountains, July 15, 1905 (*Univ. Calif. Publ. Zool.* v, 1908, 59). This specimen (no. 6730 collection J. Grinnell) was pronounced by H. C. Oberholser to be nearest to, but not quite, *idahoensis*. Mr. Grinnell writes me further regarding this bird: "It is practically identical with others from Arizona, the latter being considered *flam-*

mcclus. It would seem, therefore, that *idahoensis* has little claim to inclusion in our California list."

178. (375d) **Bubo virginianus pacificus** Cassin. PACIFIC HORNED OWL.

Fairly common resident from the foothill and mesa region up to over 7000 feet in the mountains, but becoming scarcer every year. As the country settles up, this bird is retreating to more sparsely settled sections and, in many localities where it was formerly common, it is now rare or entirely absent. It breeds mostly during the latter part of February and the first part of March. J. B. Dixon took a set of two eggs near Escondido, San Diego County, February 2, 1902 (Condor IV, 1902, 46), and I took two eggs, advanced in incubation, near Whittier, Los Angeles County, May 2, 1896. O. W. Howard saw a Horned Owl on Santa Cruz Island, April 29, 1906.

179. (378) **Speotyto cunicularia hypogaea** (Bonaparte). BURROWING OWL.

Common resident from the coast to the base of the mountains. Also found on the larger islands of the Santa Barbara group. Breeds mostly in late April and the month of May. I took ten fresh eggs near Highlands, San Bernardino County, April 3, 1897, and Antonin Jay took nine eggs, advanced in incubation, near Nigger Slough, Los Angeles County, June 8, 1902.

180. (379) **Glaucidium gnoma gnoma** Wagler. PYGMY OWL.

Rather rare resident of the mountains and higher foothills. According to J. Grinnell, a number of specimens have been taken in winter in the mountains north of Pasadena (Pub. 2, Pasadena Acad. Sci., 1898, 24). F. S. Daggett has a female, shot at Fredalba Park, 5500 feet altitude in the San Bernardino Mountains, June 26, 1899. O. W. Howard found a nest of the Pygmy Owl near Carpinteria, Santa Barbara County, in the summer of 1895. It was in a hollow in a sycamore tree, six feet from the ground, and contained newly hatched young (Taylor, Nidologist II, 1895, 153). According to F. S. Daggett, a pair nested for at least three seasons prior to 1896, in a deserted woodpecker's hole in a sycamore stub near Switzer's Camp in the Arroyo Seco, Los Angeles County; and in the latter part of July, 1888, Antonin Jay found a nest containing four nearly full-grown young in the same locality. H. J. Lelande found a nest in the west fork of the San Gabriel Cañon, Los Angeles County, June 5, 1900. It contained four young about two weeks old (Condor IV, 1902, 21). H. S. Swarth and W. B. Judson took an adult female and three juveniles from a nest in a dead pine tree at Bear Valley, 6750 feet altitude in the San Bernardino mountains, June 28, 1894 (Condor XII, 1910, 109). C. S. Sharp records the fact that a pair of Pygmy Owls were found nesting near Escondido, San Diego County, by the late J. M. Hatch, in 1895 and 1896. The first year the nest contained heavily incubated eggs, which were not disturbed. The next year young birds were found (Condor IX, 1907, 87).

181. (385) **Geococcyx californianus** (Lesson). ROAD-RUNNER.

Common resident of the brush and cactus covered washes and mesas. Twenty years ago the Road-runner was abundant all through the Lower So-

noran zone of California. It was noted by J. G. Cooper on Catalina Island in the 60's (Proc. Cal. Acad. Sci. iv, 1869, 77). There seems to be something in the appearance of this bird that causes the hunter and farmer boy to shoot it on sight. This wanton persecution has greatly diminished the numbers of this species, one of the most interesting of our California birds. The nesting season is, ordinarily, from late March to early May. W. M. Pierce found a nest containing three fresh eggs near Claremont, Los Angeles County, March 10, 1901, and noted another nest in the same locality that contained three fresh eggs July 16, 1904.

182. (387a) **Coccyzus americanus occidentalis** Ridgway. CALIFORNIA CUCKOO.

Fairly common resident of the willow regions of the lowlands. Its secretive habits render it easily overlooked. It probably arrives in southern California in April and early May and leaves mostly in September, but I have not found a great deal of definite information as to the time of migrations. Antonin Jay noted a bird near Los Angeles, May 5, 1907, and saw another in the same locality, September 22, 1904 (Condor XIII, 1911, 69). The Cuckoo begins nesting in the willow groves the first part of June, and fresh eggs may be found until late in July. H. C. Burt found a nest containing two eggs, near Santa Paula, Ventura County, in June, 1904. I took a slightly incubated set of three eggs near Compton, Los Angeles County, July 13, 1907, and on July 24, 1910, I found a nest in the same locality that contained one fresh egg, one badly incubated egg, one addled egg and one young bird (Condor XIII, 1911, 69). Alphonse and Antonin Jay have taken many sets of Cuckoo's eggs in the willow groves of Los Angeles County. Their earliest nesting date is of three newly hatched young found May 10, 1901 (Condor XIII, 1911, 69), and their latest date is of a set of two badly incubated eggs found August 20, 1911.

J. J. Schneider found the Cuckoo breeding rather commonly near Anaheim, Orange County, in June and July, 1899. His latest set was four slightly incubated eggs taken July 19 (Condor II, 1900, 34). F. Stephens found a nest in the San Bernardino Valley in the latter part of May, 1882. The eggs were two in number, fresh, and were spilled from the nest and broken while Mr. Stephens was climbing the tree (Bendire, Life Hist. N. A. Bds., 1895, 25). The species was noted once in 1875 and once in 1876 by F. E. Blaisdell at Poway, San Diego County (Belding, Land Bds. Pac. Dist., 1890, 57), and J. M. Hatch took a male on August 20 and saw another bird on August 22, 1896, near Escondido (Auk XIII, 1896, 347).

183. (390) **Ceryle alcyon** (Linnaeus). BELTED KINGFISHER.

Occurs in considerable numbers during migrations, and is occasionally noted at all seasons of the year. I have seen it in summer in various parts of Los Angeles County, as well as on the Santa Barbara Islands, but have never found a nest in this locality. H. C. Burt informs me that in the summer of 1904, a pair of these birds nested in a river bank near Santa Paula, Ventura County. C. B. Linton saw a pair enter a hole in a bank near Whittier, Los Angeles County, in the summer of 1895. L. Belding records the Belted

Kingfisher as a resident near San Diego, though not numerous (Land Bds. Pac. Dist., 1890, 58).

184. (393d) **Dryobates villosus hyloscopus** Cabanis & Heine. CABANIS WOODPECKER.

Common resident of the mountains up to at least 10,000 feet. Less common, locally, in the lower country. Quite numerous in the oak regions during severe winters. Breeds mostly in April and early May. S. Peyton took four slightly incubated eggs near Sespé, Ventura County, April 12, 1907. Antonin Jay took four fresh eggs near El Monte, Los Angeles County, March 25, 1900, and G. F. Morcom took three slightly incubated eggs near Compton, May 2, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 25). In June, 1907, I found several nests of this species in the San Bernardino Mountains from 6000 to 8000 feet altitude. They contained young of various ages.

185. (394e) **Dryobates pubescens turati** (Malherbe). WILLOW WOODPECKER.

Common resident in the willow regions of the lower country. Breeds in April and May. I took a set of seven eggs, about two-thirds incubated, near Los Angeles, April 23, 1906, and J. E. Law took five fresh eggs near Pomona, May 18, 1902.

186. (397) **Dryobates nuttalli** (Gambel). NUTTALL WOODPECKER.

This woodpecker, originally described from specimens taken near Los Angeles (Proc. Acad. Nat. Sci. Phila. I, 1843, 259), is a common resident of the mesas and foothills, and up to at least 5000 feet in the mountain cañons. It breeds mostly in April and early May. I took five fresh eggs near Monrovia, Los Angeles County, May 6, 1905. B. T. Gault took six eggs, advanced in incubation, near Redlands, San Bernardino County, April 24, 1883 (Bull. Ridg. Orn. Club 2, 1887, 79). J. G. Cooper took a set of five eggs near San Diego, April 20, 1862 (Land Birds Cal., 1870, 379).

187. (399) **Xenopicus albolarvatus** (Cassin). WHITE-HEADED WOODPECKER.

Common resident of the Transition zone in the mountains, from 5000 to 8000 feet altitude. South to San Diego County. Occasional to lower levels in winter. Breeds mostly in May. J. Grinnell found this woodpecker moderately common on Mt. Piños, Ventura County, in the summer of 1904 (Auk XXII, 1905, 383). During June, 1907, I found it very plentiful at Bear Valley in the San Bernardino Mountains, and examined several nests, all of which contained young birds. F. Stephens found it breeding in the Cuyamaca Mountains, San Diego County, from 5800 to 7000 feet altitude. On June 19, 1893, he noted a nest containing three young birds (Bendire, Life Hist. N. A. Bds., 1895, 71). L. B. Bishop has a male taken by H. W. Marsden at Julian, San Diego County, November 8, 1906, and F. E. Blaisdell noted it in the Volcan Mountains, August 21, 1884 (Belding, Land Bds. Pac. Dist., 1890, 63).

188. (402a) **Sphyrapicus varius nuchalis** Baird. RED-NAPED SAPSUCKER. Occasional in winter. H. A. Gaylord took a specimen near Pasadena De-

ember 26, 1895, and J. Grinnell took a male in the same vicinity, February 13, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 25). J. Pringle took a female in the Arroyo Seco, October 22, 1900. H. S. Swarth took a female near Los Angeles, October 17, 1899 (Condor II, 1900, 37), and a male in the same locality, February 18, 1901 (Condor III, 1901, 66). F. O. Johnson took a male at Riverside, December 26, 1889 (Swarth, Condor XII, 1910, 107). A female of the year was brought to F. Stephens by a neighbor, who shot it in his orchard near Witch Creek, San Diego County, November 2, 1891 (Bendire, Life Hist. N. A. Bds., 1895, 88). L. Belding took a male about thirty-five miles east of San Diego, January 23, 1884 (Land Bds. Pac. Dist., 1890, 65).

189. (403) **Sphyrapicus ruber ruber** (Gmelin). RED-BREASTED SAPSUCKER.

Breeds in the Transition zone in the mountains, from 5000 to 8500 feet altitude. More or less common in winter in wooded districts of the lowlands and along the base of the mountains. In June, 1907, I found this bird fairly common at Bear Valley in the San Bernardino Mountains. Specimens taken proved to be breeding birds, but I found no nests. C. B. Linton took two immature birds on San Clemente Island, October 11, 1907. They were erroneously recorded as being of the last species (Condor X, 1908, 84).

190. (404) **Sphyrapicus thyroideus** (Cassin). WILLIAMSON SAPSUCKER.

Fairly common resident of the higher mountains, south to the San Bernardino Range. Occasional to the lower country in winter. J. Grinnell found this bird a fairly common resident of the Canadian and upper edge of the Transition zone in the San Bernardino Mountains, where several nests containing young were found in June, 1905, and June, 1906 (Univ. Calif. Publ. Zool. v, 1908, 64). A nest found by J. Dixon at Dry Lake, June 22, 1905, contained three small young and two infertile eggs, which were preserved (Condor VII, 1905, 140). G. F. Morcom has noted this sapsucker at Pasadena in midwinter, and H. S. Swarth took a female at Los Angeles, November 14, 1900 (Condor III, 1901, 66).

191. (407a) **Melanerpes formicivorus bairdi** Ridgway. CALIFORNIA WOODPECKER.

Common resident of the oak regions. Less plentiful in the mountains, up to about 6500 feet. Breeds mostly in April and May. L. Peyton informs me that this bird is a common breeder in the Sespe Valley, Ventura County. I have found it locally common in the oak regions of Santa Barbara, Los Angeles and Orange counties, and it was noted by L. Belding as a common resident throughout the interior of San Diego County (Land Bds. Pac. Dist., 1890, 69). R. Arnold took five fresh eggs in the San Fernando Valley, Los Angeles County, April 5, 1892, and H. J. Lelande took four fresh eggs near Pasadena, June 3, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 26).

192. (408) **Asyndesmus lewisi** Riley. LEWIS WOODPECKER.

Breeds in San Luis Obispo County and probably also in Santa Barbara County, though I have seen no nesting records for the latter. Noted by Lawrence and Sidney Peyton near Sespe, Ventura County, in summer. Occurs

commonly in winter throughout the oak regions of southern California and occasionally on the mountains among the firs. Noted in the vicinity of Pasadena by F. S. Daggett as early as September 30 (1896), and by J. Grinnell as late as May 4 (1895) (Pub. 2, Pasadena Acad. Sci., 1898, 26). According to H. E. Wilder, a common, though irregular visitant to the San Bernardino Mountains. Observed on one occasion through the entire summer in the San Bernardino Valley. Found common at Witch Creek, San Diego County, by H. W. Marsden, during the fall and winter of 1906 (Condor ix, 1907, 27). Seen by F. E. Blaisdell at Temecula, San Diego County, November 14, 1883, and found abundant in the Volcan Mountains, during September and October, 1884 (Belding, Land Bds. Pac. Dist., 1890, 70). Recorded by J. G. Cooper as not uncommon in the Cuyamaca Mountains in the spring of 1862 (Am. Nat. viii, 1874, 16).

193. (412a) **Colaptes auratus luteus** Bangs. NORTHERN FLICKER.

Occasional straggler in winter. Recorded as follows: One specimen taken by J. G. Cooper at Saticoy, Ventura County, November 21, 1872 (Proc. Cal. Acad. Sci. vi, 1875, 200). Female by H. S. Swarth near Los Angeles, February 20, 1901 (Condor iii, 1901, 66). Male by E. C. Thurber at Alhambra, Los Angeles County, February 7, 1890 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 26), and female by A. Williamson in the same locality, November 4, 1904 (Richardson, Condor vii, 1905, 53). Female by F. Ball near San Bernardino in January, 1885 (Auk ii, 1885, 383).

194. (413) **Colaptes cafer collaris** Vigors. RED-SHAFTED FLICKER.

Common resident of wooded localities from the coast to about 9000 feet in the mountains. Also occurs on most of the islands of the Santa Barbara group. More widely distributed in winter. In some sections where trees are scarce, it nests in holes in banks. Eggs are generally deposited during late April and the month of May. C. E. Groesbeck found a nest containing five fresh eggs in the San Fernando Valley, Los Angeles County, April 16, 1896, and H. A. Gaylord took four slightly incubated eggs near Pasadena, June 15, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 26). F. S. Daggett has two hybrids between this species and the last, and several other hybrid flickers have been taken in southern California.

195. (418b) **Phalaenoptilus nuttalli californicus** Ridgway. DUSKY POOR-WILL.

Fairly common in spring, summer and fall, from the foothills up to over 8000 feet in the mountains. Also occurs on some of the Santa Barbara Islands. Much less plentiful in winter. Breeds mostly in April and May, but eggs may be found from March until late June. B. W. Evermann recorded this species as a summer resident of Ventura County, though not common (Auk iii, 1886, 179). It was noted by J. Grinnell up to over 8000 feet on Mt. Piños, Ventura County (Auk xxii, 1905, 383). H. J. Leland took a male on Anacapa Island, April 6, 1906; C. H. Richardson, Jr., found it fairly plentiful on Catalina Island in April (Condor x, 1908, 66), and J. Grinnell took a female on San Clemente Island, March 31, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 14).

The type specimen of the egg of this species (no. 25937 coll. U. S. Nat. Museum) is one of a set of two eggs taken near Monrovia, Los Angeles County, May 4, 1893, and presented to the National Museum by R. H. Lawrence (Bendire, Life Hist. N. Am. Bds., 1895, 159). F. M. Palmer took two slightly incubated eggs near Eagle Rock, Los Angeles County, June 24, 1900 (Condor II, 1900, 130), and Antonin Jay took two eggs, incubation commenced, near Monrovia, June 29, 1902. L. H. Miller has taken eggs in the Temescal Mountains, near Riverside, and A. M. Ingersoll took a set of two eggs advanced in incubation, near San Diego, March 22, 1895 (Barlow, Nidiologist II, 1895, 126). The poor-wills occurring in the southern part of San Diego County and the northern part of Lower California are intermediate toward the form *Phalaenoptilus nuttalli nitidus* Brewster (Bishop, Condor VII, 1905, 142; Anthony, Auk XII, 1895, 139).

196. (420d) **Chordeiles virginianus hesperis** Grinnell. PACIFIC NIGHT-HAWK.

Summer resident of the Boreal and upper part of the Transition zone in the San Bernardino Mountains. Occasional visitant to the valleys during migrations. June 18, 1905, J. Grinnell took two fresh eggs of this bird, on the north side of San Gorgonio Peak, San Bernardino Mountains, at an altitude of about 9000 feet (Univ. Calif. Publ. Zool. v, 1908, 67). Mr. Grinnell also took a male bird at Pasadena, October 27, 1896 (Pub. 2, Pasadena Acad. Sci., 1898, 26).

197. (421) **Chordeiles acutipennis texensis** Lawrence. TEXAS NIGHT-HAWK.

Common summer resident of the mesas and dry washes, in late summer wandering up into the Transition zone in the mountains. Leaves for the south in August and early September, and returns mostly during the month of March. Eggs are generally deposited during May and early June. J. Grinnell took two fresh eggs near Pasadena, April 21, 1897, and H. S. Swarth took two slightly incubated eggs in the San Fernando Valley, Los Angeles County, July 11, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 27). I took an adult female on Santa Barbara Island, June 20, 1911. Dissection showed that she was breeding.

198. (422) **Cypseloides niger borealis** (Kennerly). BLACK SWIFT.

Occurs in southern California irregularly in the summer. Probably mostly migratory, but may occasionally breed. J. G. Cooper noted one bird at Santa Barbara in May, 1863 (Bryant, Zoe II, 1891, 128). H. S. Swarth saw a flock of at least two hundred birds flying over Sierra Madre, Los Angeles County, on the evening of May 27, 1898, and noted several birds in the San Fernando Valley, Los Angeles County, May 30, following. He also saw a bird near Los Angeles, June 29, 1900. Flocks were observed by J. Grinnell at Pasadena on two occasions toward the last of August. They were flying in a southeasterly direction (Pub. 2, Pasadena Acad. Sci., 1898, 27). Mr. Grinnell also saw two birds at an altitude of about 7000 feet in the San Bernardino Mountains,

July 16, 1906, and in the first part of July, 1907, he noted three birds in the same vicinity (Univ. Calif. Publ. Zool. v, 1908, 69).

F. Stephens informed Major Bendire that this species had been taken by R. B. Herron in the San Bernardino Mountains, where they appeared to be breeding. They were flying in behind a water fall that poured over a perpendicular cliff and one was found drowned in the basin at the foot of the pool (Life Hist. N. Am. Bds., 1895, 176). L. H. Miller saw three birds at about 5500 feet altitude in the San Bernardino Mountains, the first week in August, 1907. One of the birds flew into a niche in a cliff and remained there several minutes. Antonin Jay and myself saw a flock of eight or ten birds of this species at San Jacinto Lake, Riverside County, on the evening of May 28, 1911 (Condor XIII, 1911, 160). L. Belding saw a flock of twenty or more Black Swifts flying over the mesa near San Diego on the evening of May 21, 1881. They were noted again the following evening and a specimen secured (Land Bds. Pac. Dist., 1890, 79).

199. (424) **Chaetura vauxi** (J. K. Townsend). VAUX SWIFT.

Common spring and fall migrant in scattered flocks, sometimes tarrying in large companies around lakes or swamp lands. Noted by J. G. Cooper at Ventura, April 22, 1873 (Auk iv, 1887, 92), and by J. Mailliard at Santa Cruz Island in late April, 1898 (Bull. Cooper Orn. Club 1, 1899, 44). I have frequently observed it at Los Angeles in migrations, some times in company with the next species. In the latter part of April, 1904, I saw a flock of forty or fifty birds mingling with eave swallows that were nest building on a barn near Compton, Los Angeles County. H. S. Swarth has observed the species near Los Angeles in the spring from April 19 (1898) to May 18 (1899), and in the fall from August 4 to October 14 (1899). H. Robertson took two specimens at Los Angeles, April 25, 1900. L. Belding took two specimens from a small flock near San Diego, April 28, 1884. He also noted them in the same locality, April 16, 26 and 29, 1885 (Land Bds. Pac. Dist., 1890, 79).

200. (425) **Aëronautes melanoleucus** (Baird). WHITE-THROATED SWIFT.

Common resident of the mountainous and rugged hill regions, occasional on some of the Santa Barbara Islands. Common in winter in straggling flocks in the lower country. Breeds plentifully in May and June in almost inaccessible cliffs. So difficult are the nests to reach that few eggs have been taken. L. Peyton took four slightly incubated eggs near Sespe, Ventura County, May 29, 1910. H. G. Rising took two fresh eggs in the Santa Monica Mountains, June 16, 1897, and E. Simmons took two eggs, one-third incubated, near Pasadena, May 30, the same year (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 27). W. C. Hanna took four slightly incubated eggs near Colton, May 28, 1908 (Condor XI, 1909, 77). Florence Merriam Bailey saw four pairs of birds feeding young in crevices in the old mission at San Juan Capistrano, San Diego County, about the middle of July, 1907 (Condor IX, 1907, 169).

201. (429) **Archilochus alexandri** (Bourcier & Mulsant). BLACK-CHINNED HUMMINGBIRD.

J. Grinnell says of this species: "It is a common summer resident from the

lowlands to the summits of the mountains but most abundant in the foothill regions, where it breeds in the cañons in some years by the thousands. Nests are generally situated near a stream and are found mostly after the middle of May. The abundance of the hummingbirds is very variable, depending on the growth of flowering plants. Usually after a wet winter they are far more numerous than after a dry one. This species arrives in the vicinity of Pasadena from the middle of April to the first week in May and the majority disappear by the last of July. Extreme records at Pasadena are April 3 (1895), and September 3 (1895). By the first of July when the vegetation of the foothills becomes dry and flowers cease to bloom, the hummingbirds are found in countless thousands at higher elevations (6000 to 8500 feet) where summer is just dawning" (Pub. 2, Pasadena Acad. Sci., 1898, 27). Extreme nesting dates are as follows: Two sets, of two fresh eggs each, taken by G. Willett at Arcadia, Los Angeles County, April 26, 1906, and set of two fresh eggs taken by Antonin Jay near Whittier, Los Angeles County, July 19, 1903.

202. (430) **Calypte costae** (Bourcier). COSTA HUMMINGBIRD.

Common summer resident of the mesa and foothill regions and brush covered washes, ranging from the lowlands to the higher mountains during migrations. Less common in northern Ventura and Santa Barbara counties. Eggs are generally deposited in May and the first part of June. J. Grinnell's earliest and latest records for the species in the vicinity of Pasadena are, respectively, March 21 (1896) and September 26 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 28). N. S. Goss took a male at San Diego, March 17, 1884 (Belding, Land Bds. Pac. Dist., 1890, 83), and J. Grinnell saw an adult male on San Clemente Island, March 30, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 15). I found this hummer rather common in the cactus patches on Santa Barbara Island during June, 1911. On June 19, I noticed a female feeding young just able to fly. H. Robertson took a set of eggs near Pasadena, April 19, 1899, and J. Grinnell took two slightly incubated eggs in the same locality, June 28, 1894 (Pub. 2, Pasadena Acad. Sci., 1898, 28).

203. (431) **Calypte anna** (Lesson). ANNA HUMMINGBIRD.

Common throughout the year from the lowlands to the foothills, and, in the latter part of June and the month of July, may be found up to 9000 feet in the mountains. Fairly plentiful in winter on the Santa Barbara Islands. "Like all hummingbirds it follows the flowers and its local presence or absence is governed by their abundance or scarcity. In August and September hundreds of Anna Hummers are to be found in the stubble fields and sunflower patches, attracted by the flowers of the 'tar-weed'. During the winter months they are found in profusion around the blossoming eucalyptus trees. In January and February, when the weather is mild, they appear high on the mountain sides among the flowering manzanitas and in March and April in the blossoming orange groves in the valley and among the currant bushes on the hill sides" (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 28). The Anna Hummer is our earliest breeding bird. It nests commonly through February and March, and eggs may be found from December until late in July. A. I. McCormick took two considerably in-

cubated eggs near Los Angeles, December 21, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 28), and H. Robertson took two eggs near Pasadena, August 17, 1900.

204. (433) **Selasphorus rufus** (Gmelin). RUFOUS HUMMINGBIRD.

Common in late summer, fall and spring; apparently absent in midwinter. Particularly abundant in the blossoming orange groves during the spring migration in April. In July and August it is plentiful in the mountains up to at least 9000 feet altitude. H. S. Swarth saw a male at Los Angeles, February 20, 1901, probably an early migrant.

205. (434) **Selasphorus alleni** Henshaw. ALLEN HUMMINGBIRD.

Breeds in the coast belt as far south as Ventura County, and is a permanent resident on the Santa Barbara Islands. Migrant over the rest of southern California west of the mountains. Occurs in July and August up to 9000 feet in the mountains. Frequently found in company with the last species during migration seasons. I have noted it on Santa Cruz Island in midwinter, and Bradford Torrey saw a bird in a park in San Diego, January 26, 1908 (Condor XI 1909, 173). According to J. Grinnell, this hummer appears on Mt. Piños, Ventura County, about July first and becomes common a few days after that date. The males appear first and are followed by the females and young (Auk XXII, 1905, 384). F. Stephens has taken birds of this species in San Diego County in June and July but he considers them early migrants and not breeding birds as is implied by Major Bendire in his "Life Histories".

J. H. Bowles finds the Allen Hummingbird to breed commonly at Santa Barbara, and has taken eggs in that locality as early as February 13 (1912) (Condor XIV, 1912, 77). H. C. Burt took two slightly incubated eggs with the female bird, near Santa Paula, Ventura County, April 5, 1911. He also found newly hatched young in the same locality, April 12, following, and, on May 19, found eggs far advanced in incubation. C. B. Linton informs me that this bird begins to nest on the Santa Barbara Islands the latter part of March, and fresh eggs may be found through April and May. Mr. Linton took two fresh eggs on San Clemente Island, March 31, 1907, and J. Grinnell took a partially incubated set on the same island, March 28, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 15). R. M. Perez took two sets of fresh eggs on Catalina Island, April 15 and 16, 1911.

206. (436) **Stellula calliope** (Gould). CALLIOPE HUMMINGBIRD.

Common summer resident of the upper Transition and Canadian zones in the mountains, south to the San Jacinto Range. Occasional, during migrations, on the lowlands and mesas along the base of the mountains. H. S. Swarth saw a male near Los Angeles, April 23, 1898, and G. F. Morcom saw a male in a garden in Los Angeles in spring (Condor II, 1900, 37). L. H. Miller took an adult male at Riverside, in late March, 1892, and N. S. Goss took a pair in the Volcan Mountains, San Diego County, April 15, 1884 (Belding, Land Bds. Pac. Dist., 1890, 89).

J. Grinnell found this hummingbird fairly common above 6500 feet on Mt. Piños, Ventura County, in the summer of 1904 (Auk XXII, 1905, 384). Mr. Grinnell also took several sets of eggs in the San Bernardino Mountains, from

June 11 to June 30, 1906 (Univ. Calif. Publ. Zool. v, 1908, 72). I took two fresh eggs at Bear Valley, San Bernardino Mountains, June 23, 1907. F. Stephens found a nest containing newly hatched young in the Santa Ana Cañon, San Bernardino Mountains, in May, 1885 (Bendire, Life Hist. N. Am. Bds., 1895, 219). The altitude in this instance was only about 3000 feet, an exceptionally low elevation for the breeding of this bird. Mr. Stephens has a male of this species that was taken by A. W. Anthony in the San Jacinto Mountains, July 3, 1895. This is, so far as I know, our most southern summer record.

207. (444) **Tyrannus tyrannus** (Linnaeus). KINGBIRD.

One record. Immature male taken by W. B. Judson at Santa Monica, Los Angeles County, August 31, 1895 (Gaylord, Avifauna I, 1895, 29). Now no. 10253 collection University of California Museum of Vertebrate Zoology.

208. (447) **Tyrannus verticalis** Say. ARKANSAS KINGBIRD.

Common summer resident of the lowlands and mesas, occasional up to 7000 feet in the mountains. Arrives in March and leaves in September. Breeds mostly in May and early June. I took an adult male at Bear Valley, 6750 feet in the San Bernardino Mountains, June 24, 1907 (Condor XII, 1910, 44). Extreme nesting dates are: Five eggs, fresh, taken by Antonin Jay at Cerritos, Los Angeles County, May 2, 1897, and four eggs, half incubated, taken by W. M. Pierce in San Antonio Cañon, July 8, 1901.

209. (448) **Tyrannus vociferans** Swainson. CASSIN KINGBIRD.

Fairly common resident, locally, in the Lower Sonoran zone. Winters regularly north to Santa Barbara. Breeds mostly in April and early May. H. C. Burt informs me that the Cassin Kingbird is a fairly common breeder in the vicinity of Santa Paula, Ventura County. He took a set of five eggs, May 10, 1910. In July, 1893, J. Grinnell found several nests containing young birds in the Simi Valley, Ventura County (Pub. 2, Pasadena Acad. Sci., 1898, 29). In the summer of 1902, G. F. Morcom noted a pair of this species and a pair of Arkansas Kingbirds nesting in the same eucalyptus tree in a yard in Los Angeles. I took four slightly incubated eggs, with the female bird, near Whittier, Los Angeles County, May 4, 1894. The Cassin Kingbird is recorded by C. S. Sharp as an uncommon breeding bird in the vicinity of Escondido, San Diego County (Condor IX, 1907, 88). According to L. Belding, it is a common summer resident around San Diego (Land Bds. Pac. Dist., 1890, 92). J. G. Cooper noted it breeding in that vicinity as early as March 20 (Land Bds. Cal., 1870, 315).

210. (454) **Myiarchus cinerascens cinerascens** (Lawrence). ASH-THROATED FLYCATCHER.

Common summer resident from the oak regions of the mesas up to about 6000 feet in the mountain cañons; less plentiful near the coast. Arrives in April and leaves mostly during the first part of September. Breeds most plentifully in late May and early June. H. C. Burt has taken several sets of eggs near Santa Paula, Ventura County, in early June. W. B. Judson took five fresh eggs in the San Gabriel Cañon, Los Angeles County, May 16, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 29), and Antonin Jay took four fresh eggs near Monrovia,

June 29, 1902. I found this fly-catcher nesting commonly near Highlands, San Bernardino County, and up to about 6000 feet in the mountain cañons. It was noted as common in summer at San Diego, by L. Belding, and at Poway, San Diego County, by F. E. Blaisdell (Land Bds. Pac. Dist., 1890, 93).

211. (456) **Sayornis phoebe** (Latham). PHOEBE.

One record. H. S. Swarth took a male near San Fernando, Los Angeles County, February 14, 1901 (Condor III, 1901, 66). Original number 1849, collection H. S. Swarth.

212. (457) **Sayornis sayus** (Bonaparte). SAY PHOEBE.

Fairly common breeding bird in the foothill regions of Santa Barbara and Ventura counties; less common throughout the rest of southern California. Much more plentiful in winter, at which season it is abundant from the ocean to the base of the mountains. In the vicinity of Los Angeles the majority of this species arrive in September and leave in March. Breeds mostly in April. L. Peyton took three slightly incubated eggs at Sespe, Ventura County, May 24, 1909, and J. S. Appleton finds it a common breeder in the Simi Valley, Ventura County. On April 3, 1906, I took a set of five fresh eggs, and found another nest containing four half grown young, in a ravine near Whittier, Los Angeles County. According to F. Stephens, the Say Phoebe is a rare summer resident of the San Bernardino Valley (Belding, Land Bds. Pac. Dist., 1890, 94). J. E. Law took two half incubated eggs near Elsinore, Riverside County, April 28, 1901 (Condor III, 1901, 186), and O. W. Howard and H. J. Lelande found it nesting commonly in the San Jacinto Valley in May, 1910. A nest containing fresh eggs was found by B. P. Carpenter at Escondido, San Diego County, April 22, 1906 (Sharp, Condor IX, 1907, 88), and L. Belding noted one or two pairs nesting near San Diego in April, 1885 (Land Bds. Pac. Dist., 1890, 94).

213. (458) **Sayornis nigricans** (Swainson). BLACK PHOEBE.

Common resident of the lowlands and occasional along streams up to 7000 feet in the mountains. Usually found near water and especially plentiful around barns and stock yards. Noted by C. B. Linton on several of the Santa Barbara Islands. Breeds mostly in May. H. J. Lelande took four fresh eggs near San Gabriel, Los Angeles County, March 1, 1897, and Antonin Jay found three fresh eggs in the San Fernando Valley, Los Angeles County, June 5, 1898.

214. (459) **Nuttallornis borealis** (Swainson). OLIVE-SIDED FLYCATCHER.

Common summer resident of the mountains from 3000 to 9000 feet altitude. Frequently seen on the mesas and lowlands during migrations. Arrives in April and May and leaves mostly in September. H. S. Swarth has noted it near Los Angeles in the spring as late as June 4 (1898), and I took a male at Colton, San Bernardino County, June 3, 1906. It was noted by J. R. Pemberton as breeding commonly in the Santa Ynez Mountains, Ventura County, in the summer of 1909 (Condor XII, 1910, 19). I found it breeding plentifully at Bear Valley, 6750 feet in the San Bernardino Mountains, in June, 1907, and J. Grinnell records three slightly incubated eggs taken at Dry Lake, 9000 feet in the San Bernardino Mountains, June 23, 1906 (Univ. Calif. Publ. Zool. v, 1908, 76). F. Stephens

took a set of three eggs in the Cuyamaca Mountains, San Diego County, June 5, 1889 (Bendire, Life Hist. N. Am. Bds., 1895, 283).

215. (462) **Myiochanes richardsoni richardsoni** (Swainson). WESTERN WOOD PEWEE.

Common summer resident of the cañons and the oak and coniferous forests, up to 9000 feet in the mountains. Occasional on the Santa Barbara Islands. More or less common, during migrations, along streams and in wooded localities in the lowlands. Eggs are generally deposited during the latter part of May and the first part of June. J. Grinnell observed the species in the vicinity of Pasadena from April 18 (1895) to September 30 (1894) (Pub. 2, Pasadena Acad. Sci., 1898, 30). Mr. Grinnell took an adult female on San Nicolas Island, May 20, 1897, and an adult male May 23, following (Pub. 1, Pasadena Acad. Sci., 1897, 10). He also saw one bird on San Clemente Island, June 3, the same year (Pub. 1, Pasadena Acad. Sci., 1897, 15). H. J. Lelande took three fresh eggs near Pasadena, May 1, 1899, and H. A. Gaylord took three slightly incubated eggs in the same locality, July 11, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 30).

216. (464) **Empidonax difficilis difficilis** Baird. WESTERN FLYCATCHER.

Common summer resident of the cañons in the foothill and mesa regions; also on the larger Santa Barbara Islands. Found all over the lowlands during migrations. L. Belding saw one bird at San Diego in December (Land Bds. Pac. Dist., 1890, 99), so it may occasionally winter within our southern limits. Breeds mostly during late May and early June. J. Grinnell has noted the species in the vicinity of Pasadena from March 30 (1896) to October 10 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 30). H. S. Swarth took a male near Los Angeles, March 21, 1899, and J. G. Cooper saw the species at Saticoy, Ventura County, March 18, 1873 (Auk iv, 1887, 92). J. Grinnell took four considerably incubated eggs near Pasadena, May 11, 1895, and took four slightly incubated eggs in the same locality, June 29, following (Pub. 2, Pasadena Acad. Sci., 1898, 30).

217. (466) **Empidonax trailli trailli** (Audubon). TRAILL FLYCATCHER.

Common summer resident from the willow thickets of the lowlands to more than 5000 feet in the mountain cañons. Occurs in migrations as high as 8000 feet. Breeds most plentifully in June. Noted by J. Grinnell at Pasadena from May 4 (1895) to September 26 (1896). A. I. McCormick took three slightly incubated eggs near Los Angeles, May 25, 1895, and H. A. Gaylord took three slightly incubated eggs near Pasadena, July 11, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 30).

218. (468) **Empidonax hammondi** (Xantus). HAMMOND FLYCATCHER.

Common migrant, mostly to the cañons and mesas along the base of the mountains. Has been recorded as nesting in southern California but all such records are probably referable to the next species. B. W. Evermann took a specimen at Santa Paula, Ventura County, April 10 (Auk III, 1886, 180). H. A. Gaylord noted it in the spring near Pasadena from April 9 (1896) to May 9 (1896), and J. Grinnell noted it in the fall in the same vicinity from the first week

in September until October 30 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 30). H. Robertson took specimens near Pasadena, April 7, 1899. It was noted in April in various parts of San Diego County by L. Belding, F. Stephens and others (Land Bds. Pac. Dist., 1890, 102).

219. (469) ***Empidonax wrighti*** Baird. WRIGHT FLYCATCHER.

Robert Ridgway of the United States National Museum writes me that, after a careful study of a large series of specimens by himself and H. C. Oberholser, they have arrived at the conclusion that the southern California birds frequently recorded during the past few years as *Empidonax griseus* Brewster, are all referable to *Empidonax wrighti* and that *E. griseus* does not occur in California at all. Therefore I have included under this species many notes that have heretofore been referred to *E. griseus*.

Wright Flycatcher is a common breeding bird in the mountains from 5500 to 9000 feet altitude, its breeding range extending south at least to the San Jacinto Range. It is fairly common in the foothills along the base of the mountains, during migrations, and a few remain through the winter. J. G. Cooper took specimens in winter at Saticoy, Ventura County (Auk iv, 1887, 92); H. S. Swarth took a specimen near Los Angeles, November 5, 1897, and H. A. Gaylord took one near El Monte, Los Angeles County, November 7, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 31). According to F. Stephens, it is a rare migrant through the San Bernardino Valley (Belding, Land Bds. Pac. Dist., 1890, 103). H. W. Marsden took a female April 20 and a male April 22, 1903, at Redlands, San Bernardino County (Bishop, Condor vii, 1905, 142). It was noted on several occasions by F. E. Blaisdell at Poway, San Diego County, and L. Belding saw it in spring migration at San Diego, April 20, 1884 (Land Bds. Pac. Dist., 1890, 103).

J. Grinnell found it in summer on the slopes of Mt. Waterman, Los Angeles County (7500 to 8500 feet) (Pub. 2, Pasadena Acad. Sci., 1898, 31). Mr. Grinnell also found it breeding in the San Bernardino Mountains in 1905 and 1906. He noted newly hatched young as early as June 15 (1905), and took four partially incubated eggs July 14, 1906 (Univ. Calif. Publ. Zool. v, 1908, 78). In June, 1907, I found it breeding plentifully at Bear Valley and Bluff Lake in the San Bernardino Mountains, from 7000 to 8000 feet altitude. I took a set of four half incubated eggs June 20, and a set of three, slightly incubated, on June 22. This is undoubtedly the species found nesting by A. W. Anthony in July, 1895, on San Jacinto Mountain up to 9500 feet, and recorded by him as *Empidonax hammondi* (Auk xii, 1895, 390).

220. (471) ***Pyrocephalus rubinus mexicanus*** Sclater. VERMILION FLYCATCHER.

Occasional straggler from the desert. Recorded as follows: Male seen by Bradford Torrey at Santa Barbara, March 15, 1907 (Condor ix, 1907, 109). Two males taken by J. G. Cooper near Ventura, October 21 and November 7, 1872 (Auk iv, 1887, 92). Adult female taken by G. F. Morcom at Los Angeles, October 17, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 31). Adult male and adult female taken by H. A. Gaylord near El Monte, Los Angeles County,

December 8, 1895, and February 8, 1896 (Auk XIII, 1896, 258). Immature male taken by Mr. Gaylord in the same locality, October 17, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 31). Male taken by H. Wright, also near El Monte, February 8, 1908 (Condor x, 1908, 91). Male taken by F. O. Johnson at Long Beach, December 26, 1894 (Swarth, Condor XII, 1910, 107). Specimen seen by F. E. Blaisdell, that was killed near Santa Ana, Orange County, December 9, 1884 (Belding, Land Bds. Pac. Dist., 1890, 105). Male taken by T. L. Hurd at Riverside, May 24, 1889 (Orn. & Ool. XIV, 1889, 94). Pair seen at Banning, Riverside County, by N. H. Hargrave in May, 1906. Adult male taken by N. K. Carpenter at Escondido, San Diego County, April 6, 1902 (Condor IV, 1902, 94). One bird seen by J. G. Cooper near San Diego (Auk IV, 1887, 92). There are several other unrecorded instances of the occurrence of this bird in southern California west of the mountains, and we may safely conclude that it is more common in this locality than has generally been supposed.

221. (474e) *Otocoris alpestris actia* Oberholser. CALIFORNIA HORNED LARK.

Abundant resident from the coast to the base of the mountains. Occurs in summer up to about 7000 feet and, after the nesting season, may be found at even higher altitudes. Nesting begins early and continues well into the summer, at least two broods being raised in a season. I found the species fairly common at Bear Valley, 6750 feet in the San Bernardino Mountains, during June, 1907. The actions of the birds showed that they were breeding. About twenty birds were seen by J. Grinnell at the very summit of San Gorgonio Peak, 11,485 feet altitude, July 16, 1906 (Univ. Calif. Publ. Zool. v, 1908, 82). Mr. Grinnell found fully fledged young near Pasadena the first week in March (Pub. 2, Pasadena Acad. Sci., 1898, 31), and Antonin Jay took two fresh eggs near Nigger Slough, Los Angeles County, June 14, 1903.

222. (474m) *Otocoris alpestris insularis* C. H. Townsend. ISLAND HORNED LARK.

Abundant resident on the Santa Barbara Islands; occasional to the mainland in winter. Type specimen taken by Mr. Townsend on San Clemente Island, January 25, 1890 (Proc. U. S. Nat. Mus. XIII, 1890, 140). Robert Ridgway says of this subspecies: "The characters of this form are most pronounced in specimens from the more northern islands of San Miguel, Santa Rosa and Santa Cruz, those from the more southern islands of San Clemente, Santa Barbara, San Nicolas and Santa Catalina inclining toward the mainland form, *O. a. actia*, thus indicating the origin of this insular form" (Bds. N. & Mid. Am. IV, 1907, 318). The breeding season of the Island Horned Lark, like that of the mainland bird, is quite extensive and at least two broods are reared in a season. I have found full grown young early in June.

J. Grinnell found a nest containing four young on Santa Barbara Island, May 15, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 5), and Antonin Jay took three eggs, advanced in incubation, on the same island, July 3, 1909. C. B. Linton took three half-incubated eggs on San Nicolas Island, May 12, 1910, and took a set of four, slightly incubated, the following day. J. Grinnell took three slightly incu-

bated eggs on San Clemente Island, June 3, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 16), and O. W. Howard took a set of three, incubation commenced, on San Miguel Island, June 21, 1910.

A male of this subspecies, now no. 17161 collection J. E. Thayer, was taken by C. B. Linton at Alamitos Bay, Los Angeles County, January 18, 1908. It was one of a small flock, seemingly of the same kind. In the original record of this specimen (Condor x, 1908, 181), Mr. Linton made a mistake as to the date of capture.

223. (476) **Pica nuttalli** (Audubon). YELLOW-BILLED MAGPIE.

Formerly a common resident of the oak regions, south to northern Los Angeles County. Much less plentiful at the present time. Still, however, fairly common, locally, in Santa Barbara and Ventura counties. Breeds in late March and early April. First described from specimens taken at Santa Barbara by Thos. Nuttall (Audubon, Bds. Am., elephant folio, iv, 1838, 450). According to early settlers in the Conejo Valley, on the line of Ventura and Los Angeles counties, Magpies were common in that region in the early 80's. At the present time, they are not to be found there. In the summer of 1908, J. S. Appleton saw a bird in the Simi Valley, Ventura County, about seven miles north of the Los Angeles County line. So far as I know, this is the most southern record for the species during late years. A specimen is recorded as having been taken by Dr. Hammond at San Diego (Baird, Pac. R. R. Rep. ix, 1858, 579). This specimen may have been mis-labeled, or possibly was an escaped cage bird.

In the early 60's, J. G. Cooper found the birds numerous near Santa Barbara and noted young nearly fledged by April 25 (Land Bds. Cal., 1870, 295). B. W. Evermann found them abundant in suitable places in Ventura County in the early 80's. On April 2, 1881, he obtained over eighty eggs in Wheeler Cañon, near Santa Paula (Auk III, 1886, 181). A small colony of birds still breeds in Alisio Cañon, not far from Wheeler Cañon, and H. C. Burt has taken several sets of eggs in this locality. He took six slightly incubated eggs April 24, 1904, and six eggs, advanced in incubation, April 30, 1905. On April 16, 1910, but one set of eggs was found, the rest of the nests containing newly hatched young. The colony was again visited April 9, 1911, and several sets of fresh and slightly incubated eggs were secured.

224. (478a) **Cyanocitta stelleri frontalis** (Ridgway). BLUE-FRONTED JAY.

Common resident of the Transition zone in coniferous forests of the mountains. Occasional to the foothills and even to the oak regions of the mesas during severe winters. Breeds mostly in early May. I found several nests of this bird in the San Bernardino Mountains in June, 1906 and 1907. They all contained young birds. N. S. Goss took several sets of eggs near Julian, San Diego County, in the spring of 1884 (Auk II, 1885, 217).

225. (481) **Aphelocoma californica californica** (Vigors). CALIFORNIA JAY.

Common resident from the coast to over 6000 feet in the mountains. Breeds mostly in April. Although the A. O. U. *Check-List* assigns the bird occurring

from Los Angeles and San Bernardino counties, south to Lower California, to the form *Aphelocoma californica obscura* Anthony, I am informed by J. Grinnell that, after a careful study of the question by himself and H. S. Swarth, they have arrived at the conclusion that all the southern California birds are referable to *californica* and that *obscura* has no standing as a bird of California.

J. Grinnell found a nest of the California Jay that contained young about two-thirds grown on March 25, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 32). W. M. Pierce took four fresh eggs near Claremont, Los Angeles County, March 20, 1902, and I took four slightly incubated eggs at 5400 feet altitude in the San Bernardino Mountains, June 7, 1906.

226. (481.1) **Aphelocoma insularis** Henshaw. SANTA CRUZ JAY.

This well marked insular form is confined to Santa Cruz Island, where it is a common resident. The specimens from which the species was originally described were taken by H. W. Henshaw in June, 1875 (Auk III, 1886, 452). The nesting season is in April and early May. In November and December, 1907, C. B. Linton and myself found this jay to be one of the most abundant land birds on Santa Cruz Island. They were singularly tame and unsuspicious for a blue jay and we had no trouble in securing all the specimens we desired. J. Mailliard found two nests containing eggs, and two nests containing young birds, the latter part of April, 1898 (Bull. Cooper Orn. Club I, 1899, 43). R. H. Beck took three sets of eggs May 8, 1897. Two sets were of three eggs each and the other was of two (Bull. Cooper Orn. Club, I, 1899, 6). On April 28 and 29, 1906, O. W. Howard found seven nests of this species in scrub oak trees. Two of the nests contained, respectively, five slightly incubated eggs and three eggs, incubation commenced. The other five nests contained young birds. J. S. Appleton took two fresh eggs June 7, 1906, probably a second laying.

227. (486) **Corvus corax sinuatus** Wagler. RAVEN.

Common resident, locally, in the more unsettled portions of the hill country. Particularly plentiful on the Santa Barbara Islands where, owing to its reputation as a destroyer of newly-born lambs, it is shot by the sheep men at every opportunity. The bird from the Santa Barbara Islands has been referred by Robert Ridgway to the race *Corvus corax clarionensis* Rothschild & Hartert (Bds. N. & Mid. Am. III, 1904, 265). I consider this conclusion erroneous, as specimens which I secured on the islands are identical with others from the mainland. The Raven begins nesting in the latter part of March, and fresh eggs may be found until late in April. If the nest is robbed, a second and even a third set will be laid. Lawrence and Sidney Peyton have taken several sets of eggs in Castaic Cañon, northern Los Angeles County. I have taken a number of sets on the Santa Barbara Islands, and in the Puente Hills, near Whittier, Los Angeles County. In the latter locality the birds were common fifteen years ago but are now rare. According to L. Belding, the Raven is a common resident in the vicinity of San Diego (Land Bds. Pac. Dist., 1890, 112). Extreme nesting dates are: Five fresh eggs taken by G. Willett near Whittier, March 14, 1895 (Oologist XII, 1895, 110), and three slightly incubated eggs taken by W. L. Chambers near Santa Monica, May 9, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 32).

228. (488b) **Corvus brachyrhynchos hesperis** Ridgway. WESTERN CROW.

Common resident of the lowlands. Breeds in the willow regions mostly in April. More widely distributed in winter. A. M. Ingersoll informs me that the Crow nests along the Sweetwater and San Diego rivers, a few miles from the coast in southern San Diego County. This is the most southern breeding record I have seen, though it is known to cross the Mexican line in winter. Antonin Jay took four fresh eggs in the San Fernando Valley, Los Angeles County, March 27, 1898, and R. Arnold took five considerably incubated eggs in the same locality, May 17, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 32).

229. (491) **Nucifraga columbiana** (Wilson). CLARKE NUTCRACKER.

Common resident of coniferous forests in Upper Transition and Boreal zones in the mountains, from 6000 feet to timber line. In winter descends to lower altitudes, straggling rarely to the valleys. At this season ranges south to, or very near, the Mexican line. I have taken full-grown young at Bear Valley, in the San Bernardino Mountains, early in June, so the nesting season must be early, probably in the latter part of March and the first part of April. At this time of year, owing to the deep snow, the nesting grounds are almost inaccessible and, up to the present time, I know of no eggs having been taken in southern California.

J. Grinnell found Nutcrackers abundant on Mt. Piños, Ventura County, in June, 1904. They were occasionally observed as low as 5500 feet altitude (Auk xxii, 1905, 385). Mr. Grinnell also observed them on San Bernardino Peak, July 12, 1905, and in June and July, found them common at the head of the Santa Ana River and down as low as 6000 feet (Univ. Calif. Publ. Zool. v, 1908, 84). H. E. Wilder saw a bird at Riverside, October 15, 1898. This must be considered a very unusual occurrence. F. Stephens has a specimen, taken from a fair sized flock, on Laguna Mountain, San Diego County, February 21, 1877. The locality where this bird was secured is about twenty miles north of the Mexican line, and Mr. Stephens writes me that he does not doubt that the species crosses the boundary regularly in winter.

230. (492) **Cyanocephalus cyanocephalus** (Wied). PINYON JAY.

Resident of the mountains, mostly on the desert side. Irregular visitant to the mesas and foothills along the base of the mountains. Undoubtedly breeds in favorable localities in the coniferous forests, but I know of no eggs having been taken in southern California. I found the species common in the piñon timber near Gold Mountain, in the San Bernardino Range, in June, 1907, and F. S. Daggett noted it in large flocks at Bear Valley, June 12, 1897. H. A. Gaylord saw several large flocks flying north over Pasadena in the fall of 1894 (Nidologist iii, 1896, 106), and J. Grinnell noted flocks every day or two in the same vicinity, September 1 to 21, 1895. They were flying northwest over the mesas and along the base of the mountains (Pub. 2, Pasadena Acad. Sci., 1898, 32). F. Stephens took one specimen and saw many others on Laguna Mountain, San Diego County, about twenty miles north of the Mexican boundary, February 21, 1877. He believes that the species crosses the line in winter in company with the last.

231. (495a) **Molothrus ater obscurus** (Gmelin). DWARF COWBIRD.

Although no cowbirds are recorded as having been taken in southern California, they have been seen here and the eggs have been frequently collected. Judging from the small size of the eggs, as well as from geographical reasons, it is probable that our cowbird is referable to the above form. J. E. Law saw a female Pacific Yellow-throat (*Geothlypis trichas arizela*) feeding a fully fledged young bird, undoubtedly of this species, near Compton, Los Angeles County, July 10, 1910. He was unable to secure the bird as it was lost to sight in the dense willow brush (Condor XII, 1910, 174). J. G. Cooper mentions seeing flocks of cowbirds on the east side of the summit of the Cuyamaca Mountains, San Diego County, at about 4500 feet altitude, in the spring of 1862 (Am. Nat. VIII, 1874, 17).

H. C. Burt took a cowbird's egg from a nest of the Yellow Warbler, near Santa Paula, Ventura County, June 18, 1904. L. Peyton found an egg in a nest of the Least Vireo, near Sespe, Ventura County, May 17, 1908, and in May, 1911, he found three nests of the Golden Pileolated Warbler, each of which contained one egg of the cowbird. The other southern California nesting records that have come to my attention, are all from Los Angeles County, where it seems to be fairly common, mostly in the willow regions of the lowlands. O. W. Howard has found several eggs of this species, all in nests of other birds, near Long Beach. Antonin Jay found an egg in a nest of the Pacific Yellow-throat, near Artesia, June 9, 1907, and found another in a Traill Flycatcher's nest, near Compton, July 10, 1910. He also found several eggs in the latter locality in July, 1911. R. M. Perez took an egg with a set of Pacific Yellow-throat's eggs, at Nigger Slough, May 7, 1910 (Condor XII, 1910, 133), and C. B. Linton took an egg with four eggs of the Western Gnatcatcher, in Elysian Park, Los Angeles, June 5, 1905.

232. (497) **Xanthocephalus xanthocephalus** (Bonaparte). YELLOW-HEADED BLACKBIRD.

Common resident of marsh lands in the lower country, south to San Diego County. Breeds, locally, on inland sloughs and tule-bordered ponds. Irregular in its breeding localities; may nest commonly in a marsh one year and be entirely absent the next. Scatters out over the lowlands in fall, winter and spring, the adult males generally being seen in bands by themselves, not mixing with the larger flocks which are made up of females and immature birds. Nests mostly in May and early June. I have found large colonies breeding at Nigger Slough, Los Angeles County, at San Jacinto Lake, Riverside County, and at various other localities in southern California. According to A. M. Ingersoll, this bird is seldom seen near San Diego, but probably breeds at Warner's Ranch, about fifty miles from the coast. It was noted in small flocks by W. O. Emerson at Poway, San Diego County, in the spring of 1884 (Bull. Cal. Acad. Sci. II, 1887, 428).

233. (498e) **Agelaius phoeniceus neutralis** Ridgway. SAN DIEGO RED-WING.

Abundant resident of the lowlands. Breeds mostly in the tule marshes, but

often in grain fields, mustard patches and sometimes even on the ground. Nests from early April through June.

234. (500) **Agelaius tricolor** (Audubon). TRICOLORED RED-WING.

Common resident of the lowlands. Breeds locally in tule marshes from the latter part of April through May. More widely distributed in winter. Originally described from specimens taken at Santa Barbara by Thos. Nuttall (Audubon, Bds. Am., elephant folio, v, 1839, 1).

235. (501.1) **Sturnella neglecta** Audubon. WESTERN MEADOWLARK.

Abundant resident of meadows and fields from the ocean to about 7000 feet in the mountains. Also on most of the Santa Barbara Islands. In winter gathers in good sized flocks where the food supply is most plentiful. Breeds mostly in April and May, though extreme sets have been taken much earlier, and J. Grinnell noted the birds carrying nesting material in January. G. F. Morcom took five slightly incubated eggs near Los Angeles, March 9, 1895, and E. Simmons took a set of four, slightly incubated, near Pasadena, June 7, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 33). H. Robertson took three eggs at Bear Valley, 6750 feet in the San Bernardino Mountains, June 28, 1894.

236. (504) **Icterus parisorum** Bonaparte. SCOTT ORIOLE.

Breeds in small numbers in the vicinity of San Diego. Occasionally straggles north to Los Angeles County. C. H. Marsh found a nest containing a single young bird, in Telegraph Cañon, ten miles from San Diego, May 16, 1890. The male parent bird was taken and sent to F. C. Browne (Auk VIII, 1891, 238). F. Stephens saw two males at San Diego in April, 1901, and saw a male in the same locality, June 2, following (Condor III, 1901, 94). A pair was seen by Kate Stephens in a garden at San Diego, many times during the latter part of April, 1906 (Condor VIII, 1906, 130). R. B. Herron took a male near San Bernardino, April 1, 1895 (Thurber, Auk XIII, 1896, 265), and H. E. Wilder took a male at Riverside, May 8, 1896. A bird of this species was sent to Hilda Wood Grinnell by her brother, who shot it at Glendora, Los Angeles County, May 6, 1904 (Condor XII, 1910, 46). W. B. Judson took a male in the San Fernando Valley, Los Angeles County, November 2, 1903 (Daggett, Condor VI, 1904, 22), and H. S. Swarth saw one near Los Angeles, April 19, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 33).

237. (505a) **Icterus cucullatus nelsoni** Ridgway. ARIZONA HOODED ORIOLE.

Common summer resident, mostly about orchards and gardens, but occurs also on brushy mesas and sometimes follows up the mountain cañons as high as 4000 feet. Generally arrives late in March and leaves during the first part of September. Breeds, ordinarily, from late April to early June. A favorite nesting site of this species is the under side of a palm leaf, and such nests are frequently noticed in gardens and parks, and among the ornamental trees along city streets. F. E. Blaisdell noted the Hooded Oriole at Poway, San Diego County, as early as March 11 (1885), and as late as September 20 (1884) (Belding, Land Bds. Pac. Dist., 1890, 125). W. M. Pierce took five

partially incubated eggs near Claremont, Los Angeles County, April 25, 1901, and H. J. Lelande found a nest containing one fresh egg, near Pasadena, August 3, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 33).

238. (508) **Icterus bullocki** (Swainson). BULLOCK ORIOLE.

Common summer resident from the lowlands to about 5000 feet in the mountain cañons. After the breeding season, occurs up to 8000 feet. Arrives from the south about the latter part of March and leaves mostly in September. Breeds, ordinarily, in May and the first part of June. F. E. Blaisdell noted the species at Poway, San Diego County, as early as March 17 (1885) (Belding, Land Bds. Pac. Dist., 1890, 126). Antonin Jay saw a male in Los Angeles, January 27 and 30, 1911 (Condor XIII, 1911, 75). C. B. Linton saw a male on San Nicolas Island, March 30 and 31, 1910. W. M. Pierce took six slightly incubated eggs near Claremont, Los Angeles County, April 25, 1901, and H. A. Gaylord took five eggs, incubation advanced, near Pasadena, July 18, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 34).

239. (509) **Euphagus carolinus** (Müller). RUSTY BLACKBIRD.

One record. C. B. Linton took a male on San Clemente Island, November 20, 1908 (Condor XI, 1909, 194). Recently no. 16659 collection John E. Thayer; now no. 21271, Univ. Calif. Mus. Vert. Zool.

240. (510) **Euphagus cyanocephalus** (Wagler). BREWER BLACKBIRD.

Abundant resident from the coast up to about 7000 feet in the mountain cañons. In winter occurs in large flocks in the lower country, feeding in meadows and orchards and around barn yards. Breeds mostly in April and early May. E. Davis has taken sets near Orange as early as March 16 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 34), and Antonin Jay took five fresh eggs at Nigger Slough, Los Angeles County, May 23, 1897.

241. (514a) **Hesperiphona vespertina montana** Ridgway. WESTERN EVENING GROSBEAK.

Fairly common winter visitant to the mountains, south at least to the San Gabriel Range. Occasionally straggles down to the foothills. E. B. Towne took an adult male near Pasadena, December 28, 1894. It was with a flock of Lark Sparrows in some oak trees (Nidologist III, 1896, 106). H. S. Swarth saw a bird of this species in the Arroyo Seco, above Pasadena, October 21, 1900, and took a female in the same locality, December 13, following (Condor III, 1901, 17). Mr. Swarth also took two females on Mt. Wilson, October 30, 1898 (Bull. Cooper Orn. Club I, 1899, 95), and saw another in the same vicinity, December 7, 1900. H. Robertson saw a bird in the Cahuenga Pass, Los Angeles County, May 8, 1902.

242. (517a) **Carpodacus purpureus californicus** Baird. CALIFORNIA PURPLE FINCH.

Summer resident of the mountains, mostly above 4000 feet; south to San Diego County. Common in winter in the lowlands, frequenting thickets and bushy places in small companies. Probably crosses the Mexican line at this season. According to F. Stephens, this finch breeds in small numbers in the

Cuyamaca Mountains, San Diego County, within twenty-five or thirty miles of the Mexican line. Mr. Stephens has also found them on Smith Mountain, and he believes that they probably breed on all the mountains of San Diego County that carry fir timber.

243. (518) **Carpodacus cassinii** Baird. CASSIN PURPLE FINCH.

Abundant breeding bird in the Transition and Boreal zones of the mountains above 4000 feet, south to the San Jacinto Range. Occurs occasionally in winter in the foothill country, and sometimes straggles down into the valleys. From February 25 to April 26, 1901, H. S. Swarth found this species quite abundant in the vicinity of Los Angeles, feeding in the pepper trees and mustard patches (Condor III, 1901, 66). From June 23 to 26, 1906, J. Grinnell secured three nests of this bird near Dry Lake, about 9000 feet altitude in the San Bernardino Mountains. The nests contained four eggs each. One of the sets was fresh and the other two were advanced in incubation. As Mr. Grinnell saw full-grown young in the same locality, June 18, 1907, the breeding season must cover at least two months and a half (Univ. Calif. Publ. Zool. v, 1908, 89). F. Stephens has a pair of birds taken on San Jacinto Mountain, June 23, 1893. He informs me that he considers this the southern limit of their breeding range.

244. (519) **Carpodacus mexicanus frontalis** (Say). HOUSE FINCH.

The "California linnet" is an abundant resident everywhere from the coast to the mountains, and up the mountain cañons to an altitude of more than 5000 feet. After the breeding season they may be found up to at least 7500 feet. In winter they occur in large flocks in stubble fields and sunflower patches, but by early spring they are paired off and nesting everywhere, being particularly abundant around gardens and parks. They breed plentifully through April, May and June and raise at least two broods in a season. W. M. Pierce took four fresh eggs near Claremont, Los Angeles County, March 22, 1901, and F. B. Jewett noted a nest near Pasadena which contained four fresh eggs on August 1, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 35).

245. (519c) **Carpodacus mexicanus clementis** Mearns. SAN CLEMENTE HOUSE FINCH.

Common resident on the Santa Barbara Islands. Originally described from San Clemente (Auk xv, 1898, 258). I have examined specimens from several of the islands and fail to see that they differ appreciably from the mainland bird. J. Grinnell found this finch abundant on San Clemente Island in the summer of 1897. He took four fresh eggs on March 30, and five partially incubated eggs the day following. He also noted nearly fledged young March 28 and took incubated eggs on June 5 (Pub. 1, Pasadena Acad. Sci., 1897, 16). I have found the House Finch plentiful on all the Santa Barbara Islands except San Miguel. On this island I noted it only occasionally.

246. (521) **Loxia curvirostra minor** (Brehm). CROSSBILL.

Occasional winter visitant, south at least to Pasadena and Riverside. Four

males and two females taken by F. S. Daggett at Pasadena, December 26, 1898 (Bull. Cooper Orn. Club 1, 1899, 51), and male taken by A. van Rossem in the same locality, November 1, 1908. Adult male taken by H. E. Wilder at Riverside, January 17, 1909.

247. (521a) ***Loxia curvirostra stricklandi*** Ridgway. MEXICAN CROSS-BILL.

Rather rare summer resident of the higher Sierra Nevadas, south to the San Bernardino Range; also on the pine-topped hills of Santa Cruz Island. May occur in southern California in winter, but records are lacking for that season. Although southern California breeding birds are referred by the A. O. U. *Check-List* to the preceding form, specimens taken show that they are nearer to *stricklandi*. J. Grinnell informs me that they are really referable to *L. c. bendirei* (Ridgway, Proc. Biol. Soc. Wash. 11, 1884, 101), a form closely resembling *stricklandi* and not recognized by the A. O. U. Committee.

J. Grinnell took a pair of adult birds near the summit of Mt. Piños, Ventura County, July 6, 1904 (Auk xxii, 1905, 385). The same collector took two males and a female and saw several more birds, at an elevation of over 9100 feet in the San Bernardino Mountains, July 15, 1906 (Univ. Calif. Publ. Zool. v, 1908, 91). A. van Rossem found the species fairly common at Dry Lake, San Bernardino Mountains, the same locality where Mr. Grinnell secured his specimens, September 3, 1910, and took several specimens.

A. B. Howell and A. van Rossem found this bird in some numbers in the heavy timber at the summit of the hills of Santa Cruz Island, from April 24 to May 2, 1911, and secured four specimens. Mr. Howell believes that they were breeding at the time (Condor xiii, 1911, 210). It is an extremely peculiar fact that this species, which occurs on the mainland of southern California only on the highest mountains, never having been noted below 9000 feet, should prove to be a resident of Santa Cruz Island at an elevation of less than 2500 feet. As Santa Cruz is the only island of the Santa Barbara group that carries pine timber, it would naturally be the only island suitable for the home of a bird, like the crossbill, which would seem out of place anywhere except in a forest of conifers. Why it should occur in a state of isolation in the very limited pine forests of Santa Cruz, when there are so many localities in the mountains of the mainland that are seemingly much more adapted to its needs, is a question that seems to be almost unanswerable. We shall have to regard it as one of the more striking of the many strange facts that are continually being brought to the attention of the student of nature. This local peculiarity of the species is paralleled by the fact that it is known to occur in the pine and cypress forests of Guadeloupe Island, off the coast of Lower California. We may perhaps safely conclude that there is something in the combination of coniferous forests and "salty" atmosphere that is attractive to this bird and adapted to its necessities.

248. (529b) ***Astragalinus tristis salicamans*** (Grinnell). WILLOW GOLD-FINCH.

Abundant resident of the lowlands, south to the Mexican line. In sum-

mer almost wholly confined to the willow regions, but in winter congregates in flocks and wanders everywhere, even into the cañons of the mountains where it feeds on the buds and seeds of sycamores and alders. Breeds most plentifully in May and June, though fresh eggs may be found from early April to late July. Originally described from Pasadena (Auk xiv, 1897, 397). I noted fresh eggs at Bixby, Los Angeles County, April 6, 1904, and found two nests, each containing four fresh eggs, near Compton, Los Angeles County, July 24, 1910. A. M. Ingersoll informs me that the Willow Goldfinch breeds commonly in certain localities in San Diego County, south to the Mexican line.

249. (530a) **Astragalinus psaltria hesperophilus** Oberholser. GREEN-BACKED GOLDFINCH.

Abundant summer resident of the mesa and foothill regions and up to 3000 feet in the mountain cañons. Less common in the lower country and up to 6400 feet in the mountains. In winter, distributed in flocks over the whole lower country. Breeds most commonly from April to July, but eggs are occasionally found much later. Nests plentifully among the evergreens and shrubbery in parks and gardens. J. Grinnell noted eggs near Pasadena as early as March 22, and took a set of three, slightly incubated, October 21, 1895 (Pub. 2, Pasadena Acad. Sci., 1898, 35).

250. (531) **Astragalinus lawrencei** (Cassin). LAWRENCE GOLDFINCH.

Common summer resident of the mesas and foothills up to 7000 feet in the mountains, occasionally occurring as high as 8500 feet. Rare in winter, the most of the species migrating south, but rather common in early spring. Originally described from specimens taken at Sonoma and San Diego (Proc. Acad. Nat. Sci. Phil. v, 1850, 103). H. S. Swarth found this bird quite abundant at the head of the Arroyo Seco, on the slope of Mt. Strawberry, Los Angeles County, October 19 to 26, 1900. Mr. Swarth also saw a pair near Los Angeles, February 12, 1900, and saw another pair in the same locality, February 23, following. W. O. Emerson noted a small flock in the Volcan Mountains, San Diego County, in late January (Bull. Cal. Acad. Sci. II, 1887, 422). In June, 1907, I found it common at Bear Valley, 6750 feet altitude in the San Bernardino Mountains. Specimens taken showed that they were breeding. Breeds mostly in May, in the lower country. Extreme nesting dates are as follows: Five fresh eggs taken by G. F. Morcom at Los Angeles, April 23, 1892 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 35), and four eggs, incubation begun, taken by W. M. Pierce near Claremont, Los Angeles County, July 5, 1903.

251. (533) **Spinus pinus** (Wilson). PINE SISKIN.

Common summer resident of the mountains above 5000 feet. Irregular visitant to the lower country in migrations and in winter, south to Lower California and Mexico. Noted by J. Grinnell as abundant near Pasadena during February and March, 1892, and in the vicinity of El Monte as late as March 20, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 35). According to

H. S. Swarth it appeared irregularly in small flocks near Los Angeles during the winter of 1898-99, one being seen as late as March 23 (Condor II, 1900, 38). Mr. Swarth also noted a flock of about two dozen birds in the same locality, April 15, 1901 (Condor III, 1901, 66), and saw several more, November 4, the same year. L. H. Miller saw a bird in the Arroyo Seco in Los Angeles city, October 29, 1908. F. Stephens took a pair of Siskins at Santa Ysabel, San Diego County, April 11, 1890. He informs me that the species migrates regularly through San Diego County, principally along the mountain ranges and foothills. I found it common at Bear Valley, San Bernardino Mountains, in June, 1907, but was unable to locate any nests, although birds taken seemed about to breed.

252. **Passer domesticus** (Linnaeus). ENGLISH SPARROW.

This little pest arrived in southern California, west of the mountains, about 1904, apparently coming in from the north and the east at about the same time. At the present writing it is probably pretty well distributed over southern California and, judging from its increase as shown in other localities, it is with us to stay. On the north, it was noted by O. W. Howard at Tehachapi in 1903 (Condor VIII, 1906, 157). It was recorded from Newhall, Los Angeles County, by Cooper Club members at the club outing meeting held May 19, 1906. They found a small colony nesting near the railroad station (Condor VIII, 1906, 157). J. S. Appleton saw it at Oxnard, Ventura County, in 1905, and in the Simi Valley in 1907. Bradford Torrey first saw it at Santa Barbara in 1909 (Condor XI, 1909, 208). H. C. Burt reports the birds fairly common around Santa Paula, Ventura County. On June 1, 1910, he found a nest containing four fresh eggs.

At about the same time that the species arrived from the north, it seems to have come in through the Cajon Pass from Victorville and spread out over the San Bernardino Valley. W. L. Holt first noted it at Banning, Riverside County, in 1910. It arrived in Los Angeles about 1907, first being noted at the corner of Eleventh and Main streets. In spite of the efforts of L. H. Miller and other Cooper Club members to exterminate them before they obtained a permanent foothold, they have increased in numbers until they are now quite common in some portions of the city. I saw fully fledged young on one of our city streets, April 25, 1911. F. Stephens and A. M. Ingersoll inform me that it has not yet put in its appearance at San Diego.

253. (536a) **Calcarius lapponicus alasensis** Ridgway. ALASKA LONG-SPUR.

One record. F. Stephens took a female near San Diego, October 2, 1909 (Condor XII, 1910, 44). Now no. 6411 collection F. Stephens.

254. (540a) **Poœcetes gramineus confinis** Baird. WESTERN VESPER SPARROW.

Common winter visitant to the stubble fields and washes, and on the dry mesa land at the foot of the mountains. Noted by J. Grinnell in the vicinity of Pasadena from September 14 (1897) to March 19 (1895) (Pub. 2, Pasadena Acad. Sci., 1898, 36).

255. (540b) **Poecetes gramineus affinis** G. S. Miller. OREGON VESPER SPARROW.

Common winter visitant, occurring in company with the last species, but more numerous on the damp meadows of the lowlands. Noted by J. Grinnell at Pasadena in the fall as early as September 16 (1895), and by H. A. Gaylord, in the spring as late as April 25 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 36).

256. (542b) **Passerculus sandwichensis alaudinus** Bonaparte. WESTERN SAVANNAH SPARROW.

Abundant winter visitant to the fields and meadows, from the coast to the base of the mountains. Noted by J. Grinnell on San Clemente Island, March 30, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 17), and in the vicinity of Pasadena from September 18 (1897) to May 3 (1895) (Pub. 2, Pasadena Acad. Sci., 1898, 36). A. B. Howell took a specimen at Santa Barbara, September 2, 1911.

257. (543) **Passerculus beldingi** Ridgway. BELDING SPARROW.

Abundant resident of the salt marshes along the coast, and on some of the alkali marshes a little distance from the ocean. Breeds mostly in May, but I have seen nearly grown young as early as April 15. Type specimens taken by L. Belding at San Diego in 1884 (Proc. U. S. Nat. Mus. VII, 1885, 516). Formerly bred commonly at Nigger Slough, Los Angeles County, several miles from the coast. I took a set of four slightly incubated eggs in that locality, May 15, 1906. Much less plentiful there at the present time. L. Belding took two partially incubated eggs near San Diego, April 4, 1885 (Land Bds. Pac. Dist., 1890, 144), and H. A. Gaylord took three eggs, advanced in incubation, near Long Beach, Los Angeles County, July 5, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 36).

258. (544) **Passerculus rostratus rostratus** (Cassin). LARGE-BILLED SPARROW.

Common in winter in the salt marshes and along the beaches of southern California, north to Santa Barbara, occasionally straggling up the coast as far as Santa Cruz (Mailliard, Condor VI, 1904, 16). Originally described from San Diego (Proc. Acad. Nat. Sci. Phila. VI, 1852, 184). Frequently seen on wharves and on the streets of beach towns. May be found along our coast from August to late April, but is apparently absent in summer. Has been repeatedly recorded as breeding along the coast of Los Angeles County, but these records are probably all referable to the last species. Although I have made a thorough search of our local salt marshes, I have never been able to find the species in summer, nor has any other ornithologist of late years, though it has been particularly sought for.

A. W. Anthony and A. M. Ingersoll, who have collected extensively in the coast marshes near San Diego, believe that it occasionally nests in that locality. This belief is based on the fact that Mr. Ingersoll in one instance saw a bird in breeding season carrying worms, as he believes, to a nest that

he was unable to locate, and that Mr. Anthony on two or three occasions found families of young that were still fed by their parents, on the beach near Oceanside (Auk XXIII, 1906, 149). The principal breeding grounds of this bird, however, have not been located up to the present time, but are probably on some part of the Lower California coast that has not been thoroughly worked by ornithologists.

C. B. Linton took a female at Alamitos Bay, Los Angeles County, August 18, 1908 (Condor x, 1908, 239), and I saw two birds at Hyperion, Los Angeles County, August 20, 1910. These were probably some of the earliest arrivals, as the species does not become common until September. G. F. Breninger took one bird of a pair seen on San Clemente Island in February, 1903 (Auk XXI, 1904, 223), and A. W. Anthony noted them on the same island in September (Auk XXIII, 1906, 149). J. H. Bowles finds them common in winter around the docks at Santa Barbara (Auk XXVIII, 1911, 174).

259. (546a) **Ammodramus savannarum bimaculatus** Swainson. WESTERN GRASSHOPPER SPARROW.

Fairly common resident, locally, in various parts of southern California, but, owing to its secretive habits, easily overlooked. More widely distributed in winter. Irregular in its breeding habits; may be found nesting commonly in a locality one year and entirely absent the next. H. W. Henshaw recorded it as breeding on the coast near Santa Barbara in 1875 (Ann. Rep. Ch. Eng. U. S. Geol. Surv., 1876, App. JJ, 241), and J. H. Bowles found it a common summer resident of the same locality. During the summer of 1910, he secured a set of five eggs and noted several nests containing young (Condor XIII, 1911, 85). J. S. Appleton finds it a fairly common resident of the Simi Valley, Ventura County. He took four eggs, advanced in incubation, May 11, 1896, and five eggs, half incubated, May 15, the same year. J. E. Law has found it rather common in summer in a section of the San Fernando Valley, Los Angeles County. April 5, 1908, he took an adult female whose oviducts contained a fully formed egg. I noted several pairs of birds, all apparently nesting, in a barley field near Gardena, Los Angeles County, in May and June, 1910. On June 2, I found a nest which contained four nearly full-grown young birds (Condor XII, 1910, 204). During the summer of 1911, I visited this place several times, but failed to find any signs of the birds. L. H. Miller has found young just able to fly at Riverside, and F. O. Johnson took an adult female at Beaumont, Riverside County, April 23, 1889 (Swarth, Condor XII, 1910, 108). L. Belding noted the species near San Diego in spring (Land Bds. Pac. Dist, 1890, 146).

260 (552a) **Chondestes grammacus strigatus** Swainson. WESTERN LARK SPARROW.

Common resident of the foothill and mesa country, rare along the coast. Occasional in summer up to 7000 feet in the mountains. Particularly plentiful in orchards, gardens and parks, where it nests in fruit trees, hedges and shrubbery. Breeds most commonly from the latter part of April through May. W. M. Pierce took four partially incubated eggs near Claremont, Los Angeles

County, April 19, 1903, and H. A. Gaylord took three slightly incubated eggs near Pasadena, July 12, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 37). I found a nest containing young birds at Bear Valley, 6750 feet in the San Bernardino Mountains, June 11, 1907.

261. (553) *Zonotrichia querula* (Nuttall). HARRIS SPARROW.

One record. C. B. Linton took a specimen, the sex of which was not determined, on San Clemente Island, October 15, 1907 (Condor x, 1908, 84). Recently no. 16656 collection J. E. Thayer; now no. 21272, Univ. Calif. Mus. Vert. Zool.

262. (554) *Zonotrichia leucophrys leucophrys* (J. R. Forster). WHITE-CROWNED SPARROW.

According to L. Belding, this species winters entirely south of San Diego, and in the migrations keeps mainly to the mountain ranges, occasionally appearing on the lowlands in the southern part of the state and southward (Land Bds. Pac. Dist., 1890, 148). There is, however, one winter record for southern California, that of an immature female taken by H. W. Marsden in the Volcan Mountains, San Diego County, December 3, 1904 (Bishop, Condor vii, 1905, 142). We have the following records of specimens taken during migrations: Two females by H. S. Swarth near Los Angeles, April 22, 1898, and April 26, 1899 (Bull. Cooper Orn. Club i, 1899, 94). Male, female and immature male, also taken by Mr. Swarth near Los Angeles, April 12, April 19 and March 16, 1900. Male by H. W. Marsden at Witch Creek, San Diego County, April 8, 1904 (Bishop, Condor vii, 1905, 142). Male and female by L. Belding near San Diego, May 3 and 5, 1885 (Land Bds. Pac. Dist., 1890, 148).

263. (554a) *Zonotrichia leucophrys gambeli* (Nuttall). GAMBEL SPARROW.

Abundant in winter all over the mesas and lowlands as well as on the Santa Barbara Islands. Arrives mostly in September and leaves in April. J. Grinnell took a specimen at Pasadena as late as May 3. (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 37).

264. (554b) *Zonotrichia leucophrys nuttalli* Ridgway. NUTTALL SPARROW.

Breeds along the coast as far south as Santa Barbara County, and, unlike the two preceding, seems to occur in winter but very little farther south than the southern limit of its breeding range. At this season straggles rarely south to Los Angeles and San Bernardino counties. Breeds commonly on the coast of San Luis Obispo County. I found fresh eggs and fully grown young in that locality in May, 1909 (Condor xi, 1909, 185). J. H. Bowles has found it breeding near Santa Barbara. He noted an old bird feeding young in that vicinity, May 21, 1910 (Auk xxviii, 1911, 174). J. Grinnell informs me that there are two specimens from Los Angeles County in the University of California Museum of Vertebrate Zoology. One of these was taken by H. S. Swarth at Los Angeles, January 13, 1896 (Grinnell, Pub. 2, Pasadena Acad.

Sci., 1898, 37), and the other, an adult female, was taken by W. P. Taylor near Pasadena, January 20, 1906. H. W. Marsden took a male at Redlands, San Bernardino County, January 27, 1903 (Bishop, Condor VII, 1905, 142).

265. (557) **Zonotrichia coronata** (Pallas). GOLDEN-CROWNED SPARROW.

Common winter resident from the lowlands up to 5000 feet on brushy mountain sides, south at least to San Diego. Also occurs on the Santa Barbara Islands. Noted by J. Grinnell at Pasadena from September 26 (1896) to May 9 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 37). A. van Rossem took a specimen near El Monte, Los Angeles County, May 16, 1911. Recorded by L. Belding as a rare winter visitant at San Diego (Land Bds. Pac. Dist., 1890, 153), and noted by W. O. Emerson as tolerably common in the Volcan Mountains in the spring of 1884 (Bull. Cal. Acad. Sci. II, 1887, 423).

266. (558) **Zonotrichia albicollis** (Gmelin). WHITE-THROATED SPARROW.

Rare straggler in winter. Two records, as follows: Immature female taken by H. A. Gaylord near Pasadena, November 21, 1894 (Nidologist III, 1896, 106). Now no. 5051 collection F. S. Daggett. Adult bird taken by W. E. Bryant near Los Angeles, February 25, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 37).

267. (560a) **Spizella passerina arizonae** Coues. WESTERN CHIPPING SPARROW.

Common resident of orchards, gardens and parks, in the foothill and mesa region. Abundant in summer in coniferous forests of the mountains up to 10,000 feet. Resident on some of the Santa Barbara Islands. Breeds mostly in May in the lower country, later in the mountains. I found the species plentiful on Santa Rosa Island, June 7, 1910 (Condor XII, 1910, 171); F. Stephens found it common on Catalina in August, 1886 (Belding, Land Bds. Pac. Dist., 1890, 155), and J. Grinnell saw it on San Clemente in March, 1897, and again in June, the same year (Pub. 1, Pasadena Acad. Sci., 1897, 18). Extreme nesting dates in the foothill region are: three fresh eggs taken by E. Parker near Pasadena, April 19, 1896, and three slightly incubated eggs noted by H. A. Gaylord in the same locality, June 19, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 37).

268. (562) **Spizella breweri** Cassin. BREWER SPARROW.

Common summer resident of the sage brush slopes of the mountains. Most plentiful from 5000 to 7000 feet. Breeds locally down into the foothills. Occurs regularly in spring and fall in favorable localities in the lowlands, but is rare in midwinter. H. S. Swarth has noted this sparrow many times in spring and fall near Los Angeles and in the San Fernando Valley, Los Angeles County. He saw one bird in the latter locality, December 27, 1899 (Condor II, 1900, 91), and J. E. Law took a specimen in the same vicinity, December 27, 1903.

O. W. Howard found the Brewer Sparrow breeding plentifully in the high sage-brush valleys of northeastern Ventura County, in the neighborhood of Mt. Piños, in May and June, 1903. His earliest set was of four slightly incu-

bated eggs taken May 14, and his latest was of three eggs, also slightly incubated, taken June 20. According to J. S. Appleton this bird is a rather common summer resident of the Simi Valley, southern Ventura County. He took five fresh eggs in that locality, May 21, 1899, and three slightly incubated eggs, May 28, following (Condor XIII, 1911, 76). H. S. Swarth found a nest containing three young birds in the San Fernando Valley, Los Angeles County, May 24, 1899 (Bull. Cooper Orn. Club 1, 1899, 94). W. M. Pierce took two considerably incubated eggs near Claremont, Los Angeles County, May 13, 1903, and noted four eggs, advanced in incubation, in the same locality, May 28, following. I took a set of four eggs near Highlands, San Bernardino County, April 19, 1897. Incubation was far advanced. Specimens were taken by N. S. Goss at San Diego in the spring of 1884 (Belding, Land Bds. Pac. Dist., 1890, 157).

269. (565) **Spizella atrogularis** (Cabanis). BLACK-CHINNED SPARROW.

Common in summer on brushy mountain sides up to about 7000 feet. Occurs sparingly on the mesas during migrations. Arrives mostly in April and leaves during late August and early September. Extreme records for the species in Los Angeles County are: specimen taken by H. S. Swarth in the Cahuenga Valley, April 1, 1896, and immature male taken by J. Grinnell near Pasadena, September 10, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 38). Although the Black-chinned Sparrow is fairly plentiful in summer in suitable localities, the nest is hard to locate and there are few sets of eggs in collections. J. Grinnell found a nest containing two small young on Mt. Piños, Ventura County, June 28, 1904 (Auk XXII, 1905, 387). O. W. Howard took five sets of eggs in Lockwood Valley and Piru Basin, northeastern Ventura County, in May and June, 1903. His earliest set was of four fresh eggs taken May 16, and his latest was of four slightly incubated eggs taken July 1. J. E. Law found a nest containing almost full-grown young near Newhall, Los Angeles County, May 19, 1906 (Condor VIII, 1906, 157). A. B. Howell took four slightly incubated eggs in the Arroyo Seco, near Pasadena, May 21, 1911. F. E. Blaisdell found three nests at Poway, San Diego County, in April and May. One nest contained four eggs and the other two contained young birds (Belding, Land Bds. Pac. Dist., 1890, 158). A nest and three eggs was taken by C. L. Pauter at Escondido, San Diego County, June 12, 1905 (Sharp, Condor IX, 1907, 89).

270. (567). **Junco hyemalis hyemalis** (Linnaeus). SLATE-COLORED JUNCO.

Winter visitant in small numbers. W. A. Jeffries took a specimen at Santa Barbara, March 14, 1883 (Auk VI, 1889, 221). F. S. Daggett took two males near Pasadena, March 15, 1893, and March 4, 1897. J. Grinnell took a female in the same locality, February 27, 1897. H. S. Swarth took a male near Los Angeles, February 8, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 38). Mr. Swarth also took two males near Los Angeles, November 3, 1898 (Bull. Cooper Orn. Club 1, 1899, 95), and a male on Mt. Wilson, December 6, 1900 (Condor III, 1901, 17). W. W. Price took two males at Riverside, February 10 and December 1, 1888 (Emerson, Zoe 1, 1890, 45), and L. Beld-

ing took a specimen thirty miles east of San Diego, January 24, 1884 (Land Bds. Pac. Dist., 1890, 159).

271. (567c) ***Junco hyemalis thurberi*** Anthony. THURBER JUNCO.

Abundant summer resident of the Transition and Boreal zones in the mountains mostly above 5000 feet. Common in winter in the lower country, generally appearing in October and remaining until April. Described from specimens taken by E. C. Thurber on Mt. Wilson, Los Angeles County, May 24, 1890 (Zoe 1, 1890, 238). C. B. Linton saw a bird of this species on San Nicolas Island, March 31, 1910. Fully fledged young may be found in the mountains as early as the middle of June, and J. Grinnell has found fresh eggs as late as July 27 (1905) (Univ. Calif. Publ. Zool. v, 1908, 95), so probably two broods are reared in a season. Antonin Jay took three eggs advanced in incubation in the Arroyo Seco above Pasadena, July 3, 1904.

272. (570b) ***Junco phaeonotus caniceps*** (Woodhouse). GRAY-HEADED JUNCO.

Occasional winter visitant. W. B. Judson took a female near Pasadena, October 26, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 38). Now no. 378 collection H. S. Swarth. Mr. Judson also saw a bird of this species on Mt. Wilson, January 23, 1900. From November 18 to December 3, 1906, several of these birds were noted by A. P. Smith at Julian, San Diego County, at an altitude of 4100 feet (Condor ix, 1907, 199).

273. (573a) ***Amphispiza bilineata deserticola*** Ridgway. DESERT SPARROW.

Occasional in winter, north to Los Angeles County. H. S. Swarth took a male near San Fernando, Los Angeles County, April 23, 1898, and F. S. Daggett took an immature male in the San Fernando Valley, September 12, 1903 (Condor vi, 1904, 24). Mr. Swarth also noted a bird in the San Fernando Valley, October 30, 1903, and saw one on a lawn in Los Angeles, January 16, the same year. J. Grinnell took an adult male near Pasadena, April 10, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 39).

274. (574) ***Amphispiza belli*** (Cassin). BELL SPARROW.

Common resident of the brush covered washes and mesas of the interior, also on several of the Santa Barbara Islands. Breeds mostly in May and early June. Originally described from specimens taken at Sonoma and San Diego (Proc. Acad. Nat. Sci. Phila. v. 1850, 103). According to J. S. Appleton, the Bell Sparrow is a common breeding bird in the Simi Valley, Ventura County. W. M. Pierce has found it breeding plentifully near Claremont, Los Angeles County. His earliest and latest nesting records for that locality are, respectively, four eggs, incubation begun, taken April 6, 1905, and four fresh eggs noted June 25, 1903. I found it nesting abundantly near Colton, San Bernardino County, in June, 1906, and took several sets of eggs. C. S. Sharp regards it as a rare breeder in the vicinity of Escondido, San Diego County (Condor ix, 1907, 89). It is recorded by L. Belding as a common resident at San Diego, and by F. E. Blaisdell at Poway (Land Bds. Pac. Dist., 1890, 161). I noted it on Santa Rosa

Island in June, 1910, and C. B. Linton has taken many specimens on San Clemente. J. G. Cooper found it on San Nicolas and San Clemente (Proc. Cal. Acad. Sci. iv, 1869, 78), and O. W. Howard took several sets of eggs on the latter island during the first week in March, 1903.

275. (574.1) **Amphispiza nevadensis nevadensis** (Ridgway). SAGE SPARROW.

Occasional winter visitant. H. S. Swarth says of a series of twenty-eight Sage Sparrows taken by F. O. Johnson near Riverside during the months of November, December and January: "The specimens in this series show every degree of variation from a few individuals typical of *canescens* to others indistinguishable from true *nevadensis*. Though the majority of the specimens are probably to be referred to *nevadensis*, they have mostly smaller bills than examples of that form from northern Nevada. In the matter of wing lengths there are some that might be referred with equal propriety to either race, being variously intermediate between the dimensions of the two forms as given by Grinnell (Condor VII, 1905, 181)" (Condor XII, 1910, 108).

276. (574.1b) **Amphispiza nevadensis canescens** Grinnell. CALIFORNIA SAGE SPARROW.

Summer resident of the elevated Upper Sonoran and Transition sage valleys of the southern Sierras, south to the Sierra San Gabriel, Los Angeles County. Slightly migratory to lower levels in winter, south at least to Riverside County. In describing this subspecies, Mr. Grinnell examined specimens from Cuddy Cañon, southern Kern County; near Tejon Pass; valleys in immediate vicinity of Mt. Piños, Ventura County; near Pine Flats, head of Tujunga Cañon, Sierra San Gabriel, Los Angeles County; San Fernando Valley, Los Angeles County (winter); Whitewater, Riverside County (winter) (Condor VII, 1905, 181). Specimens were also taken at Riverside in winter by F. O. Johnson (Swarth, Condor XII, 1910, 108). O. W. Howard found this bird breeding rather plentifully in Piru Basin, 5500 feet altitude, northeastern Ventura County, in May and June, 1903. He took four slightly incubated eggs May 16, and five, slightly incubated, June 6.

277. (580) **Aimophila ruficeps ruficeps** (Cassin). RUFOUS-CROWNED SPARROW.

Fairly common resident of the foothill regions, also on some of the Santa Barbara Islands. Partial to grass covered hillsides where it breeds mostly in April and May. Owing to its retiring habits, its nest is seldom found and the eggs are among the rarest in oological collections of this region. A nest containing three eggs was found and photographed by Harriet Williams Myers near Los Angeles, April 10, 1909 (Condor XI, 1909, 131). W. L. Chambers took four slightly incubated eggs near Santa Monica, Los Angeles County, May 17, 1903, and Antonin Jay took four eggs, advanced in incubation, near Whittier, April 17, 1910. L. P. Williams took four fresh eggs near Redlands, San Bernardino County, April 20, 1893, and took several other sets during the four years following (Osprey II, 1897, 27). C. S. Sharp found a nest containing two young and

two piped eggs near Escondido, San Diego County, March 11, 1900 (Condor ix, 1907, 89). N. K. Carpenter took three slightly incubated eggs in the same locality, June 2, 1907, and saw a set of four eggs that was taken near San Diego, May 13, 1906 (Condor ix, 1907, 158). C. B. Linton and myself found the species fairly common on Santa Cruz Island in November and December, 1907 (Condor x, 1908, 128), and J. G. Cooper noted it on Catalina (Proc. Cal. Acad. Sci., iv, 1869, 78).

278. (581e) **Melospiza melodia morphna** Oberholser. RUSTY SONG SPARROW.

One record, that of an adult female taken by F. O. Johnson at Riverside, November 3, 1888. Now no. 11324 collection University of California Museum of Vertebrate Zoology. H. S. Swarth says of this specimen: "Though the locality is extraordinary, this specimen is so exactly like an example of *M. m. morphna* at hand from Seattle, Washington, that I have no choice but to refer it to that form" (Condor xii, 1910, 108).

279. (581h) **Melospiza melodia graminea** C. H. Townsend. SANTA BARBARA SONG SPARROW.

Abundant resident on Santa Barbara Island, less plentiful on Santa Cruz. Type taken by Mr. Townsend on Santa Barbara Island, February 13, 1890 (Proc. U. S. Nat. Mus. xiii, 1890, 139). In May, 1897, J. Grinnell found this species the most abundant land bird on Santa Barbara Island. Thirty-one specimens were secured and sets of eggs were taken as follows: May 14, five eggs, incubation begun; four eggs, fresh, and four eggs, incubation advanced. May 15, three eggs, slightly incubated, and three eggs, incubation advanced (Pub. 1, Pasadena Acad. Sci., 1897, 6). In June, 1911, I found it very abundant on Santa Barbara Island and noted a nest on June 16 which contained two eggs advanced in incubation. At this time most of the young birds were full grown. I noted the species on Santa Cruz Island in November and December, 1907 (Condor x, 1908, 128), but found it much less plentiful than on Santa Barbara.

280. (581i) **Melospiza melodia clementae** C. H. Townsend. SAN CLEMENTE SONG SPARROW.

Resident on San Clemente, Santa Rosa and San Miguel islands. Type taken by Mr. Townsend on San Clemente, January 25, 1890 (Proc. U. S. Nat. Mus. xiii, 1890, 139). In June, 1910, I found this bird very common among the low bushes on San Miguel Island. A nest containing one fresh egg was found by O. W. Howard on June 15. This was probably a second laying as fully fledged young were plentiful at the time. C. B. Linton found four nests of this species on San Clemente Island, March 31, 1907. One nest held four young about a week old and the others contained incomplete sets.

281. (581n) **Melospiza melodia cooperi** Ridgway. SAN DIEGO SONG SPARROW.

Abundant resident of the lowlands and, in summer, up to 5000 feet in the mountain cañons. Breeds mostly in April and early May along streams and wherever vegetation is luxurious. H. J. Lelande took three fresh eggs near San

Gabriel, Los Angeles County, February 28, 1897, and I found several sets of fresh eggs near Bixby, June 9, 1912.

282. (583) **Melospiza lincolni lincolni** (Audubon). LINCOLN SPARROW.

Breeds in the Boreal zone in the mountains, mostly from 7000 to 9000 feet altitude, south to the San Jacinto Range. Common winter visitant to the lowlands where it is generally found in the brush in the vicinity of water courses. At this season it occurs south to Lower California and Mexico. Breeds mostly in May. Noted by H. S. Swarth near Los Angeles as early as September 18 (1897), and by J. Grinnell at Pasadena as late as May 3 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 39). Northward migration at San Diego noted by J. G. Cooper about March 25 (Land Bds. Cal., 1870, 216), and L. Belding took a male in the same locality, April 26, 1884 (Land Bds. Pac. Dist., 1890, 167). J. Grinnell took one bird and saw another, on San Clemente Island, March 30, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 19).

About the middle of June, 1907, I found several nests of this bird near Bluff Lake, 7500 feet altitude in the San Bernardino Mountains. At this date the nests contained nearly grown young, so that the eggs must have been laid early in May. J. Grinnell informs me that the Lincoln Sparrow breeds in appropriate localities on San Jacinto Peak.

283. (583a) **Melospiza lincolni striata** Brewster. FORBUSH SPARROW.

Occasional in winter. C. B. Linton took three specimens near Long Beach, Los Angeles County, February 12, 1908 (Condor x. 1908, 182). Two of these specimens, both females, are nos. 16657 and 16658 collection J. E. Thayer.

284. (585) **Passerella iliaca iliaca** (Merrem). FOX SPARROW.

Occasional winter visitant. Specimens taken as follows: Male by J. H. Bowles at Santa Barbara, January 1, 1911 (Auk xxviii, 1911, 175). Unsexed specimen by J. E. Law in the San Fernando Valley, Los Angeles County, March 22, 1908, and female by A. B. Howell in the same locality, November 11, 1911 (Condor xiv, 1912, 41). Male by A. van Rossem at Pasadena, December 13, 1907. Male by A. M. Ingersoll near San Diego, January 3, 1888 (Bryant, Proc. Cal. Acad. Sci., ser. 2, II, 1889, 90).

285. (585a) **Passerella iliaca unalaschcensis** (Gmelin). SHUMAGIN FOX SPARROW.

Occasional in winter, south at least to Los Angeles County and San Clemente Island. J. Grinnell took a female on Wilson's Peak, Los Angeles County, December 12, 1896. A. van Rossem took an adult male at Pasadena, February 4, 1910, and J. E. Law took a specimen at Pomona, December 25, 1901. C. B. Linton took a female on San Clemente Island, November 30, 1908 (Condor xi, 1909, 194).

J. Grinnell has recently described a new race of fox sparrow from the Prince William Sound region, Alaska, giving it the name of *Passerella iliaca sinuosa*. He states that this form is nearest to *P. i. unalaschcensis*, but differs from it in smaller and slenderer bill, in larger and heavier spotting beneath and much slatier tone of coloration throughout (Univ. Calif. Publ. Zool. v, 1910,

405, 406). J. H. Bowles took several specimens at Santa Barbara during the winter of 1910-11 which he considers referable to this new race (Auk XXVIII, 1911, 175).

286. (585b) *Passerella iliaca megarhyncha* Baird. THICK-BILLED FOX SPARROW.

Common winter visitant on brushy mountain sides and along water courses of the lower country. Also on the Santa Barbara Islands. Noted by J. Grinnell at Pasadena from October 10 (1896) to April 17 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 39). I took an adult female on Santa Cruz Island, November 24, 1907, and A. van Rossem took a pair on Catalina Island, February 15, 1910.

287. (585c) *Passerella iliaca schistacea* Baird. SLATE-COLORED FOX SPARROW.

Occasional winter visitant. Specimens taken as follows: Female by H. S. Swarth at Los Angeles, December 14, 1896 (Condor II, 1900, 39). Female, also by Mr. Swarth, in Millard's Cañon, near Pasadena, February 11, 1901 (Condor III, 1901, 66). Eight specimens by H. W. Marsden near Witch Creek, San Diego County, in December, 1904 (Bishop, Condor VII, 1905, 142). One specimen by F. E. Blaisdell at Poway, San Diego County, April 19 (Belding, Land Bds. Pac. Dist., 1890, 171).

288. (585d) *Passerella iliaca stephensi* Anthony. STEPHENS FOX SPARROW.

Common in summer on the higher mountains, from the San Jacinto Range north to the Sierras of southern Tulare County. More widely distributed in winter, at which season it occurs north to Marin County and, probably, south to Lower California, although, as yet, no specimens are recorded from the latter locality. Type specimens taken by A. W. Anthony in the San Jacinto Mountains, July 14, 1895 (Auk XII, 1895, 348).

Found by J. Grinnell in summer of 1911 on the west side of the Sierras in Tulare County (Mailliard, Condor XIV, 1912, 66), and in summer of 1904 on Mt. Piños, Ventura County, and its westward spur, Sawmill Mountain. A half-grown fledgling was taken June 29 (Auk XXII, 1905, 388). Mr. Grinnell also found young just able to fly at Dry Lake, 9000 feet altitude in the San Bernardino Mountains, June 22, 1905 (Univ. Calif. Publ. Zool. V, 1908, 99). He failed, however, to find the nest, and I had the same experience at Bear Valley and Bluff Lake, San Bernardino Mountains, although I found the birds very common in these localities in June, 1907. They seemed to be principally confined to the patches of low, thorny bushes known as "mountain misery," and were plentiful above 7000 feet, mostly on north slopes.

There have been very few specimens of this bird taken in southern California in winter. In fact, the only winter record for the coast district at the present time is of two birds taken on Catalina Island and now in the U. S. National Museum. Specimens were taken by E. S. Spaulding on Little Pine Mountain, one of the higher peaks in the hills of Santa Barbara County, at

an elevation of nearly 3000 feet, August 30, 1910 (Bowles, Auk xxviii, 1911, 175). These birds had probably bred at higher elevations and descended to the lower level after the young had been raised. J. Mailliard has found the Stephens Fox Sparrow to occur in winter at an elevation of about 1500 feet in the mountains of Marin County, and has taken specimens in that locality as early as the first part of September (Condor xiv, 1912, 63). This fact would seem to show that this species is one of the few land birds that winter in considerable numbers north of the northern limit of their breeding range.

289. (585f) ***Passerella iliaca insularis*** Ridgway. KADIAK FOX SPARROW.

Common winter visitant to the foothills and mesa lands, south to San Diego County. Fairly plentiful on the Santa Barbara Islands. C. B. Linton and myself found this bird not uncommon on Santa Cruz Island in November and December, 1907. Mr. Linton also took several specimens on San Clemente Island, between January 23 and April 1, 1907 (Condor x, 1908, 85).

290. (588b) ***Pipilo maculatus oregonus*** Bell. OREGON TOWHEE.

According to the A. O. U. *Check-List*, this species winters south to southern California. I have seen but one record for this locality, that of a female taken by C. B. Linton on San Clemente Island, December 4, 1908 (Condor xi, 1909, 194). Recently no. 16662 collection John E. Thayer; now no. 21273, Univ. Calif. Mus. Vert. Zool.

291. (588c) ***Pipilo maculatus clementae*** Grinnell. SAN CLEMENTE TOWHEE.

Common resident on San Clemente, Santa Catalina, Santa Cruz and Santa Rosa islands. Originally described from San Clemente (Auk xiv, 1897, 294). I have included this form solely because it has been accepted by the A. O. U. Committee. Although I have examined a great many specimens from the islands, I have never been able to discern any appreciable difference between it and the next. R. M. Perez took three sets of eggs on Catalina Island, April 13-16, 1911. They were all advanced in incubation.

292. (588d) ***Pipilo maculatus megalonyx*** Baird. SAN DIEGO TOWHEE.

Abundant resident of brushy regions, occurring in summer up to 7000 feet in the mountains. Nests mostly in May in the lower country and about a month later in the mountains. Antonin Jay found two fresh eggs near El Monte, Los Angeles County, April 11, 1897, and W. M. Pierce found two fresh eggs near Claremont, Los Angeles County, July 22, 1906.

293. (591.1a) ***Pipilo crissalis senicula*** Anthony. ANTHONY TOWHEE.

Abundant resident of the mesa and foothill regions, less common on the lowlands near the coast. May be found in summer up to about 5000 feet in the mountains. Breeds mostly in April and May. J. Grinnell found a brood of nearly fledged young in Pasadena, March 20, 1896, and noted fresh eggs in the same locality, late in July (Pub. 2, Pasadena Acad. Sci., 1898, 40). These dates are both exceptional.

294. (592.1) ***Oreospiza chlorura*** (Audubon). GREEN-TAILED TOWHEE.

Summer resident of the mountains from 5000 to 9000 feet altitude.

Occurs occasionally along the base of the mountains during migrations. Winters in small numbers at least as far north as San Bernardino. Breeds mostly in May. H. A. Gaylord took a specimen near Pasadena, April 4, 1896, and took another in the same locality, April 29, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 40). H. W. Marsden took a male at Witch Creek, San Diego County, September 25, 1909. During the winter of 1895-6, H. E. Wilder found a number of these birds near San Bernardino. Specimens were taken in January and February (Thurber, Auk XIII, 1896, 265). I found several nests of this bird at Bear Valley, 6750 feet in the San Bernardino Mountains, during June, 1907. They all contained young except one found on June 15, which held three addled eggs.

295. (596) **Zamelodia melanocephala** (Swainson). BLACK-HEADED GROS-BEAK.

Common summer resident of the lowlands and, locally, up to over 6000 feet in the mountain cañons. Arrives in late March and early April, and leaves in September. Eggs are generally deposited during late May and early June. J. Grinnell has noted the species at Pasadena from March 30 (1896) to September 22 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 40). H. Robertson saw a bird near Los Angeles, March 17, 1900. Extreme nesting dates are: Three eggs taken by H. Robertson near Los Angeles, April 28, 1897, and three eggs, incubation commenced, taken by Antonin Jay near Rivera, Los Angeles County, July 8, 1906.

296. (597a) **Guiraca caerulea lazula** (Lesson). WESTERN BLUE GROS-BEAK.

Tolerably common summer resident of the mesas and the willow-bordered streams and ponds of the lower country. Much less plentiful than formerly. Arrives in April and leaves mostly in September. Breeds most commonly in the latter part of May. J. Mailliard took two males on Santa Cruz Island, April 29, 1898 (Bull. Cooper Orn. Club 1, 1899, 44). J. E. Law took four slightly incubated eggs in the San Fernando Valley, Los Angeles County, May 11, 1907, and Antonin Jay took two eggs, incubation commenced, near Los Angeles, July 4, 1897.

J. Grinnell has recently given the name of *Guiraca caerulea salicarius* to our local form of blue grosbeak (Proc. Biol. Soc. Wash. XXIV, 1911, 163). This subspecies has not yet been acted upon by the A. O. U. Committee.

297. (599) **Passerina amoena** (Say). LAZULI BUNTING.

Common summer resident from the brush-covered mesas and foothills up to 7000 feet in the mountain cañons. Breeds mostly in May and early June. J. Grinnell has noted the species in the vicinity of Pasadena from April 4 (1896) to September 17 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 41). H. S. Swarth took an immature male near Los Angeles, September 18, 1899. Extreme nesting dates are: Three eggs, fresh, taken by E. D. Parker near Pasadena, April 30, 1895 (Grinnell, l. c.), and three slightly incubated eggs taken by A. I. McCormick near Los Angeles, June 23, 1895 (Avifauna I, 1895, 5).

298. (605) ***Calamospiza melanocorys*** Stejneger. LARK BUNTING.

Irregular visitant, mostly in winter and spring. J. Mailliard saw three birds at Santa Barbara, July 20, 1905 (Condor VII, 1905, 143). E. Simmons took an adult male at Newhall, Los Angeles County, May 3, 1897, and saw three others at the same time (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 41). H. S. Swarth took a female in the San Fernando Valley, Los Angeles County, December 13, 1901, and took a male in the same locality, January 16, 1902. Between that time and February 11, following, he saw several of the birds (Condor IV, 1902, 95). F. O. Johnson took an adult male near Riverside, February 23, 1888, and took three adult males in the same locality, April 21, following (Swarth, Condor XII, 1910, 108). H. E. Wilder has seen the species several times near Riverside. It was noted at Poway, San Diego County, by F. E. Blaisdell, May 25, 1886, and at El Cajon by N. S. Goss, May 16, 1884 (Belding, Land Bds. Pac. Dist., 1890, 180). L. Belding saw a flock of thirty or forty birds near National City, May 6, 1884, and took three males from a flock of about a dozen birds near San Diego, April 1, 1885. Mr. Belding also noted flocks in the latter locality, April 16 and 30, 1885 (Land Bds. Pac. Dist., 1890, 180). G. Holterhoff found Lark Buntings common near National City from the middle of April through May, 1884 (Auk I, 1884, 293).

299. (607) ***Piranga ludoviciana*** (Wilson). WESTERN TANAGER.

Common summer resident of the mountain cañons and coniferous forests. Most plentiful from 1500 to 8000 feet altitude. Breeds mostly in June. During the spring migration, appears numerous, but irregularly, on the mesas and lowlands, feeding in orchards and grain fields. I saw a bird at Nigger Slough, Los Angeles County, May 3, 1911. J. Grinnell records the extreme dates of arrival and departure in the vicinity of Pasadena as April 19 (1896) and September 30 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 41). J. H. Bowles reports seeing Tanagers all through the summer of 1910 in the dense live oaks in the small cañons back of Santa Barbara. He believes that they were undoubtedly breeding, although no nests were found (Auk XXVIII, 1911, 176). J. R. Pemberton found them common in summer in the Santa Ynez Mountains, Ventura County (Condor XII, 1910, 18). I found them plentiful in the San Bernardino Mountains during the summer of 1907. They were nest building the first week in June. Extreme nesting dates are: Three eggs, fresh, taken by R. Arnold in a cañon north of Pasadena, May 5, 1895 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 41), and three eggs, incubation advanced, taken by Antonin Jay in the same locality July 3, 1904.

300. (610a) ***Piranga rubra cooperi*** Ridgway. COOPER TANAGER.

Rare straggler. According to C. P. Streater, a specimen was secured at Santa Barbara by Mr. Dodge in the spring of 1885 (Orn. & Ool. XI, 1886, 52). A female, now no 16660 collection J. E. Thayer, was taken by H. Linton on San Clemente Island, October 11, 1907 (C. B. Linton, Condor X, 1908, 85).

301. (611a) ***Progne subis hesperia*** Brewster. WESTERN MARTIN.

Fairly common summer resident, locally, mostly in timbered regions of the

mountains and higher foothills. Of late years, seems to be increasing in numbers in the lowland towns, nesting in crevices in buildings. Leaves mostly in September and arrives in late March and the month of April. Several seen by H. S. Swarth at Long Beach, Los Angeles County, March 24, 1904. Recorded by B. W. Evermann as a moderately common summer resident of Ventura County (Auk III, 1886, 183), and found breeding at Santa Paula, Ventura County, by H. C. Burt. P. I. Osburn reports several pairs nesting yearly in crevices in the Hotel Maryland in Pasadena. This colony numbered about thirty pairs in 1909 (Condor XI, 1909, 208). Two sets, of five eggs each, were taken by R. M. Perez and G. K. Snyder from under the eaves of a school house in Los Angeles, June 2 and 17, 1910 (Condor XII, 1910, 133). J. Dixon took four fresh eggs at San Onofre, San Diego County, May 30, 1904, and noted several other pairs of birds in the same locality (Condor VIII, 1906, 95). C. S. Sharp found a pair breeding at Escondido (Condor IX, 1907, 89).

302. (612) **Petrochelidon lunifrons lunifrons** (Say). CLIFF SWALLOW.

Abundant summer resident from the lowlands up to 7500 feet in the mountains. Breeds, ordinarily, from April to July, at least two broods being raised in a season. Earliest in the spring in Los Angeles County noted by W. M. Pierce in San Antonio Cañon, February 15, 1904. Latest in the fall noted by J. Grinnell at Long Beach, September 7, 1895 (Pub. 2, Pasadena Acad. Sci. 1898, 41). Sometimes remains considerably later, however, as E. Davis found a nest containing three fresh eggs on the coast of Orange County, September 1, 1894 (Nidologist II, 1894, 30). J. G. Cooper noted the species at San Diego from March 15 to October 5 (1862) (Lands Bds. Cal., 1870, 105). I observed them nest building on a barn near Compton, Los Angeles County, March 26, 1910, and found them nesting abundantly on the trunks of pine trees at Bear Valley, San Bernardino Mountains, in June, 1907.

303. (613) **Hirundo erythrogastra** Boddaert. BARN SWALLOW.

Common over the lowlands and foothill country during migrations, which occur mostly in April and September. A few remain through the summer and nest under bridges or in caves along the coast and on the Santa Barbara Islands. Antonin Jay took two sets, of four eggs each, near Santa Monica, Los Angeles County, June 12, 1898.

304. (614) **Iridoprocne bicolor** (Vieillot). TREE SWALLOW.

Common in spring and summer in the willow regions of the lowlands. The majority migrate south in the fall, but a few remain through the winter. They become numerous in the spring about the middle of March and breed, ordinarily, from the latter part of April through May. Extreme nesting records are: Four eggs, fresh, taken by H. J. Lelande near El Monte, Los Angeles County, April 15, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 42), and four eggs, fresh, taken by Antonin Jay near Santa Monica, July 4, 1903.

305. (615) **Tachycineta thalassina lepida** Mearns. NORTHERN VIOLET-GREEN SWALLOW.

Common summer resident of the Transition zone in the mountains and,

locally, in the oak regions of the mesas. Plentiful over the lower country during migrations. Breeds from late May through June. Noted by J. Grinnell at Pasadena from February 16 (1895) to October 20 (1894) (Pub. 2, Pasadena Acad. Sci., 1898, 42). Although this species is principally confined to the mountains during the breeding season, H. C. Burt reports it a fairly common resident of the foothills near Santa Paula, Ventura County; and I have found it breeding commonly in the oak regions of Santa Barbara County and in the San Jacinto Valley, Riverside County. H. Robertson took four eggs in Millard's Cañon, near Pasadena, June 10, 1902.

306. (616) **Riparia riparia** (Linnaeus). BANK SWALLOW.

Common summer resident in suitable localities in the lowlands. Arrives mostly in March and leaves in September. Breeds mainly in June and early July. Antonin Jay took four eggs, incubation advanced, near Huntington Beach, Orange County, May 27, 1906, and I took four sets of fresh eggs near Whittier, Los Angeles County, July 4, 1894.

307. (617) **Stelgidopteryx serripennis** (Audubon). ROUGH-WINGED SWALLOW.

Fairly common summer resident of the foothill and mesa regions. Most numerous during migrations in March and April and in October. Breeds mostly in May. H. C. Burt took six eggs near Santa Paula, Ventura County, May 5, 1910, and H. A. Gaylord took four fresh eggs near Pasadena, May 30, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 42). On May 14, 1906, I noted two pairs of these birds nesting in crevices in a large retaining wall in the central part of Los Angeles.

308. (619) **Bombycilla cedrorum** Vieillot. CEDAR WAXWING.

Common, but irregular, winter visitant. At times, usually during the spring months, is abundant, feeding in flocks on the berries of the pepper trees and on the buds of the willows in the lower country. Noted by J. Grinnell in the vicinity of Pasadena from September 14 (1897) to May 17 (1895) (Pub. 2, Pasadena Acad. Sci., 1898, 42). One bird seen by Mr. Grinnell on San Clemente Island, May 31, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 19). Small flock seen by H. S. Swarth near Los Angeles, August 31, 1900; and a pair seen by H. J. Lelande near South Pasadena, June 16, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 42). Several birds seen by C. H. Danielson near San Diego, May 14, 1884, and noted by F. E. Blaisdell in the Poway Valley, San Diego County, as late as May 18 (Belding, Land Bds. Pac. Dist., 1890, 195).

309. (620) **Phainopepla nitens** (Swainson). PHAINOPEPLA.

Common summer resident of the Lower Sonoran zone of the mesas, dry washes and cañons of the foothill region. The majority go south in October and return in April, but a few winter at least as far north as Ventura County. Breeds mostly in June. J. G. Cooper took a specimen in the Cajon Pass, San Bernardino County, December 7, 1860 (Am. Nat. III, 1870, 185), and, according to E. C. Thurber, a small flock passed the winter of 1895-6 in the Santa

Ana River bottom near San Bernardino (Auk XIII, 1896, 265). L. H. Miller saw a male at Riverside, December 2, 1911. H. S. Swarth has noted *Phainopeplas* in Westlake Park, Los Angeles, on several occasions in mid-winter and saw one bird near Los Angeles, March 12, 1899. J. S. Appleton has noted the species on several occasions during the winter months in the Simi Valley, Ventura County. I saw a bird in this locality, February 25, 1912, and the following day I took a male in the same vicinity. Its testes were much enlarged and it would undoubtedly have bred within a short time. Extreme nesting dates for Los Angeles County are: Two slightly incubated eggs taken by H. A. Gaylord near Pasadena, May 4, 1897, and two fresh eggs taken by Mr. Gaylord in the same locality, July 28, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 43). J. S. Appleton took a set of eggs in the Simi Valley, Ventura County, in late March.

310. (622b) ***Lanius ludovicianus gambeli*** Ridgway. CALIFORNIA SHRIKE.

Abundant resident from the coast to the base of the mountains. Breeds mostly from late March to the latter part of May. Extreme nesting dates are: Five eggs, fresh, taken by H. J. Lelande near Pasadena, February 14, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 43), and four eggs, incubation advanced, taken by W. M. Pierce near Claremont, Los Angeles County, July 5, 1903.

The shrikes that occur along the southeastern border of the coastal slope of southern California are variously intermediate between this form and *L. l. excubitorides*, some specimens approaching the latter very closely.

311. (622c) ***Lanius ludovicianus anthonyi*** Mearns. ISLAND SHRIKE.

This insular form, described from specimens taken by R. H. Beck on Santa Cruz Island in May, 1897 (Auk xv, 1898, 261), is a fairly common resident on Santa Cruz Island where it is found mostly around the ranch houses and cultivated lands. It is resident on San Clemente Island but is less plentiful than on Santa Cruz. It is found on Santa Rosa Island but I have no information as to its abundance. One bird was seen there by H. J. Lelande and O. W. Howard, June 8, 1910. H. Robertson and V. W. Owen saw a pair of these birds and found a nest containing young, on Anacapa Island, June 4, 1899, but when I visited this island in June, 1910, none were seen. It is resident on Catalina Island in small numbers.

R. H. Beck took four sets of eggs on Santa Cruz Island, May 6 to 11, 1897 (Mearns, Auk xv, 1898, 264), and J. Mailliard took two sets of eggs and found several nests in course of construction on the same island in late April, 1898 (Bull. Cooper Orn. Club. 1, 1899, 41). C. B. Linton noted the following nests on San Clemente Island in March, 1907. One downy young and two infertile eggs, March 8; five eggs, two-thirds incubated, March 7; and five eggs, fresh, March 19 (Condor x, 1908, 85). J. Grinnell took five slightly incubated eggs on the same island, April 2, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 19). R. M. Perez took five fresh eggs on Catalina Island, April 15, 1911.

312 (627a) ***Vireosylva gilva swainsoni*** (Baird). WESTERN WARBLING VIREO.

Common summer resident, locally, from the base of the mountains up to about 8500 feet in the cañons. Common migrant over the lower country. Breeds mostly in May and June. J. Grinnell has noted this bird near Pasadena as early as March 23 (1895) (Pub. 2, Pasadena Acad. Sci., 1898, 43), and H. S. Swarth took a female near Los Angeles, October 4, 1901. H. A. Gaylord took three slightly incubated eggs near Pasadena, May 9, 1894, and J. Grinnell took three fresh eggs on Pine Flats, 6000 feet altitude in the San Gabriel Range, July 2, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 43). F. E. Blaisdell took a nest and eggs at Poway, San Diego County, June 11, 1883 (Belding, Land Bds. Pac. Dist., 1890, 199).

313. (629a) **Lanivireo solitarius cassini** (Xantus). CASSIN VIREO.

Common along the foothills and on the mesas during migrations, which occur in April and in late September and early October. Breeds numerous in the mountain cañons from the foothills up to about 7000 feet, nesting in cottonwoods and white oaks in May and June. Noted by H. S. Swarth migrating near Los Angeles, the first in the spring, April 3 (1901), the last in the fall, October 13 (1898). Found common in summer by J. R. Pemberton in Matilija Cañon, Rincon Creek and other localities in the coast range of Ventura County (Condor XII, 1910, 18). Extreme nesting records by J. Grinnell are: Five eggs, incubation advanced, taken near Pasadena, May 11, 1895, and three eggs, incubation slight, taken in the same locality, June 26, 1893 (Pub. 2, Pasadena Acad. Sci., 1898, 44).

314. (632) **Vireo huttoni huttoni** Cassin. HUTTON VIREO.

Common resident of the foothill and mesa regions, also the larger islands of the Santa Barbara group. Fairly plentiful over the lower country in winter. Breeds, ordinarily, from early April through May. Extreme nesting records are: Three eggs, fresh, taken by J. Grinnell near Pasadena, March 7, 1896 (Pub. 2, Pasadena Acad. Sci., 1898, 44), and four eggs, fresh, taken by H. A. Gaylord in the same locality, July 15, 1894 (Avifauna I, 1895, 27).

315. (633a) **Vireo belli pusillus** Coues. LEAST VIREO.

Common in summer in the willow regions from the coast to the foothills. Arrives in late March and early April and leaves mostly during the latter part of August. Breeds generally in the latter part of May. Noted by H. Robertson near Los Angeles as early as March 11 (1900), and by J. Grinnell at Pasadena as late as September 8 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 44). Extreme nesting records by H. Robertson near Los Angeles are: Three newly hatched young found April 1, 1900, and set of three eggs taken June 20, 1898.

316. (634) **Vireo vicinior** Coues. GRAY VIREO.

Fairly common summer resident of the foothills from San Diego County north along the San Jacinto and San Bernardino ranges to Cajon Pass, San Bernardino County. Found by F. Stephens to be not uncommon in the Cajon Pass, June 4 and 5, and July 1, 1886. A nest found on June 4 contained four slightly incubated eggs. The nest was built in the chaparral about four feet from the ground (Morcom, Bull. Ridg. Orn. Club. No. 2, 1887, 51). Mr. Stephens also took a nest and four eggs about ten miles east of Riverside, April 26, 1889

(Auk VII, 1890, 159). Mr. Stephens states that the species is not uncommon in summer at Campo and Julian, San Diego County, from the lower limit of pines down to about 3000 feet altitude. In 1876 he noted its first appearance at Campo about March 24 (Bull. Nutt. Orn. Club III, 1878, 42).

317. (636) **Mniotilta varia** (Linnaeus). BLACK AND WHITE WARBLER.

One record, that of an immature female taken by H. A. Gaylord in the Arroyo Seco, near Pasadena, October 2, 1895 (Nidologist III, 1896, 106). Now no. 5022 collection F. S. Daggett.

318. (645a) **Vermivora rubricapilla gutturalis** (Ridgway). CALAVERAS WARBLER.

Common spring and fall migrant from the lowlands up to at least 9800 feet in the mountains. Noted by J. Grinnell in spring in the vicinity of Pasadena as early as April 4 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 44), and found by H. S. Swarth to be fairly common near Los Angeles May 3 to 7 and May 12, 1900. Also noted by Mr. Swarth near Los Angeles in the fall from September 13 (1897) to October 8 (1896) (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 44). According to J. Grinnell, this species makes its appearance in the San Bernardino Mountains, in the fall, during the latter part of August. The first noted were at Cactus Flat, 6000 feet, August 17, 1905. They were common among the tamarack pines on the summit of Sugarloaf, 9800 feet, August 19, and at Bluff Lake, 7500 feet, from August 30 to September 3, the species was fairly common in the willow thickets (Univ. Calif. Publ. Zool. v, 1908, 110).

319. (646) **Vermivora celata celata** (Say). ORANGE-CROWNED WARBLER.

Probably a regular migrant in small numbers. Most common in the fall. Occasional in winter as far north as Riverside. Specimens taken as follows: Male by J. Grinnell at Pasadena, September 3, 1896 (Swarth, Condor III, 1901, 145). Several specimens by H. S. Swarth near Los Angeles, in the fall from September 17 (1900) to October 30 (1899) (Condor III, 1901, 17). Two females by J. E. Law in the San Fernando Valley, Los Angeles County, April 15 and 22, 1905, and a female by H. W. Marsden at Witch Creek, San Diego County, April 24, 1909. One winter record, that of a male taken by F. O. Johnson at Riverside, December 25, 1888 (Swarth, Condor XII, 1910, 108).

320. (646a) **Vermivora celata lutescens** (Ridgway). LUTESCENT WARBLER.

Common spring and fall migrant from the coast to at least 9800 feet in the mountains. A few remain through the summer and breed in the cañons and on brushy mountain sides. Migrations occur mainly in September and March. According to W. Brewster, winters as far north as San Diego (Bull. Mus. Comp. Zool. Harv. Coll. XLI, 1902, 179). May occasionally winter even farther north, as H. S. Swarth took a specimen near Los Angeles, November 20, 1901, and took several in the same locality, February 21, 1904. J. H. Bowles records it as a common summer resident near Santa Barbara. He has found it nesting not more than two miles from the ocean and at an elevation of less than 400 feet (Auk XXVIII, 1911, 177). J. E. Law took four half-incubated eggs near Lankershim,

Los Angeles County, April 23, 1905, and in April, 1902, I found it breeding commonly in a cañon near Monrovia, the same county. I took three slightly incubated eggs April 27, and another set of three, also slightly incubated, April 29. I have been unable to find it nesting in this locality since 1902, although I have searched for it on several occasions, so it is probably irregular in its nesting localities.

321. (646b) **Vermivora celata sordida** (C. H. Townsend). DUSKY WARBLER.

Common summer resident on the larger islands of the Santa Barbara group and on the mainland coast in the vicinity of San Diego. A few winter on the islands but the majority migrate to the mainland, where they may be found from the middle of July until April, in the willow thickets of the lowlands and the oak regions of the mesas. The type of this sub-species was taken by C. H. Townsend on San Clemente Island, January 25, 1890 (Proc. U. S. Nat. Mus. XIII, 1890, 139). It is most abundant on the islands of Santa Catalina, San Clemente and Santa Cruz. On the latter island, C. B. Linton and myself found it fairly common in November and December, 1907.

O. W. Howard found several nests containing eggs and young on Catalina Island in April and May, 1905 (Warbler, ser. 2, II, 1906, 9), and R. M. Perez took several sets on the same island in late April, 1911. Mr. Howard also took four slightly incubated eggs on Santa Cruz Island, April 27, 1906, and H. J. Lelande took four slightly incubated eggs on Anacapa Island, April 6, the same year. A. M. Ingersoll informs me that the Dusky Warbler breeds plentifully at Point Loma and Coronado Beach, near San Diego. He has found at least a dozen nests in these localities, all of which were within a mile of the salt water.

322. (647) **Vermivora peregrina** (Wilson). TENNESSEE WARBLER.

One record, that of an immature female taken by J. Grinnell in the Arroyo Seco, near Pasadena, September 27, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 45). Now no. 3177 collection J. Grinnell.

323. (652b) **Dendroica aestiva rubiginosa** (Pallas). ♂ ALASKA YELLOW WARBLER.

Occasional in migrations. E. A. Mearns took three specimens at Mountain Springs, San Diego County, May 11, 1894 (Oberholser, Auk XIV, 1897, 78). This locality is on the desert side of the mountains, about half way up the eastern slope. H. W. Marsden took specimens at Witch Creek, San Diego County, during 1904, as follows: Female, May 3; male, May 6; male, May 11, and male, October 12 (Bishop, Condor VII, 1905, 143). Now nos. 10901, 10902, 10903. 11811 collection L. B. Bishop.

324. (652c) **Dendroica aestiva brewsteri** Grinnell. CALIFORNIA YELLOW WARBLER.

Common summer resident in wooded localities, especially along streams, from the lowlands up to at least 5200 feet in the mountain cañons. Occurs at much higher altitudes during the fall migration. Breeds mostly in late May and early June. Noted by H. S. Swarth near Los Angeles from April 1 (1899) to October 14 (1901). Extreme nesting dates are: Four eggs, fresh, taken by

Antonin Jay near Compton, Los Angeles County, May 5, 1895, and three eggs, fresh, taken by J. Grinnell near Pasadena, June 26, 1893 (Pub. 2, Pasadena Acad. Sci., 1898, 44).

325. (655) ***Dendroica coronata*** (Linnaeus). MYRTLE WARBLER.

Common winter visitant. South at least to Los Angeles County and San Clemente Island. Noted by H. S. Swarth in the vicinity of Los Angeles, from November 13 (1896) to March 1 (1901). J. Grinnell took an adult female on Santa Barbara Island, May 15, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 7), and C. B. Linton found the species fairly common in winter on San Clemente (Condor XI, 1909, 194).

326. (656) ***Dendroica auduboni auduboni*** (J. K. Townsend). AUDUBON WARBLER.

Summer resident from 4000 to more than 10,000 feet altitude in the mountains. Breeds mostly in June. Very abundant and generally distributed throughout the lowlands in winter. Appears in the lower country about the first week in September and remains well into April. J. Grinnell found a nest containing three eggs at about 4000 feet altitude in the San Bernardino Mountains, June 21, 1905, and took four fresh eggs at Dry Lake, 9000 feet altitude, June 14, 1906 (Univ. Calif. Publ. Zool. v, 1908, 112-114).

327. (657) ***Dendroica magnolia*** (Wilson). MAGNOLIA WARBLER.

Rare migrant. Male taken by J. Grinnell on Santa Barbara Island, May 15, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 7). Immature female taken by H. S. Swarth near Los Angeles, October 21, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 45), and another immature female, taken by Mr. Swarth in the same locality, October 5, 1901 (Condor III, 1901, 145). So far as I know, these are our only records.

328. (665) ***Dendroica nigrescens*** (J. K. Townsend). BLACK-THROATED GRAY WARBLER.

Common summer resident of the mountains, from the foothills up to at least 6000 feet. Occurs in considerable numbers on the mesas and lowlands during migrations. Spring migration, late March and the month of April; fall migration, late September and the month of October. Earliest in the spring in Los Angeles County: male taken by J. Grinnell near Pasadena, March 23, 1895 (Pub. 2, Pasadena Acad. Sci., 1898, 46). Latest in the fall: female taken by H. S. Swarth near Los Angeles, October 30, 1899 (Condor II, 1900, 91). J. G. Cooper noted the species in spring migration at San Diego, April 20, 1862 (Land Bds. Cal., 1870, 91), and L. Belding took a male in the same locality, May 3, 1885 (Land Bds. Pac. Dist., 1890, 212). In June, 1909, J. R. Pemberton saw this bird frequently along Rincon Creek, Ventura County, from Stanley Park, elevation 400 feet, to the summit of the Santa Ynez Mountains, 4900 feet. A nest containing young was found at the summit on June 23 (Condor XII, 1910, 18). Extreme nesting records are: Nest containing three small young, noted by J. Grinnell in the mountains north of Pasadena, May 19, 1895; and three eggs, considerably incubated, taken by R. Arnold in the same locality, June 26, 1896 (Pub. 2, Pasadena Acad. Sci., 1898, 46).

329. (668) **Dendroica townsendi** (J. K. Townsend). TOWNSEND WARBLER.

Fairly common migrant, occasionally remaining through the winter. Spring migration, April and early May; fall migration, October and early November. H. S. Swarth has noted the species frequently during migrations in the vicinity of Los Angeles. He took a male in the Arroyo Seco, near Pasadena, as late as May 18 (1899). He also took a female in Santa Monica Cañon, Los Angeles County, December 21, 1900, and another female in the Cahuenga Hills, February 14, 1902. J. Grinnell found the birds fairly common near Pasadena from April 22 to May 13, 1897, and took one specimen in the same locality, October 7, 1895. He also saw several birds on Mt. Wilson, December 12, 1896, and took a specimen in that locality, January 27, 1894 (Pub. 2, Pasadena Acad. Sci., 1898, 46). W. P. Taylor found it common at Pasadena during January, 1909 (Condor xi, 1909, 69).

F. O. Johnson took a specimen at Riverside, December 31, 1888 (Swarth, Condor xii, 1910, 108). N. S. Goss noted it at Julian, San Diego County, April 17, 1884, and L. Belding took a male near San Diego, April 20, the same year (Land Bds. Pac. Dist., 1890, 213). F. Stephens found it in small numbers at Campo, San Diego County, April 27, 1877 (Bull. Nutt. Orn. Club viii, 1883, 188), and, according to J. G. Cooper, small flocks arrived at San Diego about April 20, 1862 (Land Bds. Cal., 1870, 92). J. Grinnell and H. A. Gaylord took two females on Santa Barbara Island, May 15, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 7), and C. B. Linton took a specimen on San Clemente in December, 1908 (Condor xi, 1909, 194).

330. (669) **Dendroica occidentalis** (J. K. Townsend). HERMIT WARBLER.

Fairly common migrant, though irregularly so. Most plentiful in spring. Noted by J. Grinnell at Pasadena from April 22 to May 17, and one bird seen by H. S. Swarth near Los Angeles, September 10, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 46). Mr. Swarth has also noted it in the spring near Los Angeles from April 17 (1904) to May 16 (1900). He also saw one or two birds on Mt. Wilson, May 20, 1898. G. F. Morcom took a female near Redondo, Los Angeles County, May 10, 1901. J. Grinnell took an adult male at Bluff Lake, 7500 feet altitude in the San Bernardino Mountains, September 3, 1905 (Univ. Calif. Publ. Zool. v, 1908, 115), and H. E. Wilder saw a flock at Little Bear Valley in late July, 1910. It was noted commonly in migration at Campo, San Diego County, by F. Stephens, April 27, 1877 (Bull. Nutt. Orn. Club viii, 1883, 188). N. S. Goss found it plentiful at Julian, San Diego County, April 25, 1884, and L. Belding saw three or four birds at Tia Juana, on the Mexican boundary, April 30 and May 2, 1885 (Land Bds. Pac. Dist., 1890, 215). During the last week in April, 1872, J. G. Cooper found it quite common in company with the two preceding species, in the Cuyamaca Mountains, San Diego County, between 1500 and 4000 feet altitude (Baird, Br. & Ridg., N. Am. Land Bds. iii, 1874, 506). H. A. Gaylord took a female on Santa Barbara Island, May 14, 1897, and saw several more the same day (Grinnell, Pub. 1, Pasadena Acad. Sci., 1897, 7).

331. (675a) **Seiurus noveboracensis notabilis** Ridgway. GRINNELL WATER-THRUSH.

Rare migrant. So far noted only in the fall, as follows: Bird of the year taken by J. Grinnell at Cactus Flat, 6000 feet altitude on the desert slope of the San Bernardino Mountains, August 16, 1905 (Condor ix, 1907, 60). Now no. 7157 collection J. Grinnell. Female taken by C. B. Linton near National City, San Diego County, September 29, 1906 (Condor ix, 1907, 60). Now no. 16661 collection J. E. Thayer. Specimen picked up dead under an electric light mast in the business section of San Diego, September 11, 1887, and presented to the late Walter Bryant by A. M. Ingersoll (Keeler, Zoe i, 1891, 371).

332. (680) **Oporornis tolmiei** (J. K. Townsend). MACGILLIVRAY WARBLER.

Common migrant from the foothills to at least 8500 feet in the mountains. Occasional to the lower country, mostly during the fall migration. Noted in spring in the vicinity of Pasadena by J. Grinnell as early as April 4 (1896), and by H. A. Gaylord as late as May 13 (1896). Noted in the fall by H. S. Swarth near Los Angeles from September 4 (1897) (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 46) to October 24 (1899) (Condor ii, 1900, 91). Mr. Swarth also saw a female near Los Angeles, June 4, 1898, and J. E. Law took a male near Pomona, May 22, 1901. J. Grinnell found the species common in the San Bernardino Mountains, from 7500 to 8500 feet altitude, from August 19 to September 3, 1905 (Univ. Calif. Publ. Zool. v, 1908, 116). F. E. Blaisdell noted it in spring at Poway, San Diego County, from March 28 (1885) to the middle of May (1884) (Belding, Land Bds. Pac. Dist., 1890, 216).

333. (681c) **Geothlypis trichas arizela** Oberholser. PACIFIC YELLOW-THROAT.

Common resident of the marshes and damp meadow lands, from the coast to the base of the mountains. Breeds mainly in April and May. Extreme nesting dates are: Four eggs, fresh, taken by H. J. Lelande near Pasadena, April 7, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 46), and three eggs, fresh, taken by Antonin Jay at Nigger Slough, Los Angeles County, July 9, 1905.

334. (683a) **Icteria virens longicauda** Lawrence. LONG-TAILED CHAT.

Common summer resident in the willow regions of the lowlands. Occurs in small numbers along the foothills during migrations. Arrives in April and leaves mostly in September. Breeds most plentifully in late May and early June. W. M. Pierce saw this species in San Antonio Cañon, Los Angeles County, April 1, 1900, and H. S. Swarth took an immature female at Los Angeles, October 7, 1897. Extreme nesting records are: Three eggs taken by H. Robertson near Los Angeles, May 4, 1898, and three eggs, also taken by Mr. Robertson, in the same locality, June 25, the same year.

335. (685a) **Wilsonia pusilla pileolata** (Pallas). PILEOLATED WARBLER.

Occasional in migrations. The following specimens of this form, all taken at Pasadena, are in the collection of F. S. Daggett: Male taken April 29, 1897; female taken May 1, 1896, and female taken September 22, 1896 (Grinnell, Condor v, 1903, 80). J. Grinnell took five specimens on Santa Barbara Island, May 14-16, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 8).

336. (685b) **Wilsonia pusilla chryseola** Ridgway. GOLDEN PILEOLATED WARBLER.

Abundant summer resident from the lowlands to at least 8500 feet in the mountains. Rare in winter. Breeds commonly in the willow regions in May, later in the mountains. Noted by J. Grinnell near El Monte, Los Angeles County, from February 16 (1895) to October 27 (1894) (Pub. 2, Pasadena Acad. Sci., 1898, 47). H. S. Swarth saw a bird near Los Angeles, at least once a week from November 11, 1899, until the end of February, 1900 (Condor II, 1900, 31). J. Grinnell found the species common and apparently breeding, in willow thickets at the head of the south fork of the Santa Ana River, 8000 to 8500 feet altitude in the San Bernardino Mountains, June 27 to 30, 1905 (Univ. Calif. Publ. Zool. v, 1908, 34). Extreme nesting dates in the lower country are as follows: Four eggs, fresh, taken by Antonin Jay near El Monte, Los Angeles County, April 21, 1907, and three eggs, incubation slight, taken by J. J. Schneider near Anaheim, Orange County, July 2, 1899 (Condor II, 1900, 34).

337. (687) **Setophaga ruticilla** (Linnaeus). REDSTART.

One record, that of a female found dead near Pasadena by P. I. Osburn, December 27, 1905 (Condor XI, 1909, 102).

338. (697) **Anthus rubescens** (Tunstall). PIPIT.

Abundant winter visitant. Often seen in large flocks on ploughed fields and pasture lands. Noted by J. Grinnell near Pasadena as early as August 29 (1895) (Pub. 2, Pasadena Acad. Sci., 1898, 47), and by L. Belding at San Diego as late as April 23 (1884) (Land Bds. Pac. Dist., 1890, 223). One bird seen by H. S. Swarth at Los Angeles, May 1, 1899 (Condor II, 1900, 40).

339. (701) **Cinclus mexicanus unicolor** Bonaparte. DIPPER.

Breeds along mountain streams from 2000 to 9000 feet altitude. In winter follows the streams down as low as the foothills. Breeds mostly in late April and the first part of May. According to L. Belding does not occur in San Diego County, owing to the absence of suitable streams. R. Arnold took four slightly incubated eggs in Eaton Cañon, north of Pasadena, April 22, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 47). In June, 1907, I found this bird common along Bear Creek and other streams in the San Bernardino Mountains. Several nests were examined, all of which contained young birds.

340. (702) **Oreoscoptes montanus** (J. K. Townsend). SAGE THRASHER.

Breeds in some of the high mountain valleys in northeastern Ventura County. In winter descends to the brushy foothills and mesas, south at least to San Diego. Eggs are generally deposited in May. One specimen taken by B. W. Evermann near Ventura, March 12, 1881 (Auk III, 1886, 185). Noted by H. S. Swarth fairly commonly in the San Fernando Valley, Los Angeles County, from January 20 (1902) to April 18 (1900), and particularly numerous January 25, 1899 (Condor II, 1900, 89), and February 11 and 20, 1902. Found by H. J. Lelande to be very plentiful on brushy hillsides near Perris, Riverside County, January 11, 1910. Five specimens, now in the University

of California Museum of Vertebrate Zoology, were taken by F. O. Johnson at Riverside, in January and February (Swarth, Condor xii, 1910, 108). L. Belding took two specimens near San Diego in May, 1881 (Evermann, Auk iii, 1886, 185), and Bradford Torrey saw a bird in a San Diego park, February 3-16, 1908 (Condor xi, 1909, 174). O. W. Howard found about a dozen nests of this bird at an elevation of about 5000 feet, in Lockwood Valley, Ventura County, near Mt. Piños, during the month of May, 1903. Two sets, of five eggs each, and two sets of six eggs each, were taken May 13 and 14.

341. (703a) **Mimus polyglottos leucopterus** (Vigors). WESTERN MOCKINGBIRD.

Common resident from the coast to the base of the mountains, also on the larger Santa Barbara Islands. Breeds mostly during the latter part of April and the month of May. Extreme nesting records are: Three eggs, fresh, taken by Antonin Jay at Los Angeles, March 31, 1895, and three eggs, incubation advanced, also taken by Mr. Jay, near Monrovia, Los Angeles County, June 23, 1904.

This is one bird with which civilization seems to agree. It is apparently much more plentiful at the present time than it was when the country was less settled. It is partial to orchards and parks and the ornamental trees along the streets of cities and towns.

342. (710) **Toxostoma redivivum** (Gambel). CALIFORNIA THRASHER.

Common resident of brushy localities from the lowlands up to about 6000 feet in the mountains. Most abundant in the foothill and mesa regions. Breeds mainly in March and April, but sets are occasionally taken much earlier. J. Grinnell took three eggs, incubation begun, near Azusa, Los Angeles County, December 15, 1899 (Condor ii, 1900, 19). H. J. Lelande took two considerably incubated eggs near Pasadena, January 27, 1897, and H. A. Gaylord took three fresh eggs in the same locality, June 26, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 47).

343. (711) **Toxostoma lecontei lecontei** Lawrence. LECONTE THRASHER.

A desert species, occasionally found west of the mountains. According to M. F. Gilman, the Leconte Thrasher is a regular resident in small numbers as far west as Banning, Riverside County. In that vicinity he has noted nests containing eggs from February 17 (1899) until June, most commonly in late March and early April (Condor vi, 1904, 95-98). F. Stephens saw a bird near Julian, San Diego County, late in August, 1911.

344. (713) **Heleodytes brunneicapillus couesi** (Sharpe). CACTUS WREN.

Common resident, locally, on cactus covered mesas and washes, north to Ventura County. Much less plentiful in winter than in summer. Breeds mostly in April and May. Reported by B. W. Evermann, in the early 80's, as a common resident of Ventura County, wherever cactus was abundant (Auk iii, 1886, 185). H. C. Burt took a set of eggs near Santa Paula in 1905, but has been unable to find the species there since that time. J. S. Appleton finds it a common resident of the Simi Valley, southern Ventura County. Extreme nest-

ing records are as follows: Five eggs, fresh, taken by H. J. Lelande in the San Fernando Valley, Los Angeles County, March 13, 1897 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 48), and four eggs, incubation commenced, taken by Antonin Jay near Monrovia, Los Angeles County, July 9, 1904.

345. (713a) **Heleodytes brunneicapillus bryanti** Anthony. BRYANT CACTUS WREN.

According to F. Stephens, the habitat of this form is central and northern Lower California. On examination of a large series of cactus wrens taken by A. W. Anthony in southern and Lower California, he found that there were more specimens of *couesi* taken south of the Mexican line than there were of *bryanti* taken north of it. There were, however, two specimens, a male and female from San Diego, which he assigned to this race (Condor VI, 1904, 51).

346. (715) **Salpinctes obsoletus obsoletus** (Say). ROCK WREN.

Common resident in suitable localities from the coast to the summits of the highest mountains. Also resident on all the Santa Barbara Islands except San Nicolas. Breeds mostly in April in the lower country, later in the mountains. Noted by J. Grinnell at the extreme summit of San Gorgonio Peak, over 11,000 feet altitude, in the San Bernardino Mountains, June 18, 1905 (Univ. Calif. Publ. Zool. v, 1908, 118). O. W. Howard took several sets of eggs on Catalina Island, April 1, 1905, and took seven slightly incubated eggs on Anacapa Island, April 30, 1906. Antonin Jay took five fresh eggs near Whittier, Los Angeles County, May 7, 1902.

347. (715a) **Salpinctes obsoletus pulverius** Grinnell. SAN NICOLAS ROCK WREN.

Confined to San Nicolas Island, where it is a common resident. Described by J. Grinnell in Auk xv, 1898, 238-9. On comparing my series of specimens taken on San Nicolas Island with others from the mainland and the other islands of the Santa Barbara group, I must confess that I have been unable to discern any appreciable difference between them. C. B. Linton noted a pair of these birds carrying nesting material into a crack under the eaves of a store house on San Nicolas Island, April 14 and 15, 1911 (Condor XIII, 1911, 109). On the 9th of June, following, I visited this nest accompanied by Mr. Linton. On removing some shingles from the roof of the house, we found that the nest contained four young birds, about half grown. On June 24, 1911, Mr. Linton found a nest in a cavity in a sandstone boulder, containing four eggs on the point of hatching (Auk XXVIII, 1911, 489). On the same day I found a nest in a crevice in a sandstone cliff, which contained one fresh egg. These were probably second layings, as full-grown young were plentiful all over the island at this date.

348. (717b) **Catherpes mexicanus punctulatus** Ridgway. DOTTED CANYON WREN.

Tolerably common resident from the foothills up to about 7000 feet in the mountains, south to Lower California. Most plentiful in the Upper Sonoran zone. Breeds generally from the latter part of April through May. L. B.

Bishop has several specimens taken by H. W. Marsden at Witch Creek, San Diego County, in winter, and L. Belding noted the species in Mission Cañon, near San Diego, in the 80's (Land Bds. Pac. Dist., 1890, 230). C. B. Linton took a male on Santa Cruz Island, December 19, 1907 (Condor x, 1908, 128). L. Peyton found a nest containing three young, near Sespe, Ventura County, June 10, 1910. H. Robertson took a set of six eggs near Los Angeles, April 16, 1900, and J. Grinnell took six fresh eggs in the Arroyo Seco, near Pasadena, June 23, 1893 (Pub. 2, Pasadena Acad. Sci., 1898, 48).

349. (719d) **Thryomanes bewicki charienturus** Oberholser. SAN DIEGO WREN.

Common resident of the foothill oak region and brushy mountain sides up to about 6000 feet. The majority descend to the lower country in winter, where they may be found commonly on brush and grass lands. Breeds most plentifully in April and May. Extreme nesting dates by W. M. Pierce near Claremont, Los Angeles County, are: Six eggs, incubation slight, taken March 9, 1905, and six eggs, partly incubated, taken June 20, 1903. A nest containing young was noted by Florence Merriam Bailey in an old nose bag hanging in a shed at Twin Oaks, San Diego County, April 18, 1889 (Auk XIII, 1896, 121).

350. (719.1) **Thryomanes leucophrys** (Anthony). SAN CLEMENTE WREN.

Common resident of San Clemente Island. Type specimen taken by A. W. Anthony, August 27, 1894 (Auk XII, 1895, 51). The bird found on Santa Cruz and Santa Rosa islands has been given the name of *Thryomanes bewicki nosophilus* by H. C. Oberholser (Proc. U. S. Nat. Mus. XXI, 1898, 442), and J. Grinnell has named the Catalina Island bird *Thryomanes bewicki catalinae* (Univ. Calif. Publ. Zool. v, 1910, 308). None of these three island forms differs from the mainland bird to any great extent.

351. (721a) **Troglodytes aëdon parkmani** Audubon. WESTERN HOUSE WREN.

Common summer resident from the coast up to over 5000 feet in the mountain cañons, ascending to over 8000 feet during the fall migrations (Grinnell, Univ. Calif. Publ. Zool. v, 1908, 120). A few remain through the winter in the lowlands, but the majority winter to the south of us. Breeds mostly in May in wooded localities and, occasionally, in holes in banks. Extreme nesting dates are: Eight eggs, fresh, taken by J. Grinnell near Pasadena, April 20, 1895 (Pub. 2, Pasadena Acad. Sci., 1898, 48), and six eggs, half incubated, taken by the writer at Seven Oaks, 5200 feet altitude in the San Bernardino Mountains, June 10, 1906.

352. (722a) **Nannus hiemalis pacificus** (Baird). WESTERN WINTER WREN.

Winter visitant to the mountains, occasional to the foothills and valleys. South at least to Pasadena and Pomona. Three birds seen by J. H. Bowles near Santa Barbara, November 27, 1910. One specimen secured (Condor XIII, 1911, 35). Three or more birds noted by J. G. Cooper near Saticoy, Ventura

County, in winter. One specimen secured (Auk iv, 1887, 93). One specimen taken by L. H. Miller in the San Fernando Valley, Los Angeles County, November 25, 1911, and two specimens taken by J. E. Law in San Dimas Cañon, near Pomona, January 20, 1901. Noted by J. Grinnell in the Arroyo Seco and Millard's Cañon, near Pasadena, as early as October 23 (1897) and as late as January 25 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 48). A number of birds seen by H. S. Swarth in the Arroyo Seco, October 18 to 26, 1900, and two birds seen by Mr. Swarth on Mt. Wilson, December 5, following. Female taken by C. B. Linton on Santa Cruz Island, October 23, 1908.

353. (725a) **Telmatodytes palustris paludicola** (Baird). TULE WREN.

Common resident of swampy regions in the lowlands, south to San Diego County. More widely distributed in winter, at which time it occurs plentifully in weed patches and among the rank grass of the meadows. Breeds most commonly in May. Found nesting near Riverside by F. Stephens in 1878, and recorded by C. S. Sharp as a common breeding bird at San Luis Rey, San Diego County (Condor ix, 1907, 91). A. M. Ingersoll has noted it in early spring at Linda Lake, twenty-one miles east of San Diego. This is the most southern record I have seen. I took six slightly incubated eggs at Bixby, Los Angeles County, April 15, 1904, and noted two fresh eggs in the same locality, July 2, 1906.

354. (725c) **Telmatodytes palustris plesius** (Oberholser). WESTERN MARSH WREN.

Occurs in winter. Regularity and abundance of its occurrence not fully determined, as yet. Specimens recorded as follows: Taken by F. S. Daggett: one specimen at Long Beach, Los Angeles County, February 21, 1896; two specimens, December 26, 1895, and one specimen, January 22, 1896, at Bixby, Los Angeles County. Taken by J. Grinnell: one specimen, December 27, 1895, at Bixby; two specimens, November 7, 1896, at El Monte, Los Angeles County (Condor v, 1903, 134).

355. (726d) **Certhia familiaris zelotes** Osgood. SIERRA CREEPER.

Common resident of the coniferous forests of the mountains, from 4000 to 9000 feet altitude, south to the San Jacinto Range. Occasional to the foothills in winter. J. H. Bowles took a specimen at Santa Barbara, January 5, 1911 (Auk xxviii, 1911, 177), and J. E. Law has noted it in the foothills near Hollywood, Los Angeles County, in winter. J. Grinnell found it moderately common in June, 1904, on Mt. Piños, Ventura County, from 7000 feet altitude to the summit (Auk xxii, 1905, 391). In the San Bernardino Mountains, Mr. Grinnell found no nests with eggs later than June 11; but young were found, yet unable to fly, as late as July 20. Two sets taken June 11, were of four and five eggs (Condor ix, 1907, 59).

356. (727a) **Sitta carolinensis aculeata** Cassin. SLENDER-BILLED NUT-HATCH.

Common resident of coniferous forests of the mountains from 4000 to at least 9400 feet. Occasional to the foothills in fall, winter and spring. One

specimen taken by F. S. Daggett near Pasadena, August 26, 1896 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 49). Noted by F. E. Blaisdell at Poway, San Diego County, in January, and by L. Belding at Campo and Escondido, in January, and in Santa Margarita Cañon, in April (Land Bds. Pac. Dist., 1890, 236). Seen in the Volcan Mountains, San Diego County, by W. O. Emerson. By March 1, it was mated and seemed about to breed (Bull. Cal. Acad. Sci. 11, 1887, 424). Found by J. Grinnell to be rather common around Dry Lake, 9400 feet altitude in the San Bernardino Mountains, in June and July. Several nests containing young were found (Univ. Calif. Publ. Zool. v, 1908, 123).

357. (728) ***Sitta canadensis*** Linnaeus. RED-BREASTED NUTHATCH.

Resident in limited numbers on the higher mountains, south to San Geronio Peak; also on the pine timbered hills of Santa Cruz Island. Occasional visitant to the lower country in fall and spring. Winters south to Lower California. One bird seen by H. Robertson near San Pedro, Los Angeles County, September 8, 1898. Noted by H. S. Swarth as common near Los Angeles from September 16 to about the middle of October, the same year. One specimen secured September 16 and another a few days later (Bull. Cooper Orn. Club 1, 1899, 95). Male taken by Mr. Swarth on Mt. Wilson, May 21, 1898. Found by J. Grinnell to be one of the rarest birds in the San Bernardino Mountains. "Their peculiar nasal call note was heard at Dry Lake (9000 feet), June 21, 1905; on the north side of San Bernardino Peak at 7500 feet, July 12, and on several occasions during July at Bluff Lake (7500 feet). On September 2, a single specimen was shot from a tall pine at the latter place" (Univ. Calif. Publ. Zool. v, 1908, 123). A. B. Howell and A. van Rossem found this bird fairly common in the pine timber on Santa Cruz Island from April 24 to May 2, 1911. About two dozen birds were seen and six taken. One bird was watched for half an hour while she was preparing a nesting site (Condor XIII, 1911, 210). C. B. Linton took three specimens on Santa Cruz Island, October 3, 4, 1908.

358. (730) ***Sitta pygmaea pygmaea*** Vigors. PYGMY NUTHATCH.

Common resident of coniferous forests above 4000 feet. Occasional to the foothills and mesas in winter. One bird seen by H. E. Wilder at Riverside in October, 1898. Noted by F. E. Blaisdell several times during January at Poway, San Diego County (Belding, Land Bds. Pac. Dist., 1890, 238). I found several nests containing young in the San Bernardino Mountains in June, 1906, and J. Grinnell took seven slightly incubated eggs at an elevation of 7000 feet in the same mountains, June 12, 1906 (Univ. Calif. Publ. Zool. v, 1908, 123).

359. (733) ***Baeolophus inornatus inornatus*** (Gambel). PLAIN TITMOUSE.

Common resident from the oak covered foothills up to about 6000 feet in the mountains. More widely distributed in winter. Breeds mainly in April. Extreme nesting dates are: Four eggs, fresh, taken by H. J. Lelande at Arcadia, Los Angeles County, March 3, 1897, and six eggs, slightly incubated, taken by J. Grinnell near Pasadena, May 12, 1894 (Pub. 2, Pasadena Acad. Sci., 1898, 49). I found a nest containing newly hatched young at Seven Oaks, 5200 feet in the San Bernardino Mountains, June 10, 1906, and W. O. Emerson noted the birds

mated and singing by March 2, in the Volcan Mountains, San Diego County (Bull. Cal. Acad. Sci. II, 1887, 424).

360. (738a) **Penthestes gambeli baileyae** (Grinnell). BAILEY MOUNTAIN CHICKADEE.

Common resident of the coniferous forests of the mountains from 5000 feet to as high as 10,600 feet (Grinnell, Univ. Calif. Pub. Zool. v, 1908, 124). Occasional to the oak regions of the foothills and mesas in winter. Noted by H. S. Swarth as rather common in winter near Switzer's Camp in the Arroyo Seco. Several birds seen by J. E. Law in the Calabasas Hills, Los Angeles County, September 15, 1911, and a male taken by Mr. Law in the city of Pomona, March 6, 1901. Several birds seen and one specimen taken, by F. E. Blaisdell at Poway, San Diego County, February 15, and noted by W. O. Emerson in the Volcan Mountains on February 24 and occasionally afterwards (Belding, Land Bds. Pac. Dist., 1890, 241). I found it breeding plentifully at Bear Valley, 6750 feet in the San Bernardino Mountains, in June, 1907. Several nests were examined, all of which contained young. J. Grinnell took five slightly incubated eggs in the San Bernardino Mountains, June 15, 1906 (Univ. Calif. Publ. Zool. v, 1908, 124).

361. (742a) **Chamaea fasciata henshawi** Ridgway. PALLID WREN-TIT.

Common resident from the willow thickets of the lowlands up to about 7000 feet on brushy mountain sides. Breeds in the lower country mostly in April and May, later at higher altitudes. Extreme nesting dates are: Two sets of fresh eggs taken by N. S. Goss near San Diego, March 16, 1884 (Belding, Land Bds. Pac. Dist., 1890, 242), and four considerably incubated eggs taken by J. Grinnell near Pasadena, June 25, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 50).

362. (743a) **Psaltiriparus minimus californicus** Ridgway. CALIFORNIA BUSH-TIT.

Abundant resident from the willow thickets of the lowlands up to more than 5000 feet in the mountains. Occurs as high as 7500 feet after the close of the breeding season. Common in winter on the Santa Barbara Islands. Breeds mostly in April and May. Extreme nesting dates are: Four eggs, fresh, taken by C. E. Groesbeck near Pasadena, March 7, 1896, and seven eggs, fresh, taken by H. A. Gaylord in the same locality, July 18, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 50).

363. (748a) **Regulus satrapa olivaceus** Baird. WESTERN GOLDEN-CROWNED KINGLET.

Fairly common fall and winter visitant to the mountains, south at least to the San Bernardino Range. Occasionally straggles to the mesas. J. Grinnell took two specimens in Santa Ana Cañon, San Bernardino Mountains, at an altitude of 5500 feet, August 19, 1907 (Univ. Calif. Publ. Zool. v, 1908, 126). Mr. Grinnell also took specimens on Mt. Wilson, Los Angeles County, October 31, 1896, and observed others in the same locality, October 30, 1897 (Pub. 2, Pasadena Acad. Sci., 1898, 50). H. S. Swarth found it fairly common in the Arroyo Seco, above Pasadena, October 19 to 26, 1900, and saw several flocks in San Antonio Cañon, October 18, 1903. He has several specimens taken on Mt. Wil-

son during the winter months, and one female that he shot from a pepper tree in Los Angeles, November 4, 1901. J. E. Law took several specimens in San Antonio cañon, October 18, 1903, and L. H. Miller took a specimen in the same locality, December 29, 1904. Several others were seen the same day. C. B. Linton took a pair on Santa Cruz Island, October 21, 1908.

364. (749) **Regulus calendula calendula** (Linnaeus). RUBY-CROWNED KINGLET.

Breeds in the upper Transition and Boreal zones in the mountains, above 7000 feet, south at least to the San Jacinto Range. Abundant winter visitant to the lowlands and the Santa Barbara Islands. Arrives in the lower country during late September and the month of October, and leaves in March and early April. Extreme migration dates noted by J. Grinnell near Pasadena are: September 24 (1896) and April 15 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 50). In June, 1906, I saw several of these birds at about 9000 feet altitude in the San Bernardino Mountains, but was unable to locate any nests. A. W. Anthony found a nest containing half grown young at an altitude of 9000 feet in the San Jacinto Mountains, July 2, 1895 (Nidologist, III, 1895, 16). According to W. O. Emerson, this species is rare in the Volcan Mountains, San Diego County, and perhaps breeds among the firs (Belding, Land Bds. Pac. Dist., 1890, 246).

365. (749a) **Regulus calendula grinnelli** W. Palmer. SITKA KINGLET.

According to the A. O. U. *Check-List*, this sub-species ranges south in winter to middle California. We have one record for southern California, that of a female taken by H. W. Marsden at Redlands, San Bernardino County, March 24, 1903 (Bishop, Condor VII, 1905, 143). Now no. 9287 collection L. B. Bishop.

366. (751a) **Polioptila caerulea obscura** Ridgway. WESTERN GNAT-CATCHER.

Common resident of wooded and brushy localities, from the lowlands up to more than 5000 feet in the mountains. Occurs as high as 7500 feet in early fall. More widely distributed over the lower country in winter, also occurring at this season on the Santa Barbara Islands. Breeds mostly in May. Extreme nesting dates are: Nest containing young birds, noted by J. Grinnell near Pasadena, May 4, 1895 (Pub. 2, Pasadena Acad. Sci., 1898, 50), and four eggs, fresh, taken by W. M. Pierce in San Antonio Cañon, July 5, 1903.

367 (753) **Polioptila californica** Brewster. BLACK-TAILED GNATCATCHER.

Common resident, locally, on brushy mesas, washes and foothills, north to Ventura County. Breeds most plentifully in May. One of Mr. Brewster's type specimens was taken by J. G. Cooper at Saticoy, Ventura County, November 24, 1872, and another was collected by F. Stephens at Riverside, March 28, 1878 (Bull. Nutt. Orn. Club VI, 1881, 103). B. W. Evermann found this bird a resident of Ventura County (Auk III, 1886, 186). I have never heard of its occurrence in Santa Barbara County, but should not be surprised if it were found to occur there. It is common in certain parts of Los Angeles County at the present time where it was not noted at all a few years back. The first nest and eggs on record was taken by F. Stephens near San Bernardino, May 2, 1887, and is

now in the U. S. National Museum (Bendire, Proc. U. S. Nat. Mus. x, 1887, 549). Extreme nesting dates are: Four eggs, fresh, taken by Antonin Jay in the San Fernando Valley, Los Angeles County, April 7, 1901, and three eggs, incubation advanced, taken by W. M. Pierce near Claremont, Los Angeles County, July 12, 1904.

368. (754) **Myadestes townsendi** (Audubon). TOWNSEND SOLITAIRE.

Breeds in moderate numbers in the mountains from 6000 to 9500 feet altitude, south to the San Bernardino Range. Occasionally appears in the mesa and foothill region during the winter, at which season it occurs south to Lower California. Recorded by B. W. Evermann as a very rare migrant in Ventura County. Noted once or twice in the spring of 1881 (Auk III, 1886, 186). Female taken by H. S. Swarth at Los Angeles, February 2, 1901, and a bird seen by him at Switzer's Camp in the Arroyo Seco, October 19, 1900. Pair taken by Mr. Swarth on Mt. Wilson, October 21, 1899. Male taken by J. E. Law at San Dimas, Los Angeles County, March 20, 1901, and specimen taken by L. H. Miller in San Antonio Cañon, December 29, 1904. Two specimens taken and others seen by A. K. Fisher in Cajon Pass, San Bernardino County, January 2, 1891 (N. Am. Fauna no. 7, 1893, 144). Specimen taken by F. E. Blaisdell at Poway, San Diego County, February 23, 1884, and noted by him at Temecula, the same county, November 12, 1883. Specimen taken by L. Belding at San Diego, January 24, 1884 (Land Bds. Pac. Dist., 1890, 250). Two or three birds noted by W. O. Emerson in the Volcan Mountains, San Diego County, during the spring of 1884 (Bull. Cal. Acad. Sci., II, 1887, 424).

In Fish Cañon, 7000 feet in the San Bernardino Mountains, J. Grinnell and party found two nests on June 16, 1905. One contained three newly hatched young and the other, four considerably incubated eggs. Still another nest was found in the same locality, June 17, containing four eggs in which incubation was far advanced. In 1906, two sets, of four eggs each, were found on the 22nd and 24th of June. The first set was well incubated and the second was fresh (Univ. Calif. Publ. Zool. v, 1908, 128-9).

369. (758) **Hylocichla ustulata ustulata** (Nuttall). RUSSET-BACKED THRUSH.

Common summer resident of the willow regions of the lowlands. Arrives during the latter part of April and early May and leaves mostly in late August and the month of September. Breeds generally from the middle of May to the middle of June. Earliest in the spring near Pasadena noted by H. A. Gaylord, April 12 (1896) (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 51), and the latest in the fall, by H. S. Swarth in the Arroyo Seco, October 22, 1900. Adult female taken and three more birds seen, by J. Grinnell on Santa Barbara Island, May 16, 1897 (Pub. 1, Pasadena Acad. Sci., 1897, 8). Found common on San Clemente Island by C. B. Linton in October, 1907 (Condor x, 1908, 86). Extreme nesting dates are: Four eggs, incubation slight, taken by Antonin Jay near Rivera, Los Angeles County, May 14, 1905, and three eggs, incubation slight, taken by H. A. Gaylord in the same locality, July 11, 1894 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 51).

370. (759c) *Hylocichla guttata nanus* (Audubon). DWARF HERMIT THRUSH.

Common winter visitant from the foothills to the coast and on the Santa Barbara Islands. Noted by J. Grinnell near Pasadena from October 10 (1896) to May 9 (1896) (Pub. 2, Pasadena Acad. Sci., 1898, 51). C. B. Linton and myself found it plentiful on Santa Cruz Island in November and December, 1907, and Mr. Linton noted it on San Nicolas Island, March 30, 31, 1910. He also found it common on San Clemente Island from October to April (Condor x, 1908, 86).

371. (759d) *Hylocichla guttata slevini* Grinnell. MONTEREY HERMIT THRUSH.

Occurs in migrations; so far noted only in the spring, as follows: Five specimens by F. S. Daggett near Pasadena, April 8 to 26, 1896 (Condor III, 1901, 131). Male by H. W. Marsden near Redlands, San Bernardino County, April 16, 1903 (Bishop, Condor VII, 1905, 143).

372. (759e) *Hylocichla guttata sequoiensis* (Belding). SIERRA HERMIT THRUSH.

Breeds in the mountains above 6000 feet, south to the San Bernardino Range. Winters south to Lower California and Mexico. J. Grinnell found this hermit thrush common in the cañons among the north spurs of San Gorgonio Peak, San Bernardino Mountains. Many nests, both old and new, were found in June, 1905 and 1906, above 6300 feet altitude. A nest found in Fish Cañon, 7000 feet, June 16, 1905, contained four eggs in which incubation was nearly complete. Nests found June 18 and June 30, 1905, in South Fork Cañon, contained half-grown young. June 12, 1906, Mr. Grinnell found a set of five considerably incubated eggs in South Fork Cañon and on June 25, a set of four moderately incubated eggs was found in the same cañon. On June 15, 1907, a nest containing two eggs with the parent sitting, was found in the same locality. The next day there were three eggs in the nest, which proved to be the full complement (Univ. Calif. Publ. Zool. v, 1908, 130).

373. (761a) *Planesticus migratorius propinquus* (Ridgway). WESTERN ROBIN.

Common summer resident in the mountains from 5000 to 9000 feet altitude, south at least to the San Bernardino Range. More or less common winter visitant to the lower country, south to San Diego and probably occasionally crossing the Mexican line. Breeds mostly in May. Noted by J. Grinnell in the vicinity of Pasadena from October 5 (1897) to April 17 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 51). Observed by W. M. Pierce near Claremont, Los Angeles County, as late as May 3 (1903), and one bird seen by L. Belding at Campo, San Diego County, May 14, 1884 (Land Bds. Pac. Dist., 1890, 256). F. Stephens informs me that the Robin is abundant in the vicinity of San Diego during severe winters, but during many winters is not noted at all. In June, 1907, I noted several nests containing young birds at Bear Valley, 6750 feet altitude in the San Bernardino Mountains. J. Grinnell took a set of three eggs in which incubation was

nearly complete, in the upper Santa Ana Cañon, San Bernardino Mountains, June 12, 1906 (Univ. Calif. Publ. Zool. v, 1908, 132).

374. (763a) ***Ixoreus naevius meruloides*** (Swainson). NORTHERN VARIED THRUSH.

Usually fairly common in winter from the foothills to the coast and on the Santa Barbara Islands. South at least to San Diego County. Some winters much less plentiful than others. Particularly common wherever the "California holly" grows abundantly. Noted by H. S. Swarth in the Arroyo Seco above Pasadena, as early as October 23 (1900), and by J. Grinnell near Pasadena, as late as April 10 (1897) (Pub. 2, Pasadena Acad. Sci., 1898, 51). Found common at Riverside during February, 1907, by H. E. Wilder, and several specimens taken by H. W. Marsden at Witch Creek, San Diego County, in January and February, the same year. Pair noted by F. E. Blaisdell in the Volcan Mountains, San Diego County, in November (Belding, Land Bds. Pac. Dist., 1890, 260). Several specimens taken by C. B. Linton on San Clemente Island, from January to April, 1907 (Condor x, 1908, 86).

375. (767) ***Sialia mexicana occidentalis*** J. K. Townsend. WESTERN BLUEBIRD.

Common summer resident from the foothills up to over 10,000 feet in the mountains, south to Los Angeles County. Common in winter over the lower country, south to Lower California. Breeds mostly in May. Male taken by C. B. Linton on San Clemente Island in December, 1908. I have found this bird breeding plentifully in the hills of northern Santa Barbara County, J. S. Appleton reports it a common breeder in the Simi Valley, Ventura County, and it is plentiful in summer in the mountains of Los Angeles County, from 2000 feet to the summits, occasionally nesting at lower altitudes. Extreme nesting dates are: Six eggs, considerably incubated, taken by E. Simmons near Newhall, Los Angeles County, May 4, 1897, and four eggs, incubation slight, taken by H. A. Gaylord near Pasadena, May 24, 1892 (Grinnell, Pub. 2, Pasadena Acad. Sci., 1898, 52).

376. (767b) ***Sialia mexicana anabelae*** Anthony. SAN PEDRO BLUEBIRD.

According to the A. O. U. *Check-List*, this sub-species ranges from the mountains of southern Los Angeles County, southward. The bluebirds of the extreme southern end of the state are intermediate between this form and the last, and are not typical of either. Robert Ridgway says "Specimens from San Diego County and southern Los Angeles County, are much nearer this form than they are to *occidentalis*" (Bds. N. & Mid. Am. iv, 1907, 151). This bird is an abundant breeder in the San Bernardino and San Jacinto Mountains and, according to L. Belding, breeds commonly in the timbered parts of San Diego County (Land Bds. Pac. Dist., 1890, 262).

377. (768) ***Sialia currucoides*** (Bechstein). MOUNTAIN BLUEBIRD.

Breeds in the higher mountains, mostly on the eastern slope, south to the San Bernardino Range. More or less common in the lower country in winter, south to Lower California. Breeds in May. Recorded by B. W. Evermann as a rare winter visitant to Ventura County. He saw a single individual near Saticoy in

December (Auk III, 1886, 186). I have found it plentiful during some winters in the vicinity of Los Angeles, and during other winters have failed to see it. According to J. G. Cooper, during the severe winter of 1861-2, these birds came down in large numbers to the vicinity of San Diego and remained until the end of February, when all suddenly disappeared (Land Bds. Cal., 1870, 29). During the spring of 1884, L. Belding found it common at San Diego until March 15, when it disappeared. A large flock returned March 29, during a cold rain storm, and stayed two days. A female taken April 4, was the last seen (Land Bds. Pac. Dist., 1890, 263). During June, 1907, I found the Mountain Bluebird fairly common at Bear Valley, 6750 feet altitude in the San Bernardino Mountains. Several nests were examined, all of which contained young (Condor XII, 1910, 44).

HYPOTHETICAL LIST

1. (5) **Colymbus dominicus brachypterus** Chapman. MEXICAN GREBE. Often quoted from W. Gambel as occurring in "Upper California." No definite record.

2. (83) **Thalassogeron culminatus** (Gould). YELLOW-NOSED ALBATROSS. An inhabitant of southern oceans. Said to occur casually north to the coast of Oregon. No California specimens known.

3. (84) **Phoebetria palpebrata** (J. R. Forster). SOOTY ALBATROSS. A southern species which has frequently been stated to occur "north to the coast of Oregon," without, however, a great deal of definite data to substantiate its occurrence so far north. A specimen recorded by C. P. Streater as having been taken near Santa Barbara (Orn. & Ool. XI, 1886, 90). Its present whereabouts unknown.

4. (87) **Priocella glacialoides** (A. Smith). SLENDER-BILLED FULMAR. A bird of southern oceans. Said to occur north along the Pacific coast to Oregon. Supposed skeleton found by J. G. Cooper on Catalina Island in 1863 (Baird, Brewer & Ridg., Water Bds. N. Am. II, 1884, 374). Also recorded by Dr. Cooper as found dead on the beach near Ventura (Auk IV, 1887, 87).

5. (181) **Olor buccinator** (Richardson). TRUMPETER SWAN. This bird, now believed to be nearly if not quite, extinct, is frequently stated to have occurred in winter in Los Angeles County. So far as I have been able to ascertain, these statements all originated from specimens obtained by A. M. Shields, which specimens, I am informed by Mr. Shields, were destroyed in the San Francisco fire. As it has since been found that the Whistling Swan (*Olor columbianus*), is a fairly common winter visitant to Los Angeles County, and as *buccinator* has not been further noted in this locality, I am inclined to believe that Mr. Shields' specimens were wrongly identified, and should be referred to *columbianus*.

6. (183) **Ajaia ajaja** (Linnaeus). ROSEATE SPOONBILL. Recorded by W. Gambel as occurring on the coast of California in 1849

(Journ. Acad. Nat. Sci. Phil., 2nd. ser. I, 1849, 222). Not known that he secured specimens in the state. R. B. Herron informed F. Stephens that he saw a bird of this species standing in a pond, about four miles south of San Bernardino, June 20, 1903. It was feeding and paid no attention as he drove past within gun shot. At first he thought it was a Wood Ibis, but, on coming nearer, he saw the pink tinge of plumage and the spatulate bill. On his returning the next morning with a gun, the bird was gone. Mr. Stephens was further informed by H. E. Wilder that during 1902, while in Riverside, he saw a bird fly over that he felt sure was a Roseate Spoonbill (Condor VI, 1904, 139). While these facts would seem to show that this bird probably does occasionally occur in southern California, there still remains an element of doubt, due to a possibility of misidentification.

7. (255) **Totanus flavipes** (Gmelin). YELLOW-LEGS.

In migrations, mainly east of the Rocky Mountains (A. O. U. *Check-List*, 1910, 120). Noted in southern Lower California (Brewster, Bull. Mus. Comp. Zool. XLI, 1902, 66). According to E. Heller, noted twice at Riverside during migrations (Condor III, 1901, 100). Mr. Heller writes me that it is possible that these birds were wrongly identified, and that he does not know the present whereabouts of the specimens.

8. (272) **Charadrius dominicus dominicus** Müller. GOLDEN PLOVER.

In migration to California. Formerly abundant, now becoming rare (A. O. U. *Check-List*, 1910, 127). Young male taken by M. Abbott Frazar at San Jose del Cabo, Lower California, October 18, 1887 (Brewster, Bull. Mus. Comp. Zool. XLI, 1902, 71). Bradford Torrey records seeing a bird of this species at Coronado Beach, San Diego County, January 12, 15 and 20, 1908 (Condor XI, 1909, 207). While Mr. Torrey is well known to be a most careful observer, I feel that records of birds belonging to the group of waders should not be considered conclusive without the actual taking of specimens.

9. (442). **Muscivora tyrannus** (Linnaeus). FORK-TAILED FLYCATCHER.

Specimen obtained from a dealer in California curiosities, at Santa Monica, Los Angeles County, recorded by G. L. Toppan (Orn. & Ool. IX, 1884, 48). Supposed to have been shot near that place in late summer, 1883.

10. (464a) **Empidonax difficilis cineritius** Brewster. SAN LUCAS FLYCATCHER.

Lower California. Breeds as far north as the Cuyamaca Mountains, San Diego County (A. O. U. *Check-List*, 1910, 215). Breeding in the Cuyamaca Mountains from 4000 to 6000 feet elevation, latter part of June, 1895 (Anthony, Auk XII, 1895, 390). In the summer of 1909, F. Stephens went to the Cuyamaca Mountains in the interests of the University of California Museum of Vertebrate Zoology, with the chief object of securing this flycatcher. He secured a number of breeding birds, of which Mr. Grinnell writes me: "I consider them identical with *Empidonax difficilis difficilis*, as occurring throughout California. They are somewhat more worn and, possibly, faded than some other examples of *difficilis* at hand, but I would certainly not consider them

as belonging to any other race." Robert Ridgway says: "I have considerable difficulty in separating this form satisfactorily from *E. d. difficilis*, from which it certainly is not more than subspecifically distinct, birds from the extreme northern portion of Lower California and some of those from San Diego County, California, being unmistakably intergrades" (Bds. N. & Mid. Am. iv, 1907, 580).

11. (498a) ***Agelaius phoeniceus sonoriensis*** Ridgway. SONORA RED-WING.

Two males and a female taken by H. W. Marsden at Redlands, San Bernardino County, January 22, March 28 and January 10, 1903, and a male taken by the same collector at Witch Creek, San Diego County, April 13, 1904, considered by H. C. Oberholser to belong to this subspecies (Bishop, Condor vii, 1905, 142). Now nos. 9173, 8306, 8304, 10847 collection L. B. Bishop. Probably individual variation in *Agelaius phoeniceus neutralis*.

12. (16.3 Hyp. List). ***Icterus icterus*** (Linnaeus). TROUPIAL.

One record, that of a male taken by J. H. Bowles in Mission Cañon, near Santa Barbara, April 30, 1911. The plumage of this bird, as well as the feet, were in perfect condition and Mr. Bowles does not believe that it was an escaped cage bird (Condor xiii, 1911, 109). The Troupial is a native of the northeast coast of South America (Colombia, Venezuela, etc.), and has only once previously been recorded from the United States, at Charleston, South Carolina (Audubon, Bds. Am., 8vo. ed., vii, 1844, 357). The authenticity of this old record has been generally doubted and the species has been assigned to the hypothetical list by the A. O. U. Committee. While there can be absolutely no doubt as to the identity of Mr. Bowles' specimen, or the locality of capture, in placing the species in the hypothetical list I have been governed by the old rule that "the more unlikely the occurrence, the stronger should be the proof." It seems to me more probable that this specimen should have escaped from confinement—probably a sufficient length of time previous to the date of capture to allow its plumage and feet to regain their normal condition—than that it had wandered so great a distance as from its normal habitat to Santa Barbara.

13. (515b) ***Pinicola enucleator californica*** Price. CALIFORNIA PINE GROSB-EAK.

According to J. H. Bowles, this species was noted by E. S. Spaulding at an elevation of nearly 3000 feet on Little Pine Mountain, Santa Barbara County, August 30, 1910 (Auk xxviii, 1911, 175). J. Grinnell says regarding this record: "It is extremely unfortunate that Mr. Bowles put *Pinicola enucleator californica* on record from southern California upon such inadequate evidence as that submitted. The occurrence of the species at any season at so low an elevation as 3000 feet anywhere in California is in itself exciting of comment. But when we consider that the species has never been recorded in California south of the head of the San Joaquin River in Madera or Fresno County (Fisher, N. Am. Fauna No 7, May, 1893, 79), and never,

winter or summer, below the Canadian life zone, a record like the present one demands the severest test. The California Pine Grosbeak is a species the occurrence of which anywhere under such zonal conditions as the 'hills of Santa Barbara County,' to be thoroughly established would have to be backed up by the taking of specimens at the very least" (Condor XIII, 1911, 141).

14. (18.1 Hyp. List). **Piranga rubriceps** Gray. GRAY TANAGER.

A South American species, a specimen of which is said to have been secured at Dos Pueblos (Naples), Santa Barbara County (Bryant, Auk IV, 1887, 78). Probably an escaped cage bird (A. O. U. Check-List, 1910, 373).

15. (625) **Vireosylva flavoviridis** Cassin. YELLOW-GREEN VIREO.

W. W. Price records a specimen taken by him in the Santa Ana river bottom near Riverside, October 1, 1887 (Auk V, 1888, 210). I have endeavored to locate this specimen, but have been unable to do so. Mr. Price writes me that he disposed of it some years ago and has forgotten who obtained it.

16. (664) **Dendroica graciae** Baird. GRACE WARBLER.

B. W. Evermann records taking a male of this species near Santa Paula, Ventura County, May 3, 1881 (Auk III, 1886, 185). This specimen was later destroyed by fire. The locality seems an unlikely one, and Mr. Grinnell informs me that he believes it was probably an immature *Dendroica townsendi*.

17. (730a) **Sitta pygmaea leuconucha** Anthony. WHITE-NAPED NUT-HATCH.

Transition zone from San Diego County south to San Pedro Martir Mountains, Lower California (Anthony, Proc. Cal. Acad. Sci., ser. 2, II, 1889, 77). F. Stephens informs me that he believes this form is strictly Lower Californian and does not occur north of the United States boundary.

18. (742) **Chamaea fasciata fasciata** (Gambel). WREN-TIT.

A female collected by J. H. Bowles at Santa Barbara, February 18, 1910, was identified by H. C. Oberholser as typical of this species (Auk XXVIII, 1911, 178). It seems improbable that this form should occur at Santa Barbara, and Mr. Bowles' specimen is probably a case of individual variation of *Chamaea fasciata henshawi*.

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