

BIRDS OF HOT SPRINGS MOUNTAIN, SAN DIEGO COUNTY, CALIFORNIA

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The mountains of San Diego County have never been the object of much ornithological study. The birds of other nearby ranges in southern California have been reported on by Grinnell (1908, San Bernardino Mts.), Grinnell and Swarth (1913, San Jacinto and Santa Rosa mts.), and Pequegnat (1945, Santa Ana Mts.). Information from the San Diego County mountains has been published only in a few brief notes or in comprehensive regional summaries (Cooper 1874, Emerson 1887, Belding 1890, McGregor 1899, Willett 1933, Grinnell and Miller 1944, Sams and Stott 1959). The highest peak in the county, isolated Hot Springs Mountain, has apparently not been previously visited by an ornithologist. Nothing relating to the birds of this area has been published, and no specimens collected there have been preserved in the San Diego Natural History Museum or in the Museum of Vertebrate Zoology, University of California, Berkeley. I made three visits to Hot Springs Mountain during June and July 1980. The observations here reported are an attempt to fill this gap in our knowledge of California bird distribution.

Mixed coniferous-oak woodland occurs in San Diego County at elevations above about 4000 feet (1200 m) in situations which receive an annual rainfall of over 18-20 inches (460-500 mm). The most extensive areas of this habitat correspond with five mountains or mountain ranges. Palomar Mountain, in the north-central part of the county, rises to 6140 feet (1871 m). Hot Springs Mountain, with its summit at 6533 feet (1991 m) is separated from Palomar by a broad treeless valley at an elevation of about 2800-3100 feet (850-950 m). This valley extends east to separate Hot Springs Mountain from Volcan Mountain, 5719 feet (1743 m), to the south. Farther south, in the central portion of the county, the Cuyamaca Mountains rise to 6512 feet (1985 m) on Cuyamaca Peak, and the Laguna Mountains, to 6272 feet (1912 m) on Monument Peak.

Woodland habitat on Hot Springs Mountain covers approximately 4 square miles (10 km²), mostly on the northeastern and southeastern slopes. The dominant trees in this area are Jeffrey Pine (*Pinus jeffreyi*), Coulter Pine (*P. coulteri*), Ponderosa Pine (*P. ponderosa*), White Fir (*Abies concolor*), Incense Cedar (*Calocedrus decurrens*), Black Oak (*Quercus kelloggii*), and Canyon Live Oak (*Q. chrysolepis*). The rest of the mountain is vegetated with dense mixed chaparral, or, particularly on the south slope, patches of chaparral scattered among grasses and other herbaceous plants. The latter situation is apparently the result of fire, clearing of brush, and cattle grazing. Three small streams were flowing on the mountain at the time of my visits. The largest of these, an apparently unnamed tributary of Agua Caliente Creek, descended the northeast slope, and along it the greatest numbers of birds were concentrated. Hot Springs Mountain is accessible by automobile from the village of San Ysidro on San Ysidro Creek at the south base of the mountain.

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Bart Cord and I made the first visit to Hot Springs Mountain on 3 June, arriving about 1130, and departing about noon the following day. David Povey and I made the second visit, arriving 1945 on 23 June and departing 1400 on 24 June. The third visit was also made with David Povey; we

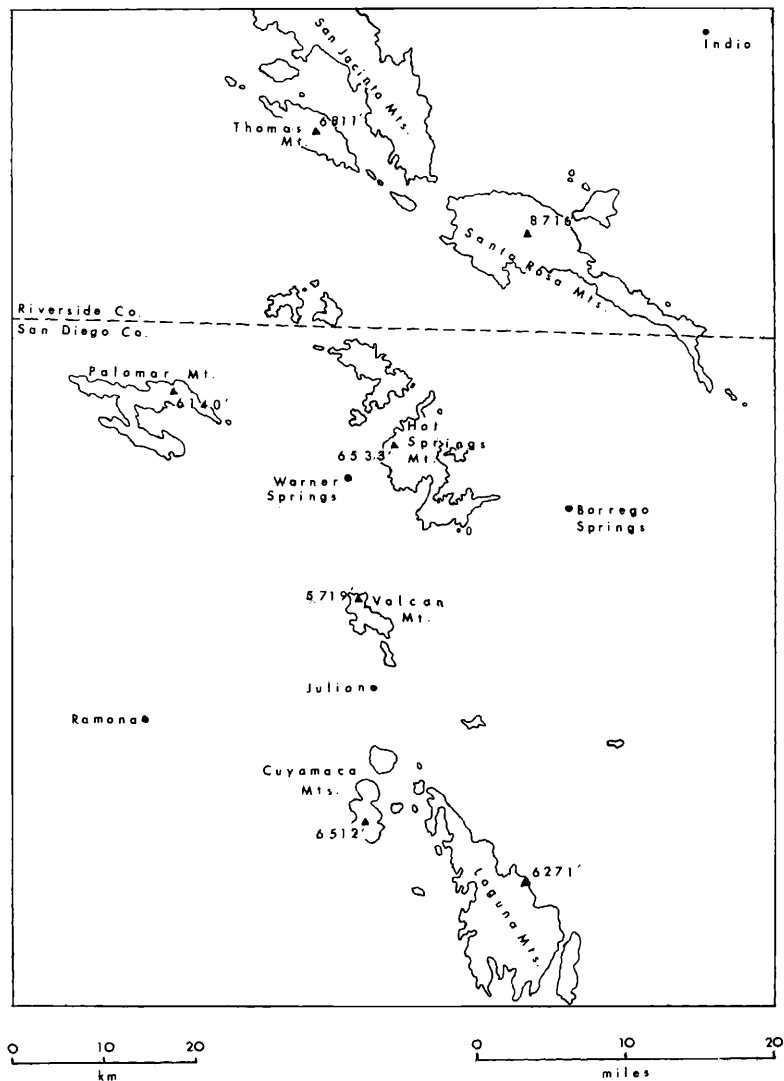


Figure 1. Hot Springs Mountain among nearby ranges in southern California. Contour illustrated is 5000 ft. elevation.

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arrived 1930 on 21 July and left 1300 on 22 July. We concentrated our observations in dense woodland along and near the creek on the northeast slope, but also looked in several other areas on the mountain, and spent some time on each visit in more open woodland and dense chaparral near the summit. All species seen or heard were counted as accurately as possible.

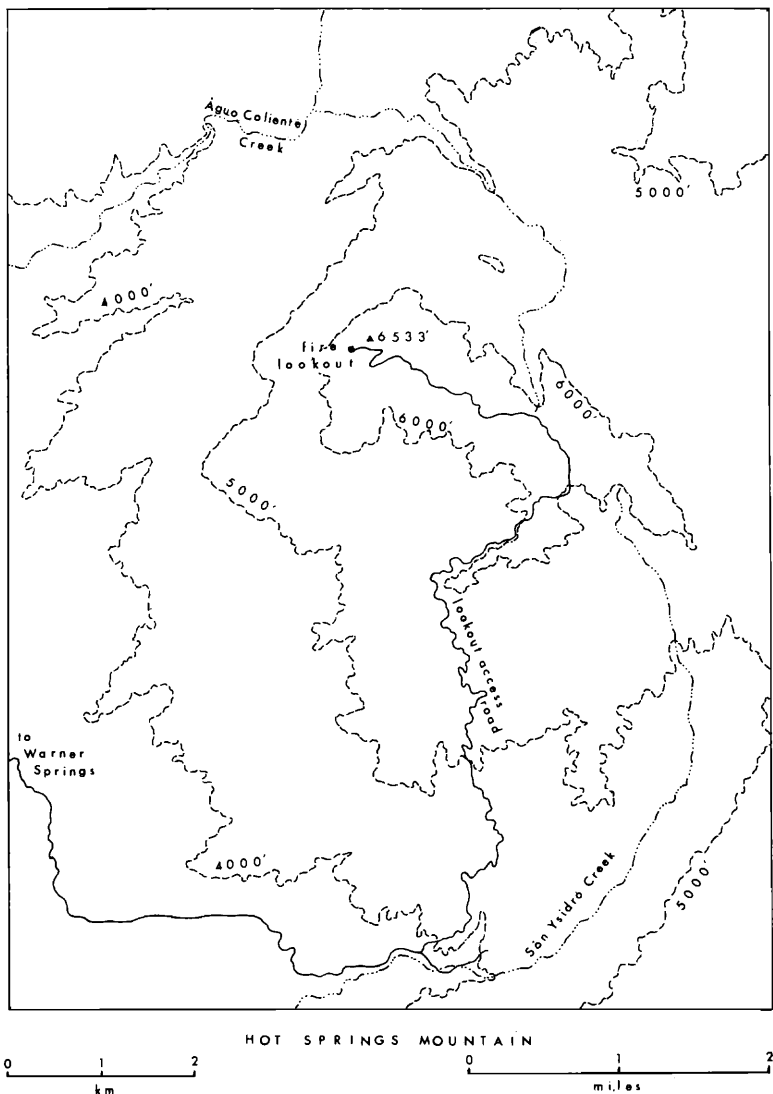


Figure 2. Detail of Hot Springs Mountain area, San Diego Co., California.

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The timing of our visits was intended to cover the breeding season for most resident birds, and to avoid the problem of distinguishing local breeders from early or late migrants. I believe all species observed were potential, if not actual breeders on Hot Springs Mountain, except (*Selasphorus*) sp. (fall migrants reach San Diego County by late June) and Scott's Oriole (probably a post-breeding wanderer from nearby habitat downslope to the east). Definite reproductive activity (usually fledged young accompanying adults) was seen in Anna's Hummingbird, Calliope Hummingbird, White-headed Woodpecker, Scrub Jay, White-breasted Nuthatch, House Wren, Western Bluebird, Western Tanager, Black-headed Grosbeak, Rufous-sided Towhee and Dark-eyed Junco.

Our results are summarized in Appendix 1. Most of the species observed are widespread in the other mountains of San Diego County and do not require further comment. The occurrence of a few, however, merits discussion.

Calliope Hummingbird, *Stellula calliope*. On 4 June one male was seen in a meadow with scattered bushes along the creek on the northeast slope, elevation 5400 feet (1650 m). It chased off another hummingbird of equal size, presumably also a Calliope. On 24 June what was very likely the same male was seen in the same bush. It was displaying to a female: three or four steep dives in front of the female followed by a very slow descent. The birds also hovered in front of each other, very close together, but we did not see actual copulation. On 22 July a single female was seen near the same area. This is the first summer report of Calliope Hummingbird from San Diego County; potentially breeding birds had previously been noted south to the San Jacinto Mountains, where Dawson (1916) saw displaying males near Idyllwild and in Tahquitz Valley.

Dusky Flycatcher, *Empidonax oberholseri*. One was heard on 3 and 4 June about 1.3 miles (2.1 km) southeast of the summit at 6200 feet (1900 m) elevation. Dusky Flycatcher has only recently been found as a rare summer visitor south to San Diego County. I have also seen the species near the summit of Cuyamaca Peak (one on 1 July 1979) and along Agua Dulce Creek in the Laguna Mountains (pair with young in nest on 14 July 1974; 2 on 24 July 1976). David Povey saw a pair feeding a fledgling Brown-headed Cowbird near Cibbets Flat, Laguna Mountains, on 4 July 1978. Breeding Dusky Flycatchers were recorded previously south to the San Jacinto and Santa Rosa mountains, where Grinnell and Swarth (1913) found them "in abundance."

Red-breasted Nuthatch, *Sitta canadensis*. One was heard calling on 24 June in a very dense stand of trees on a steep north-facing slope 1.3 miles (2.1 km) east of the summit at 5900 feet (1800 m) elevation. Until recently, the breeding range of this nuthatch extended south in California to the San Jacinto Mountains, where Grinnell and Swarth (1913) found it in Tahquitz and Round valleys. The species has been noted a few times on Palomar Mountain, including a pair nesting in summer 1970 (McCaskie 1970) and a single bird on 19 May 1975 (Jon Dunn, field notes). In southwestern San Diego County, Red-breasted Nuthatches colonized planted conifers on Point Loma, where young were seen being fed in summer 1964 (McCaskie 1966); the species has remained there ever since.

Hermit Thrush, *Catharus guttatus*. One was heard singing on 24 June in the same place where the Red-breasted Nuthatch was noted. Although we were never able to see the bird, we approached it closely and heard the characteristic song very well:

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well-spaced phrases, each phrase composed of a clear whistle followed by a series of rising and falling rapid notes. Hermit Thrushes have been recorded in the nesting season south only to the San Bernardino Mountains, so the present observation was completely unexpected.

Black-throated Gray Warbler, *Dendroica nigrescens*. The numbers seen of this species were surprising since it is very rare during the breeding season in San Diego County. I had previously seen it in the breeding season only three times, on Palomar Mountain on 26 June 1976, and in the Laguna Mountains on 13 July 1974 and 22 May 1975. Very little information is available on the breeding status of Black-throated Gray Warbler in San Diego County. Grinnell and Miller (1944) report it from Vallecito and the Cuyamaca Mountains, but it is undoubtedly only a migrant at the former locality. The San Diego Natural History Museum has two June specimens from Palomar Mountain (SDNHM 1414 and 19188), and the Western Foundation of Vertebrate Zoology has one egg set from Julian and another from the Laguna Mountains (WVZ 72757 and 82925).

Green-tailed Towhee, *Pipilo chlorurus*. On 4 June one was seen about 1.5 miles (2.4 km) northeast of the summit. On 24 June two were seen together 1.3 miles (2.1 km) east of the summit. On both occasions the birds were in open woodland with scattered bushes and low herbaceous growth. Until recently, Green-tailed Towhee was known in summer south only to the San Jacinto Mountains. In 1978 small numbers were discovered near the summit of Cuyamaca Peak (D. Povey), and a juvenile was seen accompanying adults there on 29 July (pers. obs.).

DISCUSSION

The summer distribution of montane birds among several mountain ranges in southern California and northern Baja California is presented in Table 1. This table is an expansion of Miller's (1951) Table 7, but I have included only those species whose breeding ranges are confined to elevations above 4000 feet in the mountain ranges listed. Footnotes refer principally to localities reported for a species since Grinnell and Miller (1944).

The mountains of San Diego County form a rather low area along the mountain system of the Transverse and Peninsular ranges. To the north, Mount San Jacinto reaches an elevation of 10831 feet (3301 m); to the south, the highest summit in the Sierra San Pedro Martir reaches 10135 feet (3089 m). The low elevation and small extent of coniferous forest habitat in San Diego County have made the area a barrier to the dispersal of boreal forest birds. Information in Grinnell and Miller (1944) and Miller (1951) indicates that 12 species reach the edges of their breeding ranges in the San Jacinto or Santa Rosa mountains (the report of Sharp-shinned Hawk nesting in San Diego County is undocumented and probably erroneous). An additional 7 species, absent as breeders in San Diego County, reappear to the south in the Sierra Juarez or Sierra San Pedro Martir. In recent years, 12 of these 19 have been noted during the nesting season in San Diego County mountains. Four (Red-breasted Sapsucker, Dusky Flycatcher, Red-breasted Nuthatch and Green-tailed Towhee) have definitely nested, and two others (Calliope Hummingbird and Fox Sparrow) have probably done so. All these situations however involve very small, localized or ephemeral populations, and do not significantly alter the basic pattern of bird geography.

Table 1. Breeding distribution of montane birds in southern California and northern Baja California. Species included are those whose breeding ranges are confined to elevations above 4000 feet (1200 m) in the mountain regions listed.

	SB	SJ	SR	HS	P	V	C	L	J	SPM
Northern Goshawk <i>Accipiter gentilis</i>	O ¹	+ ²								
Sharp-shinned Hawk <i>Accipiter striatus</i>	X	+				O ³	? ⁴			
Flammulated Owl <i>Otus flammeolus</i>	X	O ⁵			O ⁵		O ⁵			
Saw-whet Owl <i>Aegolius acadicus</i>	X	O			+ ⁶		X			
Common Nighthawk <i>Chordeiles minor</i>	X	O ⁷								
Black Swift <i>Cypseloides niger</i>	+	+								
Calliope Hummingbird <i>Stellula calliope</i>	X	+	+ ⁸	+	X ⁹		O ¹⁰			+
Red-breasted Sapsucker <i>Sphyrapicus ruber</i>	X	X								
Williamson's Sapsucker <i>Sphyrapicus thyroideus</i>	X	X								
Hairy Woodpecker <i>Picoides villosus</i>	X	X	+	+	+ ¹¹	+	+	+ ¹²	+	+
White-headed Woodpecker <i>Picoides albolarvatus</i>	X	X	X	X	+ ¹³	+	X	+ ¹⁴		
Dusky Flycatcher <i>Empidonax oberholseri</i>	X	X	X	O			O ¹⁵	X ¹⁵		
Olive-sided Flycatcher <i>Contopus borealis</i>	X	X	+	+	X ¹⁶	+	X	X ¹⁷	+	+
Steller's Jay <i>Cyanocitta stelleri</i>	X	+	+	+	X	X	X	X ¹⁸		
Piñon Jay <i>Gymnorhinus cyanocephalus</i>	X	X							+	+
Clark's Nutcracker <i>Nucifraga columbiana</i>	X	+	+	+	O ¹⁹			O ²⁰		+
Mountain Chickadee <i>Parus gambeli</i>	X	X	X	+	X	+	+	X	+	+
Red-breasted Nuthatch <i>Sitta canadensis</i>	+	+		O	X ¹⁵					
Pygmy Nuthatch <i>Sitta pygmaea</i>	X	X	X	+	+ ²¹	+	+	X	+	+
Brown Creeper <i>Certhia familiaris</i>	X	X	+	+	+		X			
Hermit Thrush <i>Catharus guttatus</i>	X			O						

L = Laguna Mts.
 J = Sierra Juarez
 SPM = Sierra San Pedro Martir

P = Palomar Mt.
 V = Volcan Mt.
 C = Cuyamaca Mts.

SB = San Bernardino Mts.
 SJ = San Jacinto Mts.
 SR = Santa Rosa Mts.
 HS = Hot Springs Mt.

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Table 1 (Cont.)

7. One collected on 23 June 1893, altitude 8000 ft. (SDNHM 431).
8. One seen on 22 July 1979 (J. Dunn); 2 on 21 June 1980 (G. McCaskie).
9. Devillers 1970.
10. One seen near Paso Picacho Campground on 10 May 1974 (pers. obs.).
11. Many observations by E. Beemer (pers. comm.); specimens collected on 8 and 10 July 1935 (SDNHM 19094-5).
12. Many pers. obs.; specimens collected on 8 June 1924 (SDNHM 31707) and 15 January 1946 (MVZ 94435).
13. Many observations by E. Beemer (pers. comm.).
14. One seen in April 1970 (pers. obs.); 1 on 6 November 1975 (M. Thornburgh pers. comm.); 1 on 27 January 1978 (C. G. Edwards pers. comm.).
15. See text.
16. Many observations, including fledglings, by E. Beemer (pers. comm.); specimen collected on 30 June 1899 (SDNHM 617).
17. Many pers. obs.; eggs collected on 4 July 1923 (WFVZ 71133).
18. Many pers. obs.; 3 egg sets in WFVZ.
19. One seen on 24 June 1967 (AFN 21:605, 1967).
20. Fortner 1920; 1 on 25 May 1974 (pers. obs.).
21. Two seen on 16 July 1978 (pers. obs.); other sight records.
22. One seen on 16 June 1974; 2 on 22 July 1979 (J. Dunn).
23. One seen on 19 July 1980 (AB 34:931, 1980).
24. W. O. Emerson's (Belding 1890:246) speculation that this species "perhaps breeds in the firs" has never been supported by facts.
25. One seen on 30 May 1974 (AB 28:950, 1974).
26. Four sightings of single individuals (E. Beemer pers. comm.).
27. One seen on 29 July 1978 (pers. obs.).
28. Egg set collected at Julian on 17 June 1915 (WFVZ 64938).
29. Many pers. obs., e.g., a pair on 25 June 1978.
30. Thirty seen on 16 June 1974 (J. Dunn); 2 on 14 July 1979 (G. McCaskie).
31. One seen on 19 July 1966 (AFN 20:600, 1966).
32. One adult and 1 juvenile seen on 22 July 1979 (J. Dunn).
33. Six seen on 22 July 1979 (G. McCaskie).
34. Three or 4 pairs seen in summer 1979 (AB 33:898, 1979).
35. Numerous reports since 1978, e.g., 10 on 1 July 1979 (pers. obs.).

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The mountains of San Diego County, though not supporting a continuous area of coniferous woodland habitat, nevertheless compose a cohesive region of bird distribution, as originally indicated by Miller (1951). No major breaks in the distribution of any species occur between any of the five mountain areas. Any difference in the avifauna of the various ranges involves the marginal species mentioned above, or is probably an artifact of inadequate exploration. As well as lacking several species present in the San Jacinto and Santa Rosa mountains, the avifauna of the San Diego County mountains shows some differences from that of the Sierra Juarez and Sierra San Pedro Martir in Baja California. Saw-whet Owl, White-headed Woodpecker, Steller's Jay and Brown Creeper have not spread south of the international border, while Calliope Hummingbird, Pinon Jay, Clark's Nutcracker, Yellow-rumped Warbler, Cassin's Finch, Pine Siskin and Red Crossbill, which inhabit Baja California, are not regular breeders in the mountains of San Diego County. Grinnell (1928) describes other cases of differentiation at the subspecific level.

ACKNOWLEDGMENTS

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LITERATURE CITED

- Belding, L. 1890. Land birds of the Pacific District. Occas. Pap. California Acad. Sci. 2:1-274.
- Cooper, J.G. 1874. Animal life of the Cuyamaca Mountains. Am. Nat. 8:14-18.
- Dawson, W.L. 1916. A personal supplement to the distributional list of the birds of California. Condor 18:22-30.
- Devillers, P. 1970. Identification and distribution in California of the *Sphyrapicus varius* group of sapsuckers. Calif. Birds 1:47-76.
- Emerson, W.O. 1887. Ornithological observations in San Diego County. Bull. California Acad. Sci. 2:419-431.
- Fortner, J.C. 1920. Clark Nutcracker and White-winged Dove in southern California. Condor 22:190.
- Grinnell, J. 1908. The biota of the San Bernardino Mountains. Univ. California Publ. Zool. 5:1-170.
- Grinnell, J. 1928. A distributional summation of the ornithology of Lower California. Univ. California Publ. Zool. 32:1-300.
- Grinnell, J. & A.H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avif. 27.

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- Grinnell, J. & H.S. Swarth 1913. An account of the birds and mammals of the San Jacinto area of southern California. Univ. California Publ. Zool. 10:197-406.
- McCaskie, G. 1966. The nesting season. Southern Pacific Coast region. Aud. Field Notes 20:545-547.
- McCaskie, G. 1970. The nesting season. Southern Pacific Coast region. Aud. Field Notes 24:715-718.
- McGregor, R.C. 1899. Some summer birds of Palamar Mountains, from the notes of J. Maurice Hatch. Bull. Cooper Ornithol. Club 1:67-68.
- Miller, A.H. 1951. An analysis of the distribution of the birds of California. Univ. California Publ. Zool. 50:531-644.
- Pequegnat, W.R. 1945. Report upon the biota of the Santa Ana Mountains. J. Entomol. Zool. 37:25-41.
- Sams, J.R. & K. Stott, Jr. 1959. Birds of San Diego County, California: An annotated checklist. Occas. Pap. San Diego Soc. Nat. Hist. 10:1-49.
- Willett, G. 1933. A revised list of the birds of southwestern California. Pac. Coast Avif. 21.
- Winter, J. 1974. The distribution of the Flammulated Owl in California. West. Birds 5:25-44.

Appendix 1. Species and numbers of birds observed on Hot Springs Mountain, San Diego Co., California. The three numbers indicate respectively the numbers of each species recorded on each of the three trips. Time spent in observation was 14 hours on 3-4 June, 9 hours on 23-24 June, and 8 hours on 21-22 July, 1980.

Red-tailed Hawk *Buteo jamaicensis* (4, 1, 1), Mountain Quail *Oreortyx pictus* (16, 4, 4), Band-tailed Pigeon *Columba fasciata* (20, 9, 13), Mourning Dove *Zenaida macroura* (8, 3, 2), Anna's Hummingbird *Archilochus anna* (14, 8, 3), Calliope Hummingbird (2, 2, 1), Rufous/Allen's Hummingbird *Selasphorus* sp. (0, 0, 5), Common Flicker *Colaptes auratus* (6, 4, 4), Acorn Woodpecker *Melanerpes formicivorus* (42, 28, 30), Hairy Woodpecker *Picoides villosus* (4, 4, 2), Nuttall's Woodpecker *Picoides nuttallii* (2, 0, 2), White-headed Woodpecker *Picoides albolarvatus* (2, 13, 8), Ash-throated Flycatcher *Myiarchus cinerascens* (13, 9, 9), Dusky Flycatcher (1, 0, 0), Western Flycatcher *Empidonax difficilis* (3, 3, 0), Western Wood Pewee *Contopus sordidulus* (18, 11, 10), Olive-sided Flycatcher *Contopus borealis* (2, 2, 3), Violet-green Swallow *Tachycineta thalassina* (30, 25, 25), Steller's Jay *Cyanocitta stelleri* (37, 22, 19), Scrub Jay *Aphelocoma coerulescens* (13, 1, 5), Common Raven *Corvus corax* (2, 1, 0), Mountain Chickadee *Parus gambeli* (80, 66, 62), Plain Titmouse *Parus inornatus* (13, 5, 14), Bushtit *Psaltriparus minimus* (4, 8, 6), White-breasted Nuthatch *Sitta carolinensis* (10, 9, 10), Red-breasted Nuthatch (0, 1, 0), Pygmy Nuthatch *Sitta pygmaea* (3, 2, 0), Brown Creeper *Certhia familiaris* (8, 4, 2), Wrentit *Chamaea fasciata* (7, 5, 8), House Wren *Troglodytes aedon* (39, 22, 20), Bewick's Wren *Thryomanes bewickii* (1, 0, 5), California Thrasher *Toxostoma redivivum* (2, 2, 0), American Robin *Turdus migratorius* (0, 0, 2), Hermit Thrush (0, 1, 0), Western Bluebird *Sialia mexicana* (43, 15, 21), Orange-crowned Warbler *Vermivora celata* (0, 2, 4), Black-throated Gray Warbler (0, 1, 3), Scott's Oriole *Icterus parisorum* (0, 0, 1), Northern Oriole *Icterus galbula* (0, 0, 1), Brown-headed Cowbird *Molothrus ater* (3,

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Appendix 1 (Cont.)

3, 3), Western Tanager *Piranga ludoviciana* (18, 9, 10), Black-headed Grosbeak *Pheucticus melanocephalus* (6, 0, 17), Purple Finch *Carpodacus purpureus* (13, 4, 4), House Finch *Carpodacus mexicanus* (0, 6, 5), Lesser Goldfinch *Carduelis psaltria* (4, 14, 10), Lawrence's Goldfinch *Carduelis lawrencei* (0, 2, 3), Green-tailed Towhee (1, 2, 0), Rufous-sided Towhee *Pipilo erythrophthalmus* (3, 22, 18), Lark Sparrow *Chondestes grammacus* (1, 2, 4), Dark-eyed Junco *Junco hyemalis* (67, 23, 14), Chipping Sparrow *Spizella passerina* (1, 1, 0), Black-chinned Sparrow *Spizella atrogularis* (5, 0, 0).

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Black-throated Gray Warbler

Sketch by Tim Manolis