

Tyrannus vociferans. Cassin's Kingbird. We first discovered three individuals of this species, apparently members of a family group, at Deep Springs, Inyo County, on 15 July 1962, after hearing their distinctive vocalizations. McCaskie saw a pair there on 14 July 1963, and we saw at least six individuals, including a pair building a nest, on 10 and 11 June 1964; DeBenedictis saw this pair apparently feeding young and discovered a second pair's nest on 28 June 1964. We saw at least five individuals there on 29 and 30 May 1965. At Oasis, Mono County, Richard Stallcup saw an individual on 24 August 1963, and we saw another bird on 10 and 11 June 1964. DeBenedictis watched an individual in the same area attempting to pull a length of string from a tree top on 28 June 1964, and McCaskie saw two birds on 22 August 1964. In eastern California this species is not otherwise known to breed north of the Providence Mountains, San Bernardino County (Grinnell and Miller, Pacific Coast Avifauna, No. 27, p. 250, 1944), 200 miles to the south, but "vagrants" have been reported from Death Valley, Inyo County (Wauer, Condor, 64:231, 1962).

At both Deep Springs and Oasis this species was found in otherwise arid *Artemesia* flats together with the more numerous Western Kingbird, *Tyrannus verticalis*, in cottonwoods (*Populus* sp.) growing along irrigation ditches near ranch buildings. We were impressed by an apparent spacing of the two species in this linear habitat, particularly pronounced in 1962 and 1964. Cassin's Kingbirds were located in the same section of the ranch plantings in all four years. At Deep Springs in 1962 we saw a Cassin's Kingbird chase a Western Kingbird a short distance; the chase ended when the two birds landed about a foot apart in a small tree. In 1964 the Cassin's Kingbirds were localized in an area not occupied by Western Kingbirds, although the latter had been found there in other years; after two Cassin's Kingbirds apparently disappeared between 11 and 28 June, their favorite perch, a net in a tennis court, was occupied by a pair of Western Kingbirds. In 1965 the two species were much intermixed, and little territorial behavior of any sort was evident. At Oasis, Cassin's Kingbirds were usually seen in the same trees with Western Kingbirds. Hesperheide (Wilson Bull., 76:265-281, 1965) reported that these species are not interspecifically territorial in southeastern Arizona but suggested that intraspecific territoriality may be confined to the vicinity of the nest. Our casual observations also give us this impression but suggest that in some areas, perhaps where nest sites are at a premium, these two species may be as interspecifically territorial as they are intraspecifically territorial.

Vireo solitarius plumbeus. Solitary Vireo. We discovered a singing male Solitary Vireo in piñon-juniper woodland near Westgard Pass, Inyo County, on 14 July 1962. McCaskie collected the bird (Museum of Vertebrate Zoology specimen no. 148200), and it was identified as this race by Ned K. Johnson. McCaskie heard a Solitary Vireo singing from similar habitat near this locality on 13 July 1963, and we heard two widely separated birds at about 6500-foot elevation in piñon-juniper along Wyman Creek in Inyo County on 10 June 1964. DeBenedictis and three others found a singing bird near Westgard Pass on 30 May 1965 and noted its gray back and flanks from distances as close as 10 feet. Solitary Vireos are not known to breed in the White Mountains. As the avifauna of the White Mountains has clear affinities with that of the Great Basin (Miller and Russell, *op. cit.*), the eventual discovery that *V. s. plumbeus* breeds there would not be at all surprising. The only other report of this race from California is of a migrant taken on 26 November 1960 near Needles, San Bernardino County (Cardiff, Condor, 61:534, 1963).—PAUL DEBENEDICTIS, *University of Michigan Museum of Zoology, Ann Arbor, Michigan*, and R. GUY MCCASKIE, *San Diego, California*.

Turkey Vulture Migration in Veracruz, México.—At 0900 hours, 27 March 1966, we observed a large migrating flock of Turkey Vultures, *Cathartes aura*, 30 miles south of Tecolutla, Veracruz, México, on highway 125. The flock was estimated to consist of several thousand individuals including several unidentified hawks. The flock, about three miles in length, was linearly oriented in a broad band with the birds spiraling and constantly drifting north. A photograph taken of a segment of the flock passing overhead shows 160 vultures. Other flocks, with up to 200 birds, were seen on the horizon. This major flight seemed to be part of a general migration

as scattered small groups of vultures were seen as we traveled south to the city of Veracruz. More small flocks were seen west of Veracruz on the following day. The migrating vultures seemed to be restricted to the coastal lowlands since no additional flocks were seen once we left that area.

Similar flights have been observed during autumn in Panamá by Loftin (Carib. J. Sci., 3:63-64, 1963) and Hicks, Rogers, and Child (Bird-Banding, 37:123, 1966). Eisenmann (Smithson. Misc. Coll., 117:13, 1952) has reported large flocks over Barro Colorado Island, Panama Canal Zone, in the spring. Of the studies on the birds of Veracruz, only Wetmore (Proc. U.S. Natl. Mus., 93:237, 1943) has commented on a large migration of Turkey Vultures. He observed the steady passage of numerous small groups of vultures through southern Veracruz on 6 and 10 April 1939. His largest group contained about 50 birds. To the best of our knowledge, our observation is the first record of large migratory flocks of Turkey Vultures in Veracruz.—LOUIS J. BUSSJAEGER, CHARLES C. CARPENTER, HAROLD L. CLEVELAND, and DALE L. MARCELLINI, *Department of Zoology, University of Oklahoma, Norman, Oklahoma, 1 September 1966.*

Capture of a Hoary Bat, *Lasiurus cinereus*, by a Sparrow Hawk.—On 17 January 1965, at 1445 PST, in downtown San Jose, Santa Clara County, California, I saw a male Sparrow Hawk (*Falco sparverius*) flying with a bat in its talons. I observed this event on a sunny day from a distance of about 20 meters.

The Sparrow Hawk flew three to four meters high beneath the canopy of some streetside shade trees. At first sighting the bird was holding the bat in its right foot in such a way that the bat could freely flap its wings and swing to-and-fro. After a few seconds the bat fell to the ground after either struggling free or having been dropped. The bird did not attempt to recapture the bat but perched 10 meters high in a tree located about 40 meters away. Ten minutes later, the Sparrow Hawk flew away, evidently abandoning its catch.

When I collected the bat, then identified as a male *Lasiurus cinereus*, it was still alive but severely wounded by talon punctures. This bat was prepared as a museum specimen and deposited in the San Jose State College Museum of Vertebrate Zoology (accession no. 2210).

To my knowledge, this is the first record of capture of *L. cinereus* by a Sparrow Hawk. A survey of Sparrow Hawk foods by Heinzelman (Wilson Bull., 76:323-330, 1964) includes only the bats *Eptesicus fuscus* and *Tadarida brasiliensis*. Bent (Bull. U.S. Natl. Mus. 170, p. 123, 1938) reports a Sparrow Hawk's capture of a "small bat" in the "depths of the Grand Canyon of the Colorado."

I acknowledge the help of Miss Jean Norton and G. Victor Morejohn of San Jose State College, who prepared the bat specimen.—RONALD L. CHURCH, *Department of Biology, University of Nevada, Reno, Nevada, 89507, 26 August 1966.*

The Status of Certain Fringillids in California.—The majority of the following species are considered casual or accidental in California but most are now reported annually within the state. The status of many of these species may have been obscured because they seldom come to feeding stations, in contrast to many other species of this group, as the White-throated Sparrow, *Zonotrichia albicollis*, and the Harris' Sparrow, *Z. querula*, which are now considered rare winter visitors to California, but which actually may occur no more frequently than the species treated in this paper.

Pheucticus ludovicianus. Rose-breasted Grosbeak. In 1944 this species was known from a spring and a midsummer report from coastal California and one spring and two fall records from the eastern part of the state (Grinnell and Miller, Pacific Coast Avifauna, No. 27, p. 441-2, 1944). Since then a specimen has been taken at Pacific Grove, Monterey County, on 12 October 1963 (Audubon Field Notes, 18:69, 1964), and several sight records, most of lone males, have been published. Coastal records are from: Fort Ross, Sonoma County, 29 June 1962 (Sheldon, Condor, 65:241, 1963); Santa Rosa, same county, 3 January to 13 April 1963 (female banded, AFN, 17: 356, 432, 1963) and a male there 18 to 25 December 1963 (AFN, 18:385, 1964); San Francisco, 25 August 1955 (AFN, 9:402, 1955); Oakland, Alameda County, 3 September 1963 (AFN, 18:69,

1964); near Mt. Harmon, Santa Cruz County, 24 June 1961 (AFN, 15:491, 1961); Los Angeles, 2 August 1953 (AFN, 8:43, 1954); Glendale, Los Angeles County, 3 June 1943 (Berry, Condor, 47:268, 1945); Tustin, Orange County, 25 July 1964 ("a pair," AFN, 7:268, 1953); San Juan Capistrano, same county, 9 April 1963 (AFN, 17:436, 1963); and San Diego, 19 January to 5 February 1963 (AFN, 18:389, 1964). In eastern California it has been reported from: Death Valley, Inyo County, 15 November 1963 (AFN, 18:76, 1964); China Lake, same county, 12 May 1961 (AFN, 15:440, 1961), and Idyllwild, Riverside County, 16 to 23 May 1961 (AFN, 15:494, 1961).

Stallcup saw a male on Point Reyes, Marin County, on 26 May 1964 and two on 6 June 1965. McCaskie and DeBenedictis saw a female (with deep-saffron wing linings) at Deep Springs, Inyo County, on 29 May 1965. McCaskie saw a male that frequented a feeder in Los Angeles between 15 February and 28 March 1964. McCaskie and Stallcup saw a male present at a feeder on Point Loma, San Diego County, between 28 February and 13 April 1963, and McCaskie saw a male present at a feeder in San Diego from 28 December 1965 to 15 February 1966. McCaskie and DeBenedictis collected an immature male (San Diego Natural History Museum no. 35102) near Imperial Beach, San Diego County, on 10 October 1964.

This species appears to be a rare migrant and winter visitor in California. The old midsummer Humboldt County record may have come from a temporary breeding colony (Grinnell and Miller, *op. cit.*), and at least one of the other summer records apparently involves a pair. In view of the close relationship between this and the Black-headed Grosbeak, *P. melanocephalus* (West, Auk, 79:399-424, 1962), reports of Rose-breasted Grosbeaks in the western United States are of more than casual interest.

Guiraca caerulea. Blue Grosbeak. This species breeds commonly in central and southern California but previously has not been reported in the winter. On 29 January 1964 McCaskie saw a lone bird feeding with a flock of House Finches, *Carpodacus mexicanus*, near San Ysidro, San Diego County. Stallcup saw a male near Solana Beach, same county, on 22 February 1964, and McCaskie saw it on 13 March.

Passerina cyanea. Indigo Bunting. Three sight records in the summer 1939 from the San Francisco Bay region were the only California reports in 1944 (Grinnell and Miller, *op. cit.*, p. 574). Since then spring and summer records of males include specimens from: Rialto, San Bernardino County, 27 May 1950 (Cardiff, Condor, 53:100, 1951); Boquet Canyon, Los Angeles County, 10 June 1957 (Bleitz, Condor, 60:408, 1958); and Mecca, Riverside County, 11 April 1908 (Thompson, Condor, 66:445, 1964); and sightings at: Calaveras Big Trees, Calaveras County, 23 June 1947 (AFN, 1:188, 1947); Morongo Valley, San Bernardino County, 24 April 1965 (AFN, 19:512, 1965); San Gabriel Mts., Los Angeles County, 28 June 1965 (AFN, 13:456, 1959); near San Juan Capistrano, Orange County, 13 June 1965 (AFN, 19:578, 1965); and Ramona, San Diego County, 23 May 1956 (AFN, 10:364, 1956). A fall sight record of a male near Imperial Beach, San Diego County, on 10 October 1962 (AFN, 17:71, 1963) and two winter records, one seen in Ferndale, Humboldt County, from 9 January to 25 March 1963 (Wilbur, Condor, 65:533, 1963), and one collected in Carmel, Monterey County, on 2 February 1959 (Williams, Condor, 63:341, 1961), have also been reported.

McCaskie and Stallcup saw a male near Fort Bidwell, Modoc County, on 2 July 1961. Stallcup saw a male on Point Reyes, Marin County, on 18 May 1964 and collected a singing first-year male (Museum of Vertebrate Zoology no. 149867) near Elkhorn Ferry, Yolo County, on 28 July 1963. McCaskie and DeBenedictis saw a pair at Oasis, Mono County, on 10 June 1964, and they retrieved a mummified adult male (SDNHM no. 35079) that had been dead at least a week on 10 June 1964 and saw a singing male the following day at Deep Springs, Inyo County. Stallcup and DeBenedictis saw a different male there on 28 June 1964, and McCaskie saw another on 22 August 1964. In San Diego County McCaskie saw a "female" on Point Loma on 25 October 1963; he and Stallcup collected an adult female (SDNHM no. 30782) near Imperial Beach on 6 September 1963; and McCaskie saw a molting male there on 21 September 1963, a "female" on 27 September 1963, two "females" on 3 October 1963, and a molting male from 28 September to 2 October 1964.

The Indigo Bunting appears to be expanding its range into the southwestern United States

(Phillips, Marshall, and Monson, *The Birds of Arizona*, p. 180, 1964), possibly to California as indicated by the above records. As this species hybridizes with the Lazuli Bunting, *P. amoena*, where their ranges overlap in the Great Plains (Sibley and Short, *Auk*, 76:443-463, 1959), the probable continued occurrence of Indigo Buntings in California should be followed carefully.

Passerina ciris. Painted Bunting. Three birds found near Imperial Beach, San Diego County, in the fall of 1962 are the only prior reports from California (McCaskie and Banks, *Auk*, 81:358, 1964). McCaskie saw a "female" with a flock of Lazuli Buntings, *P. amoena*, on Point Loma, San Diego County, on 22 September 1963, and he and DeBenedictis collected an immature female (SDNHM no. 30783) near Imperial Beach on 28 September 1963. This and the earlier specimen, reported as nominate *ciris* by McCaskie and Banks, have been examined by Robert W. Storer, who finds both specimens are within the size range of both races but closer to the western race *pallidior* in coloration. The Painted Bunting migrates (perhaps irregularly) through southeastern Arizona (Phillips, Marshall, and Monson, *op. cit.*, p. 181) and apparently also occasionally reaches California.

Spiza americana. Dickcissel. Two specimens and several sight records for the fall period recently have been reported from California. One specimen was taken at Arcata, Humboldt County, on 19 November 1957 (Woody, *Condor*, 60:195, 1959); one was taken in Death Valley, Inyo County, on 22 September 1961 (Wauer, *Condor*, 64:232, 1962), and others were seen on 17 and 27 September 1964 (AFN, 19:82, 1965); one was examined in the hand at Santa Monica, Los Angeles County, on 30 September 1948 (Stager, *Condor*, 51:44, 1949); lone birds were seen at Morongo Valley, San Bernardino County, 7 September 1964 and at the Salton Sea, Imperial County, 10 October 1964 (AFN, 19:82, 1965); and two were seen on Catalina Island on 7 October 1963 (AFN, 18:69, 1964).

DeBenedictis saw one on Point Reyes, Marin County, on 20 October 1963. McCaskie saw at least 12 near Imperial Beach, San Diego County, between 20 September and 1 October 1963, including seven together on 27 September; he collected an immature male (SDNHM no. 30784) on 20 September. McCaskie and DeBenedictis saw one there on 10 October 1964. This species is evidently a rare fall migrant in California.

A female seen by McCaskie and DeBenedictis at Deep Springs, Inyo County, on 10 June 1964 appears to be the only California spring record, and a male seen by McCaskie and Stallcup during its stay at a feeder in San Diego from 2 December 1963 to 16 March 1964 appears to be the only California winter record.

Calamospiza melanocorys. Lark Bunting. This species is an irregular winter visitor to the southeastern part of the state, where it has not been reported since 1951, when Gale Monson noted up to 450 near Havasu Lake in San Bernardino County (AFN, 6:210, 1952). Stragglers have been taken on the coast as far north as Santa Barbara County and inland to Mariposa County (Grinnell and Miller, *op. cit.*, p. 480).

Stallcup collected an immature male (MVZ no. 150957) on Point Reyes, Marin County, on 25 September 1963, and he and DeBenedictis saw another on 13 September 1964. McCaskie saw up to three together near Imperial Beach, San Diego County, between 3 and 19 October 1963 and another on 24 November 1963. He found 10 there between 10 and 18 April 1966 and collected a female (SDNHM no. 36022) on 10 April.

Ammodramus savannarum. Grasshopper Sparrow. The only published record from southeastern California is of one collected in Joshua Tree National Monument on 30 September 1961 (Miller and Stebbins, *Desert Animals in Joshua Tree National Monument*, p. 253, 1964). McCaskie collected an unsexed immature (SDNHM no. 30787) near Niland, Imperial County, on 9 November 1963 and saw another near Westmoreland, same county, on 12 December 1964. On both occasions the birds were with other sparrows in weedy fields.

Ammospiza caudacuta. Sharp-tailed Sparrow. Previous California records of this species are specimens from Milpitas, Santa Clara County, 6 May 1891 (Ridgway, *Proc. U.S. Natl. Mus.*, 14: 483, 1891) and 31 January 1896 (Barlow, *Condor*, 2:483, 1891) and two taken from a flock of five at Morro Bay, San Luis Obispo County, on 27 December 1952 (Munro, *Condor*, 56:108, 1954); and sight records of one at Alviso, Santa Clara County, between 27 December 1948 and

13 March 1949 (Kelly and Bailey, Gull, 31:11, 1949) and two near Venice, Los Angeles County, between 16 January and 12 February 1944 (Cogswell, Condor, 46:204, 1944).

Stallcup saw one near the Dumbarton Bridge, Santa Clara County, on 22 May 1963, and he, DeBenedictis, and many others saw one there on 1 December 1963. McCaskie collected an immature female (SDNHM no. 30788) at Imperial Beach, San Diego County, on 2 November 1963. All specimens and probably all sight records from California are of the western race *nelsoni*. This secretive marsh-dwelling sparrow is probably a rare but regular winter visitor to California.

Spizella pallida. Clay-colored Sparrow. McCaskie found an immature female near Imperial Beach, San Diego County, on 24 September 1963 and collected it (SDNHM no. 30790) the following day. McCaskie and DeBenedictis saw three others in the same area on 29 September 1963, and McCaskie saw one or two there between 20 and 25 September 1964 and two on 30 October 1965. These are the first records of this species from California, but its presence there is not surprising since it breeds in British Columbia and winters in Baja California.

Melospiza georgiana. Swamp Sparrow. California specimens of this species are from: near Sebastopol, Sonoma County, 31 December 1956 (MVZ no. 134783); Daly City, San Mateo County, 21 October 1923 (Grinnell, Condor, 27:247, 1925); Keeler, Inyo County, 1 November 1921 (Dickey, Condor, 24:136, 1922); Morro Bay, San Luis Obispo County, 31 December 1952 (Munro, Condor, 56:108, 1954); near Riverside, Riverside County, 13 November 1948 (Cardiff, Condor, 51:150, 1949); the Salton Sea, Imperial County, 1 February 1953 (Cardiff, Condor, 56:54, 1954) and 22 and 25 April 1953 (Cardiff, Condor, 63:183, 1961); and Sweetwater Reservoir, San Diego County, 4 November 1943 (Huey, Condor, 46:201, 1944). Sight records are from near Sebastopol, Sonoma County, 30 December 1959 to 2 January 1960 (AFN, 14:339, 1960); Tomales Bay, Marin County, 18 April 1964 (AFN, 18:485, 1964); near Mecca, Riverside County, 12 March 1955 (AFN, 9:289, 1955); and Lakeside, San Diego County, 13 October 1954 (AFN, 12:60, 1958).

Stallcup saw one at Conn Lake, Napa County, on 7 March 1965 and another near Dillon's Beach, Marin County, on 2 January 1961. McCaskie saw one in Monterey, Monterey County, on 31 January 1961; it remained there until at least 25 February. Stallcup saw one near Carmel, same county, on 18 January 1964, and McCaskie saw one there on 2 October 1965. In San Diego County McCaskie saw one along the San Diego River in San Diego on 17 February 1965; one at Bonita on 7 December 1962 and two there between 11 January and 4 April 1964; two near San Ysidro between 12 February and 4 April 1964; and at least four (together) near Imperial Beach between 23 December 1963 and 12 February 1964, when he collected a male (SDNHM no. 35800). He saw one at the north end of the Salton Sea, Riverside County, on 9 May 1964 and two at the south end, Imperial County, on 22 February 1963.

All California specimens, save one of the nominate race collected by Cardiff on 1 February 1953, have been *M. g. ericrypta*. Over 30 individuals of this easily overlooked sparrow have been found in California, where, as in Arizona (Phillips, Marshall, and Monson, *op. cit.*, p. 209), it is probably a rare winter visitor.—R. GUY McCASKIE, *San Diego, California*, RICHARD STALLCUP, *Oakland, California*, and PAUL DEBENEDICTIS, *University of Michigan Museum of Zoology, Ann Arbor, Michigan, 15 August 1966*.

Role of Song in Territoriality of Black-throated Sparrows.—In the spring and summer of 1965 a study was undertaken to examine the relative roles of visual and vocal communication in territorial defense in Black-throated Sparrows (*Amphispiza bilineata*). The study was done with a breeding population living in creosote-bush scrub in the Rio Grande Valley near Las Cruces, New Mexico. It was noticed during field observations that Black-throated Sparrows were not readily observable when singing. Among field notes stating the site from which a bird sang, 29 per cent of the notations (7 of 24) specifically mention that the bird sang from a prominent position, while the remaining 71 per cent mention positions down in the bush, on the ground, or otherwise hidden.

Other quantitative data were taken on an individual territorial male sparrow that was observed singing and foraging. Singing sites were classified as either prominent (in the upper,