Western Specialty:
Pacific Wren

Photo by © Peter LaTourrette of Los Altos, California:
Pacific Wren (Troglodytes pacificus)
In 2010, the American Ornithologists’ Union Committee on Classification and Nomenclature for North and Middle America reclassified populations of the Winter Wren in western North America as the Pacific Wren (Troglodytes pacificus) and those in eastern North America as the Winter Wren (T. hiemalis), both as species different from the Eurasian Wren (T. troglodytes).
The decision was made on the basis of differences in voice and genetics, even at the point of contact at Tumbled Ridge, northeastern British Columbia (see Toews, D. P. L., and Irwin, D. E. 2008. Cryptic speciation in a holarctic passerine revealed by genetic and bioacoustic analyses. Molecular Ecology 17:2691–2705). Within the Pacific Wren, there are several divergent subspecies, some large, on the islands of Alaska, and further variation, still poorly understood, in the species’ mainland range (see Rea, A. M., in A. R. Phillips’ Known Birds of North and Middle America, part 1, 1986).
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Front cover photo by © Mark Scheel of Sierra Madre, California: Hudsonian Godwits (Limosa haemastica), Edwards Air Force Base, Los Angeles County, California, 15 May 2010.

Back cover “Featured Photo” by © Nancy Bell of Livermore, Colorado: Xanthochroistic male Cassin’s Finch (Carpodacus cassini) near Livermore, Larimer County, Colorado, 26 March 2009, in which yellow-orange has replaced the normal red.

Western Birds solicits papers that are both useful to and understandable by amateur field ornithologists and also contribute significantly to scientific literature. The journal welcomes contributions from both professionals and amateurs. Appropriate topics include distribution, migration, status, identification, geographic variation, conservation, behavior, ecology, population dynamics, habitat requirements, the effects of pollution, and techniques for censusing, sound recording, and photographing birds in the field. Papers of general interest will be considered regardless of their geographic origin, but particularly desired are reports of studies done in or bearing on North America west of the 100th meridian, including Alaska and Hawaii, northwestern Mexico, and the northeastern Pacific Ocean.

Send manuscripts to Kathy Molina, Section of Ornithology, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007. For matters of style consult the Suggestions to Contributors to Western Birds (at www.westernfieldornithologists.org/docs/journal_guidelines.doc).
THE 34TH REPORT OF THE CALIFORNIA BIRD RECORDS COMMITTEE: 2008 RECORDS


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ABSTRACT: The California Bird Records Committee reached decisions on 233 records involving 76 species, one species pair, and one hybrid combination evaluated during 2008, endorsing 200 of them. New to California was the Bluethroat (Luscinia svecica), bringing California’s bird list to 641 species, ten of which are non-native. A potential first state record of a Yellow-headed Caracara (Milvago chimachima) was not accepted on grounds of questionable natural occurrence, and potential first state records of the Great Black-backed Gull (Larus marinus) and Oriental Greenfinch (Chloris sinica) were not accepted on grounds of identification.

This 34th report of the California Bird Records Committee (hereafter the CBRC or the committee) discusses the evaluation of 233 records of 76 species, one species pair, and one hybrid combination. Although most records pertain to birds found in 2008, the period covered by this report spans the years from 1967 through 2008. The committee accepted 200 of the 233 records involving 209 individuals of 67 species, one species pair, and one hybrid, for an acceptance rate of 86%. Nineteen of the accepted records involved determinations of whether a bird was the same as another reported earlier in the year or in a previous year, and another involved a date extension. Twenty-nine records of 20 species were not accepted because of insufficient documentation or because descriptions were inconsistent with known identification criteria. Four additional records of two species were not accepted because of questions concerning the birds’ natural occurrence. Counties best represented by accepted records were San Diego (22 records), Imperial (20), Humboldt (17), Mendocino (17), Los Angeles (14), San Francisco (13, 11 of which were from or near Southeast Farallon I.),
Monterey (13), Orange (11), Santa Barbara (10), San Bernardino (9), Kern (8), Riverside (7), Inyo (7), Ventura (7), San Luis Obispo (6), and San Mateo (6). In addition to the Bluethroat, highlights of this report include California’s second Black-tailed Gull (*Larus crassirostris*), third Bridled Tern (*Onychoprion anaethetus*), fourth Cave Swallow (*Petrochelidon fulva*), fourth hybrid Blue-winged × Golden-winged Warbler (*Vermivora cyanoptera × V. chrysoptera*), and first record of a returning Dusky-capped Flycatcher (*Myiarchus tuberculifer*). In addition, species recorded in unusually high numbers in 2008 included the Mottled Petrel (*Pterodroma inexpectata*) with 20, the Lesser Black-backed Gull (*Larus fuscus*) with 14, the Worm-eating Warbler (*Helmitheros vermivorum*) with 13, and Sprague’s Pipit (*Anthus spragueii*) with 9. Records of the Mottled Petrel and Sprague’s Pipit are reviewed only through 2008.

Currently, the committee is considering the validity of potential first state records of the White-chinned Petrel (*Procellaria aequinoctialis*) and Yellow-breasted Bunting (*Emberiza aureola*). With the addition of one new state record described in this report, California’s list stands at 641 species, ten of which are non-native and two of which have been extirpated within historical times. An additional species that has declined to the brink of extirpation within the past two decades, the Elf Owl (*Micrathene whitneyi*), was added to the review list at the January 2010 meeting.

The acceptance rate of 86% was above the average of 80.2% for all CBRC records combined and continues a recent trend toward higher than average acceptance rates. For example, the average annual acceptance rate between 2006 and 2008 was 84.8%, whereas the average between 1996 and 1998 was 73.5%. One cause for this trend may be the increasing use of digital photography to support records that otherwise might have been documented only with written descriptions. The total records reviewed is above the committee’s average of 218.9 records per report over its first 33 reports but well below the more recent three-year average of 263.7.

The list of species reviewed by the committee is posted at the CBRC web site at www.californiabirds.org. This site also includes the California state list, the committee’s bylaws, a reporting form for the direct e-mail submission of records to the CBRC, the addresses of current committee members, and a photo gallery of recent submissions, including some pertaining to records published in this report. Additional information about the CBRC, the Western Field Ornithologists (WFO), and its journal, *Western Birds* can be found at the WFO home page at www.westernfieldornithologists.org.

All documentation reviewed by the CBRC, including copies of descriptions, photographs, videotapes, sketches, audio recordings, and committee comments on records submitted, is archived at the Western Foundation of Vertebrate Zoology, 439 Calle San Pablo, Camarillo, California 93012, and are available for public review. The CBRC solicits and encourages observers to submit documentation for all species on the review list, as well as for species unrecorded in California. Documentation should be sent to Guy McCaskie, CBRC Secretary, P. O. Box 275, Imperial Beach, CA 91933-0275 (e-mail: secretary@californiabirds.org).
NEWS AND FORMAT

Committee News. The committee’s voting membership after the January 2010 annual meeting consisted of Paul E. Lehman (chair), Daniel S. Singer (vice-chair), David M. Compton, Jon L. Dunn, Kimball Garrett, Oscar Johnson, Joseph Morlan, Brian Sullivan, and James R. Tietz. Guy McCaskie continued in his role as nonvoting secretary. Additional committee members who voted on many of the records in this report include Alvaro Jaramillo, Kristie N. Nelson, James E. Pike, Peter Pyle, and Scott B. Terrill.

As noted by Shuford (2006) and Iliff et al. (2007), California Birds/Western Birds is now available online via SORA, the Searchable Ornithological Research Archives (http://elibrary.unm.edu/sora), and all previously published CBRC reports through 2006 can be accessed through that site. Annual reports published from 1999 through 2009 also are available through the CBRC website at www.californiabirds.org.

Format and Abbreviations. As in other recent CBRC reports, records are generally listed chronologically by first date of occurrence and/or geographically, from north to south. Included with each record is the location, county abbreviation (see below), and date span. The date span usually follows that published in North American Birds (hereafter N. Am. Birds; formerly American Birds and Field Notes); if the CBRC accepts a date span that differs from a published source, the differing dates are italicized. Initials of the observer(s) responsible for finding and/or identifying the bird(s)—if known and if they supplied supportive documentation—are followed by a semicolon, then the initials, in alphabetized order by surname, of additional observers submitting supportive documentation, then the CBRC record number consisting of the year of submission and a chronological number assigned by the secretary. All records are sight records unless otherwise indicated: a dagger (†) following an observer’s initials indicates the observer supplied a supportive photograph, (‡) indicates the observer supplied a video, (§) indicates a voice recording, (S) indicates a sketch, and (#) indicates a specimen record, which is followed by the acronym (see below) of the institution housing the specimen and that institution’s specimen catalog number. An asterisk (*) prior to a species’ name indicates that the species is no longer on the CBRC’s review list.

In this report, the first number in parentheses after the species’ name is the number of individual birds accepted by the CBRC through this report, not the number of accepted records; the number of individual birds may be higher than the number of records, as historically the committee has treated groups of individuals appearing together with a single record number (e.g., a flock of Common Redpolls, Acanthis flammea). The second number is the number of new individuals accepted in this report (because this number excludes records thought to pertain to returning individuals treated in previous reports, it may be zero). Two asterisks (**) after the species’ total indicate that the number of accepted records refers only to a restricted review period or includes records accepted for statistical purposes only; see Roberson (1986) for more information.

When individual birds return to a location after a lengthy or seasonal absence, each occurrence is reviewed under a separate record number, and
committee members indicate whether or not they believe the bird is the same as one accepted previously. Decisions in such cases follow the opinion of the majority of members and, if a bird is considered a returning individual, the total number of individuals remains unchanged.

Although the CBRC does not formally review the age, sex, or subspecies of each bird, information on these subjects is often provided during the review process (and, in some cases, a strong majority or consensus is achieved). We report much of this information; the diagnosis of age, sex, or subspecies is the authors’ opinion based on the evidence in the files and committee members’ comments. Our terminology for age follows that used in text accounts found in CBRC (2007).

The CBRC uses standard abbreviations for California counties; those used in this report are ALA, Alameda; BUT, Butte; CC, Contra Costa; DN, Del Norte; GLE, Glenn; HUM, Humboldt; IMP, Imperial; INY, Inyo; KER, Kern; LA, Los Angeles; MRN, Marin; MEN, Mendocino; MER, Merced; MNO, Mono; MTY, Monterey; NEV, Nevada; ORA, Orange; PLA, Placer; RIV, Riverside; SAC, Sacramento; SBE, San Bernardino; SBT, San Benito; SD, San Diego; SLO, San Luis Obispo; SM, San Mateo; SBA, Santa Barbara; SCL, Santa Clara; SCZ, Santa Cruz; SIE, Sierra; SJ, San Joaquin; SON, Sonoma; TRI, Trinity; TUO, Tuolumne; VEN, Ventura; YOL, Yolo; YUB, Yuba. A list of abbreviations for all 58 California counties is available on the CBRC web site and in Appendix C of CBRC (2007). Other abbreviations used: Co., County; Cr., Creek; Ft., Fort; I., Island; km, kilometer; L., Lake; Mt., Mountain; n. mi., nautical mile; N.W.R., National Wildlife Refuge; Pt., Point; R., River; W.A., Wildlife Area.

Museum collections housing specimens cited in this report, allowing access to committee members for research, or otherwise cited, are the Natural History Museum of Los Angeles County, Los Angeles (LACM); San Diego Natural History Museum, San Diego (SDNHM); Western Foundation of Vertebrate Zoology, Camarillo (WFVZ); National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM); University of Michigan Museum of Zoology, Ann Arbor (UMMZ); Museum of Wildlife and Fish Biology, University of California, Davis (WFB); and, Death Valley National Park Museum (DVNPM).

RECORDS

TRUMPETER SWAN Cygnus buccinator (77, 1). An adult was at Piute Ponds on Edwards Air Force Base, LA, 23 Feb–9 Mar 2008 (KLG†, SG, MSc†, SLS†; 2008-038). The only accepted record from farther south is of a bird that spent part of the winter in El Monte, LA (1 Jan–17 Feb 1975), and later was present in Covina, LA, 13–15 Mar 1975 (1980-131; Binford 1983).

IDENTIFICATION NOT ESTABLISHED: One was reported vocalizing in flight at Lewiston L., TRI, 29 Dec 2008 (2009-007). Members were hesitant to accept the identification solely on the basis of the call, particularly given that the observer was not experienced with this species.

BAIKAL TEAL Anas formosa (7, 1). A first-winter male shot by a hunter near Loleta, HUM, 21 Jan 2008 (MMcCl; 2008-035; photo in N. Am. Birds 62:297) is preserved as a life mount in a private collection. Photographs of the mount by Stanley
W. Harris provided documentation of the record. The record passed in its first round of circulation, with one member withholding acceptance over concern of natural origin. This species is known to be kept in captivity, and past records have occasioned discussion of origin (e.g., see Iliff et al. 2007). However, the well-documented recovery of the Baikal Teal population since the 1990s, based on numbers wintering in South Korea and elsewhere in east Asia (Delaney and Scott 2002), may ease acceptance of records in California in the future. Six of the seven California records have involved birds shot by hunters.

**SMEW Mergellus albellus. IDENTIFICATION NOT ESTABLISHED:** The report of a female on the Yuba R. near Smartville, YUB, 4 Mar 2008 (2008-045) included little detail specifically on the bird observed (instead referring to its similarity to a field-guide illustration). Except for its small size in comparison to a Common Merganser (*Mergus merganser*), features described by the observer did not match those of a female Smew.

**ARCTIC LOON Gavia arctica (7, 2).** One seen in close comparison with the three common species of loon at Stone Lagoon, HUM, 12 Feb–5 Mar 2008 (RF†, KR†; 2008-030) provided a county first. A year-old bird in very worn plumage was photographed at close range in Bodega, SON, 12 Jun 2008 (SNGH†; LHu†; 2008-078; Figure 1). Both individuals showed not only extensive white flank patches but also other features indicating the Arctic Loon, such as a flat crown peaked on the forecrown and uptilted head and bill. Reinking and Howell (1993) and Birch and Lee (1997) discussed field identification of this species and discrimination of the Arctic Loon from the similar Pacific Loon (*G. pacifica*).

![Figure 1. This year-old Arctic Loon (*Gavia arctica*) was photographed 12 June 2008 at Bodega Harbor, Sonoma County. Although in worn and faded plumage, it shows the extensive white flanks, flattened crown, distinct forecrown peak, uptilted head, and apparently long bill typical of this species.](Photo by Steve N. G. Howell)
Figure 2. The subadult Short-tailed Albatross (*Phoebastria albatrus*) on the right was at Cordell Bank off Marin County, 8 August 2008. This photo highlights the differences in size from the Black-footed Albatross (*P. nigripes*) on the left. 

*Photo by Jan Roletto*

Figure 3. The Common Black-Hawk (*Buteogallus anthracinus*) shown here, the first in juvenal plumage in California, was present for one day at Silver Saddle Resort, Galileo Hill, Kern County, 27 April 2008.

*Photo by Bob Steele*
YELLOW-BILLED LOON *Gavia adamsii* (79, 2). One was 0.5 mi off Lover’s Pt. in Monterey, MTY, 26 Oct 2008 (RW†; 2008-172). A second-year bird on L. Havasu, SBE, moved back and forth between California and Arizona, 11 Jan–12 Jul 2008 (DJK; TABe†, BDe†, JSF, PEL‡, SJM†, DJP, KAR†; 2008-025; photo in *N. Am. Birds* 62:302). The latter was one of the few Yellow-billed Loons that have spent all or part of the summer in California, as well as one of the very few inland. Also inland was one at San Luis Reservoir, MER, 15 Sep–13 Oct 2008 (JLD, JSF, OJ, GMcC, MMR†; 2008-138), considered to be the same as the one there 16–20 Nov 2007 (2007-282; Singer and Terrill 2009). With its remiges described as either very short or missing entirely, it appeared incapable of flight. So it had likely been present for some time and may have summered.

SHORT-TAILED ALBATROSS *Phoebastria albatrus* (26**, 4). Second- or third-spring birds were 3.8 mi. w. of Pt. Pinos, MTY, 22 Mar 2008 (RW; 2008-048) and 12.7 mi. w. of North Farallon I., SF, 11 Apr 2008 (MB; 2008-076), a first- or second-fall bird was at 38.050° N, 123.450° W, Cordell Bank, MRN, 8 Aug 2008 (JaR†, SNGH; 2008-100; Figure 2), and a first-winter bird was near the Cordell Bank at 38.120° N, 123.479° W, SON, 29 Dec 2008 (VO, LC†, AP; 2009-001). Although this species was near extinction by the end of the 19th century, its population has rebounded. At the end of the 2006–2007 breeding season, the worldwide population was estimated at 2364 (BirdLife International 2009). This population increase is reflected in an increase in records in California waters. No Short-tailed Albatrosses were recorded in the state from 1900 to 1977. Of the 26 records accepted since then, 14 have been since 2005. The committee reviews records of this species from 1900 onward.

In addition to these birds, the same research cruise recorded many more of this species more than 200 n. mi. offshore. Although the CBRC has accepted only 79 Mottled Petrels for California, past records also indicate that this species occurs in relatively large numbers in some years. Prior to 2008, one-day totals of at least eight individuals were recorded on three occasions (Bevier 1990, Heindel and Garrett 1995,

Photo by Matt Sadowski

Figure 5. Adult Red-necked Stint (Calidris ruficollis) on the shore of San Diego Bay in the Naval Amphibious Base, Coronado, San Diego County, 23 July 2008. This photograph clearly shows the dark spotting on the side of the breast extending below the rufous on the upper breast, an important feature in distinguishing this species from the Little Stint (C. minuta). Another key character in which these species differ, the lack of rufous edges on the tertials of the Red-necked, is partly visible here. Other features evident in this photo are the extensive and unmarked rufous on the face and breast, split supercilium, extensively rufous scapulars, white stripe on the mantle, and short straight bill.

Photo by Matt Sadowski
Patten et al. 1995), accounting for 35 of the 59 individuals accepted. Therefore, the committee concluded that occurrences of the Mottled Petrel within 200 n. mi. of California are not extralimital but reflect the species' passage closer to shore in some years. It removed the Mottled Petrel from the review list at the 2009 meeting and now reviews records only through 2008.

IDENTIFICATION NOT ESTABLISHED: One reportedly seen from Southeast Farrallon I., SF, 26 Nov 2006 (2007-031) received support from a majority of the committee in every round. But others withheld their support because of the brevity and distance of the sighting, along with the fact that the normally conspicuous dark carpal bar on the underwing was not seen.

GALAPAGOS/HAWAIIAN PETREL \textit{Pterodroma phaeopygia/sandwichensis} (24, 2). Three sightings off Ft. Bragg, MEN, 8 Aug 2008 involved at least two individuals (CK†, JoP†, DLS; 2008-101). Several members, in part on the basis of Force et al. (2007), believed that the photographs represent Hawaiian Petrels. At the 2009 annual meeting, the committee concluded that identification of these species in the field is possible and that past records supported by photographs might be assigned to species. Analysis by Peter Pyle showed that, in particular, head pattern is useful for distinguishing between these species. Secondary characters include bill size, contrast between cap and mantle, thickness of the dark trailing edge of the secondaries, overall sleekness, and the presence of a black spot in the axillars. Pyle examined accepted records supported by photographs and recommended acceptance of the Fort Bragg record and 10 others as the Hawaiian Petrel. The committee will vote on whether or not these birds can be identified to species.

Of the 24 accepted records of this species pair through 2008, 11 are for August.

BULWER’S PETREL \textit{Bulweria bulwerii}. IDENTIFICATION NOT ESTABLISHED: A procellariid in the Santa Barbara Channel, VEN, 5 Sep 2007 (2007-243), found...
by a British tour group, was photographed through binoculars. The record received substantial support as this species in the first round. However, the poor quality of the photos and doubts about the size of the bird, which to some members seemed more appropriate for the similar but larger Jouanin’s Petrel (B. fallax), persuaded most in the second round that the bird could not reliably be identified to species. The committee has accepted only one of the three previous reports, of a well-documented bird in Monterey Bay, MTY, 26 Jul 1998 (1998-119; Erickson and Hamilton 2001).

STREAKED SHEARWATER Calonectris leucomelas (18, 1). One was 15 mi. off Santa Cruz, SCZ, 12 Oct 2008 (TA, KPe; ToE†, RW; 2008-139). Eleven of the 18 accepted records have come since 2001, and all 18 are from fall. Monterey Bay, which receives substantial coverage at that season, continues to supply most of the records, including all five since 2006.

GREAT SHEARWATER Puffinus gravis (7, 1). One was 5 mi. off Pt. Lobos, MTY, 29 Nov 2008 (LST, SBT; ER†, DLS, BLS†; 2008-189). Six of the seven accepted California records of this species, and six of the 11 records for the northeast Pacific, have come from Monterey Bay and surrounding waters. These records are spread widely over the fall and winter months.

WEDGE-TAILED SHEARWATER Puffinus pacificus (6, 1). One light-morph bird off Año Nuevo Pt., SM, 23 Aug 2008 (ToE†; JeP†, DSS†; 2008-108; photo in N. Am. Birds 63:190) was the first for San Mateo Co. Written details were sparse, but close-range photos clearly show this species, which remains extremely rare in California, although it is common in the tropical Pacific and nests on islands off the western coast of Mexico.

IDENTIFICATION NOT ESTABLISHED: A shearwater 25.5 mi. w. of Bodega Head, SON, 7 Sep 2007 (2007-179) was identified at the time of observation as this species by highly skilled and experienced observers. The record gained strong support during the first round, but some committee members believed the poor photographs showed a bird that was too heavy-bodied and short-tailed to be a Wedge-
tailed Shearwater. In addition, the photos suggested that the bird had an “M” pattern on the dorsal side and a capped appearance, also wrong for the Wedge-tailed. Most members thought a dark shearwater photographed at Southeast Farallon I., SF, 15 Sep 2008 (2008-160) was probably a Sooty Shearwater (*P. griseus*).

*MANX SHEARWATER* *Puffinus puffinus* (111, 2). Individuals were seen from shore at Pt. Pinos, MTY, 11 Sep 2006 (BLS; 2007-267) and at the mouth of Humboldt Bay, HUM, 15 Dec 2007 (BSa; 2008-124). The committee reviews records of this species through 2007.

**RED-TAILED TROPICBIRD** *Phaethon aethereus* (33, 5). One was at 33.082° N, 123.169° W (155 n. mi. wsw. of Pt. Conception, SBA), 17 Aug 2008 (WTH†; 2008-128), and four were seen equally far off the California coast during seabird surveys from the NOAA ship *McArthur II* in October and November 2008, including two at 35.317° N, 124.977° W (162 n. mi. wsw. of Pt. Sur, MTY), 2 Oct 2008 (SWW; 2009-033); one at 35.111° N, 124.167° W (132 n. mi. sw. of Pt. Sur, MTY), 3 Oct 2008 (SWW; 2009-034); and one at 30.906° N, 121.764° W (180 n. mi. sw. of San Nicolas I., VEN), 17 Nov 2008 (SWW; 2009-035). Similar numbers had been recorded on a research cruise in 2005, when larger numbers were off California but outside the 200-n.-mi. limit (Pyle 2006). As noted by Iliff et al. (2007), this species likely is regular far offshore of the state, although the number of accepted records remains relatively low.

**BLUE-FOOTED BOOBY** *Sula nebouxii* (92**, 1). One at 32.765° N, 117.777° W (27 n. mi. w. of Mission Bay, SD), 23 Aug 2008 (DP; TABI, BLC, TRS†; 2008-

Figure 9. Even in first-fall plumage, the Bluethroat (*Luscinia svecica*), with its long legs, broad pale supercilium, bib across the lower breast, and rusty tail base, is like no other species likely to occur in California. This individual, photographed on the first day of its 14–18 September 2008 stay on San Clemente Island, Los Angeles County, was the first recorded in the contiguous United States. On the basis of rusty tips to the greater secondary coverts and tertials, it was in its first fall; the lack of blue and red on the breast indicates a female (Svensson 1992). Although this bird’s origin cannot be determined, the Bluethroat is last of the species of passerine that breeds in Alaska and normally winters in the Old World to be recorded in California.

*Photo by Jason Fidorra*

106) was only the second recorded in California away from the mainland. Most records of this species are from the Salton Sea, site of sporadic minor invasions. The most recent of these irruptions was in 2006, following eight years in which only one individual was recorded. However, the three records from the past two years were all coastal or offshore (Singer and Terrill 2009). The committee reviews records of the Blue-footed Booby since 1972.

*BROWN BOOBY Sula leucogaster. IDENTIFICATION NOT ESTABLISHED:* A first-fall booby photographed while perched on a boat traveling between Santa Catalina I., LA, and Oceanside, SD, 11 Oct 2006 (2006-153) was identified by the photographer as a Brown Booby. Unfortunately, no written description of the bird was provided, and committee members disagreed over the interpretation of various features visible in the photo. When the record circulated for its fourth and final round, nearly half the committee believed the bird was possibly a Red-footed Booby (*S. sula*). The committee reviews records of the Brown Booby through 2007.

NEOTROPIC CORMORANT *Phalacrocorax brasilianus* (17, 1). A first-winter bird was at Fig Lagoon 1.5 mi. s. of Seeley, IMP, 3 Feb 2008 (TEW; 2008-042). One adult at the same location 24 Oct–11 Nov 2008 was joined by a second adult 5–11 Nov (GMcC; KZK†). These were presumed to be the same birds present at this location 23 Nov 2007–16 Feb 2008 (2007-273; Singer and Terrill 2009). Fourteen of California’s 17 records are from Imperial Co.
TRICOLORED HERON *Egretta tricolor* (57**, 2). Two records involving single adults, of one at the southeast corner of the Salton Sea, IMP, 25 Jul–1 Aug 2008 (GMcC; DR† 2008-094) and one at Bolsa Chica, ORA, 16–24 Oct 2008 (GRG†; RBMcN; 2008-145). The committee reviews records of this species since 1990.

*REDDISH EGRET* *Egretta rufescens* (93, 0). The dates of a first-fall bird in Anaheim, ORA, 10 Sep 1984 (1984-210) are extended to 10 Sep–27 Oct 1984 (HBK). The committee reviews records for this species through 2001.

YELLOW-CROWNED NIGHT-HERON *Nyctanassa violacea* (43, 5). An adult was at the Ventura R. mouth, VEN, 13 Apr 2008 (RM†; OJ; 2008-056), and another adult was in the Ventura Harbor, VEN, 15 Aug 2008 (DS†; 2008-129). In Imperial Beach, SD, a pair (2005-079 and 2005-080; Iliff et al. 2007), resident since Jun 2005, fledged three young in the summer of 2008 (GMcC; PEL; 2008-087), one of which was found dead near the nest on 30 Aug (GMcC, SDNHM #52127). One of the remaining juveniles was still present 1 Jan 2009. An immature at the same location 5 Jul 2008–1 Jan 2009 (PEL; GMcC; 2008-088) was probably one of the (2007-151) fledged here in 2007. The breeding in 2008 represented the third consecutive year the Imperial Beach pair had successfully raised young since establishing the first California nesting record for this species in 2006 (Heindel and Garrett 2008).

GLOSSY IBIS *Plegadis falcinellus* (21, 7). A first-spring bird was at the Prado Basin, RIV, 17 Mar 2008 (JEP; 2008-044), and an adult was near Daggett, SBE, 26 Apr 2008 (JCS†; 2008-072). Adults at Unit 1 of the Salton Sea N.W.R., IMP, 1 Aug 2008 (DWA†, TaE, GMcC; 2008-095), at Calipatria, IMP, 1 Aug 2008 (GMcC; 2008-096), 5.5 km nnw. of Calipatria, IMP, 1 Aug 2008 (TaE†, GMcC; 2008-097), near Ramer L., IMP, 8 Aug 2008 (GMcC; 2008-099), and 6 km nw. of Calipatria, IMP, 15 Aug 2008 (PAG; GMcC; 2008-102) were around the south end of the Salton Sea. This species now appears to be annual in summer in this area, which accounts for 13 of California’s 27 accepted records, dating to the first records in 2000 (McKee and Erickson 2002, San Miguel and McGrath 2005, Iliff et al. 2007). The growing number of records in the state in these years has been a part of this species’ expansion throughout the western United States (Patten and Lasley 2000).

IDENTIFICATION NOT ESTABLISHED: Photographs of a single bird at the Yolo Bypass W.A., YOL, 10 Oct 2007 (2008-198) were not supported by a written description and suggested that the bird may have been a hybrid of the Glossy and White-faced (*P. chihi*). Photographs of an individual at the Prado Basin, SBE, 5–11 Apr 2007 (2007-133) were accompanied by a written description, but, after three rounds, a majority of the committee concluded the photographic evidence suggested this bird too may have been a hybrid.

ROSEATE SPOONBILL *Platalea ajaja* (137, 1). A first-winter bird collected at Pt. Hueneme, VEN, 15 Dec 1967, by Sid Peyton (DVP†; WFVZ #19575; 2008-219) has not previously been reported in the literature and now provides the first record of the Roseate Spoonbill for the California coast. The specimen is one of five collected in California, not including three additional reported specimens whose disposition the committee has been unable to determine.

MISSISSIPPI KITE *Ictinia mississippiensis* (43, 2). Two juveniles were recorded, one on Pt. Loma, SD, 11–18 Sep 2008 (MJB; DWA†, GMcC, PSp; 2008-114), the other at the Golden Gate Bridge/Marin Headlands, SF/MRN, 25 Oct 2007 (SB†; MMa†, PSA; 2008-168). The latter represents only the fourth coastal record of the Mississippi Kite from north of Santa Barbara Co.

COMMON BLACK-HAWK *Buteogallus anthracinus* (6, 1). An adult flying north near Aromas, SBT, 31 Mar 2008 (DT; 2008-055) and over Tiburon, MRN, 2 Apr (LBl, BST†; 2008-052; photo in *N. Am. Birds* 62:474) was considered the same bird.
later observed near Santa Rosa, SON, 14 Apr 2008–20 Dec 2009 (SM†; 2008-053).
This same individual had spent the previous three summers at this location (2005-
and Terrill 2009), before returning for a fourth summer and staying for more than a
year and a half. One at Galileo Hill, KER, 27 Apr 2008 (SLS; KH-L†, TGM†, RSt†;
2008-057; Figure 3, photo also in N. Am. Birds 62:507) provides the first record
for California of a Common Black-Hawk in juvenile plumage.

HARRIS’S HAWK *Parabuteo unicinctus*. NATURAL OCCURRENCE QUESTIONABLE.
An adult with damaged and missing wing and tail feathers in Pauma
Valley, SD, 7–23 Feb 2008 (2008-026) was suspected of being an escaped captive
bird by six committee members. Some who doubted this bird’s origin acknowledged
that falconers’ birds typically are well cared for but questioned whether a wild bird
could show the wear and feather damage shown by this individual. The origin of one
in Bonita, SD, 27 Jun 2008 (2008-086) was questioned by six members, mostly
because the bird was tame and near a large urban area, where escaped birds are
more likely to be found.

CRESTED CARACARA *Caracara cheriway* (28, 4). A first-winter bird with a
distinctive pattern of broken primaries on the right wing was first at Hansen Dam,
LA, 29 Jan–1 Feb 2007 (LL†; KLG†, JHa, MJSanM†; 2007-027), then at More
Mesa near Goleta, SBA, 2–3 Feb 2007 (DLt†; EvC†; 2007-083), at Pt. Joe in Pebble
Beach, MTY, 25 Feb 2007 (DR†; 2007-101), and finally at Moss Landing, MTY, 1
Mar 2007 (JdeM; 2007-101), substantiating northward movement along the coast
by one individual. Other new records were of a second-winter bird near Año Nuevo,
SM, 14 Feb 2008 (RDS†; 2008-043; photo in N. Am. Birds 62:298), an adult
photo in N. Am. Birds 62:150), and a second-spring bird in the Kern R. Preserve
near Weldon, KER, 25–27 Mar 2008 (DB†; AST†; 2008-047) that was considered
the same bird as one at Mojave Narrows Regional Park near Victorville, SBE, 18 Feb
2008 (BDe†, JLD, SJM†; 2008-039; photo in N. Am. Birds 62:303). One in the
area of the Tijuana R. valley, SD, 15 Jul–21 Nov 2008 (TME; GMcC; 2008-093)
was considered the same bird (2006-127 and 2007-144; Singer and Terrill 2009)
present sporadically since 9 Sep 2006.

YELLOW-HEADED CARACARA *Milvago chimachima*. NATURAL OCCURRENCE QUESTIONABLE.
One was around Ferndale, HUM, 27 Jul–30 Dec 2007, at Humboldt Bay, HUM, 8 Mar 2008, then near L. Earl, DN, 13 Mar 2008 (KR†,
GSL; 2008-169). The committee unanimously questioned the origin of this individual,
and some questioned whether this nonmigratory, primarily South American species
is a candidate to occur in California at all, let alone in the far north of the state. Ac-
cording to Wetmore (1981), the dark bands on the tail of individuals of the more
southerly race, *M. c. chimachima*, found from the Amazon southward, are “wider
and heavier” than the white bands. If this is correct, photos of the Yellow-headed
Caracara originally found in Ferndale suggest it may be *M. c. chimachima*, not the
more northerly *M. c. cordata*.

AMERICAN GOLDEN-PLOVER *Pluvialis dominica* (43**, 8). One juvenile was
near Arcata, 30 Aug 2008 (DF; 2008-111), and two were there on 21 Oct 2007
(RS; 2007-284). Single fall juveniles were also near Loleta, HUM, 19 Oct–11 Nov
2008 (RF†; KMB; 2008-175) and near Salinas, MTY, 12–23 Oct 2008 (OJ†; BLS†,
Kvv†; 2008-140 and 2008-151). The record (documented by photo only) of another
fall juvenile, at Estero Bluff State Park, SLO, 17 Sep 2007 (JC; 2007-302), was
reviewed three times before being endorsed. Single spring migrants were inland at
the south end of the Salton Sea, IMP, 6 Apr 2008 (RMW†; 2008-054) and on the
IDENTIFICATION NOT ESTABLISHED: The committee considered documentation for individuals at the Salinas R. mouth, MTY, 19 Aug 2008 (2008-104), near Arcata, HUM, 27 Sep 2008 (2008-196), near Salinas, MTY, 23 Sep 2008 (2009-040), and near Gustine, MER, 15 Oct 2008 (2008-200) inadequate to eliminate the Pacific Golden-Plover (*Pluvialis fulva*). A juvenile at Owens L., INY, 16 Oct 2007 (2007-293) was suspected to be the same bird (2007-292; Singer and Terrill 2009) photographed nearby the same day but was rejected because of inadequate documentation. The committee removed the American Golden-Plover from the review list at the Jan 2010 meeting and reviews records from 2004 through 2009 only.

**WILSON’S PLOVER** *Charadrius wilsonia* (13, 1). An adult male was at North Island Naval Air Station, SD, 11–14 Apr 2008 (PLS†; 2008-051; photo in *N. Am. Birds* 62:479). Eight of the 13 records for California, including the past six, have come from San Diego Co.

*AMERICAN OYSTERCATCHER* *Haematopus palliatus* (44, 7). Mainland records were of one adult at Crescent Pt. in Laguna Beach, ORA, 18 Jan–1 Feb 2008 (RBMcN; DL†, MMatt†, DWN†, JEP, KP†; 2008-018; Figure 4), one in La Jolla, SD, 13 Feb 2008 (RG†; 2008-031), and one at the entrance to San Diego Bay, SD, 22 Sep–2 Oct 2008 (DP; TAB†; 2008-122) and 6–20 Dec 2008 (WTH†; 2008-220). Channel Is. records included one on Sutil I. off Santa Barbara I., SBA, 16 Sep 2007 (NAL; WTT†; 2007-224) and three together near Laguna Anchorage on Santa Cruz I., SBA, 29 Sep 2007 (KP†; 2007-244). One at Pelican Bay on Santa Cruz I., SBA, 8 Jan 2006 (DLG†, OJ†, AS; 2006-005) was presumably the same bird as that at nearby Prisoner’s Harbor, 16 Apr–14 May 2005 (2005-055; Iliff et al. 2007) and 3 Apr–5 Jul 2004 (2004-058; Cole et al. 2006). The committee removed the American Oystercatcher from the review list at the 2009 meeting and reviews only records through 2008.

Figure 10. This first specimen of the Veery (*Catharus fuscescens*) for California was procured on 16 May 2003, when the bird was found dead in a backyard in Davis, Yolo County. The coloration of the upperparts and the distinctiveness of the brown spots on the breast are consistent with *C. f. salicicola*, a subspecies that breeds as close to California as northeastern Oregon. The relatively dark dorsum of this race can overlap with that of the Russet-backed Swainson’s Thrush (*C. ustulatus ustulatus*) (Pyle 1997). Some of the early state records of Veery were considered more suggestive of the brighter eastern races (Roberson 1980).

RED-NECKED STINT *Calidris ruficollis* (12, 1). An adult on San Diego Bay at Delta Beach, Naval Amphibious Base, Coronado, SD, 23 Jul–18 Aug 2008 (MSa†; JLD, PAG, MMat‡, CAM, GMcC, AM†, MSanM; 2008-091; Figure 5, photo also in *N. Am. Birds* 62:644) was the first recorded in that county. This long-staying individual arrived within the species’ normal window of occurrence in California, but it remained seven days later than the previous late date for the species. Like all other Red-necked Stints accepted for California, this one was an adult in alternate plumage.

LITTLE STINT *Calidris minuta* (10, 1). A juvenile was at Moonglow Dairy in Moss Landing, MTY, 14 Sep 2008 (BHi†, DR†; 2008-117). The close-up photos showed a short, fine-tipped bill, dark legs, a clear lack of webbing between the toes, dark-centered tertials with rusty edges, dark-centered lower scapulars, and a split supercilium, a combination eliminating all other stints. This is California’s fifth accepted record of a juvenile and the second juvenile from this location.

WHITE-RUMPED SANDPIPER *Calidris fuscicolis*. IDENTIFICATION NOT ESTABLISHED: One reported at Piute Ponds near Daggett, SBE, 20 Sep 2008 (2008-137) was initially reported as a juvenile, although the observer later described it as an adult. No juveniles of this species have been recorded in California or anywhere in the West, and most juveniles do not depart the breeding grounds until mid- to late September (O’Brien et al. 2006). Given the extreme rarity of this species in Califor-
nia in fall, the observer’s uncertainty of the bird’s age, and the relative brevity of the description, most committee members were unwilling to support this record.

*SHARP-TAILED SANDPIPER Calidris acuminata (29, 1). Documentation for a juvenile on Southeast Farallon I., SF, 7 Nov 1979 (EG, TH, JSh, LSp; 2008-205) was taken from the Farallon journal by James R. Tietz. It was the first Sharp-tailed Sandpiper to be recorded on the island and was listed as “not submitted” in CBRC (2007). The committee reviews records of this species from 1966 through 1980.

LITTLE GULL Hydrocoloeus minutus (100, 2). One seen flying past Pigeon Pt., SM, 1 May 2008 (RST; 2008-059) was in its second spring or older. A first-spring bird was in Modesto, STA, 25 May 2008 (ErC†; 2008-075).

BLACK-TAILED GULL Larus crassirostris (2, 1). An adult at Half Moon Bay, SM, 29 Dec 2008 (CG†; 2009-003; Figure 6, photo also in N. Am. Birds 63:356) was present only long enough to be photographed by the observer, who was familiar with this east Asian species. California’s lone previous record was of an adult female found at the north end of San Diego Bay, SD, 26 Nov 1954 and collected two days later (1977-143; UMMZ #136176; Luther et al. 1979, Roberson 1986, Heindel and Patten 1996). The 54 years between records is surprising, considering this species has occurred widely as a vagrant, with records from British Columbia (Birders J. 11:4), southwestern Washington (N. Am. Birds 59:138, 191), northwestern Sonora (Garrett and Molina 1998), and various locations across North America to the east coast (CBRC 2007; P. Lehman pers. comm.).

ICELAND GULL Larus glaucoides (7, 1). A first-winter bird at the Yolo County Central Landfill near Davis, YOL, 27 Dec 2007 (SCH†; 2007-299) passed despite reservations expressed by some members in the first round. Ultimately, members were persuaded by its structure (short bill, rounded head, and long wings compared to Thayer’s Gull, L. thayeri) and by the date of the record, likely too early for a Thayer’s Gull to have been bleached so pale. While five of the seven accepted records for this species have come since 2005, ten records from this period were not accepted, and this species continues to have easily one of the lowest acceptance rates of any reviewed. The conservative approach of the committee reflects the poorly understood identification criteria in the Iceland–Thayer’s complex and the uncertainty surrounding the taxonomy of these species.

IDENTIFICATION NOT ESTABLISHED: Three records of single birds received support from few members. One at the mouth of Redwood Cr. near Orick, HUM, 3 Jan 2008 (2008-003) was described as a second-winter bird by the single reporting observer. Several members expressed hesitation at voting for a record of this species that lacked photo documentation, as this one did. Several members thought a first-winter gull at the Pajaro R. mouth, SCZ/MTY, 9 Jan 2008 (2008-009) was more likely a hybrid, possibly between the Herring (L. argentatus) and Glaucous-winged (L. glaucescens), than either an Iceland or a Thayer’s. Finally, most members thought a first-winter gull at the Yolo County Central Landfill near Davis, YOL, 27 Dec 2008 (2008-231) was within the phenotypic range of L. g. kumlieni but also of a Thayer’s × Kumlien’s Gull and possibly of Thayer’s.

LESSER BLACK-BACKED GULL Larus fuscus (61, 14). The 14 new records included three from the coast, four from the Salton Sea, and an additional seven from other inland locations. Surpassing the total number of inland records away from the Salton Sea in all previous years, these seven are of four single adults, at Beal’s Pt. on Folsom L., PLA, 7 Feb 2008 (DeR; ToE†; 2008-046), the Nimbus Fish Hatchery near Sacramento, SAC, 5 Dec 2008 (SNGH†; 2009-037), Clearlake, LAK, 1 Nov 2008–3 Jan 2009 (FEH†; JCS†, JW; 2008-170), and L. Perris, RIV, 23 Nov 2008–18 Feb 2009 (MF†; HBK, C-TL†, CMcG†; 2008-195), as well as of a juvenile at Crowley L., MNO, 12 Dec 2008 (JLD†; DH; 2008-211), a second-winter bird at the Buena
Vista Aquatic Recreation Area, KER, 21 Dec 2008 (SLS; RSt†; 2008-222), and a third-winter bird at L. Perris, RIV, 23 Nov 2008–7 Mar 2009 (HBK, TABe†, MF†, C-TL†, CAM; 2008-188). The four new records from the Salton Sea, where this species is now annual, involved single adults at the Whitewater R. mouth, RIV, 5 Jan 2008 (RLMcK†; 2008-004), at Salton City, IMP, 9 Jan 2008 (MBS†; 2008-008), at Mecca Campground, RIV, 27 Jan 2008 (MF, NFT; 2008-022), and near Rock Hill, Salton Sea N.W.R., IMP, 16 Dec 2008–30 Jan 2009 (GMcC; HDD†; 2008-215). Also, a returning bird (same as 2007-260; Singer and Terrill 2009) was around Obsidian Butte, IMP, 24 Oct 2008–22 Feb 2009 (GMcC; BKr†, PEL‡, CMcG†; 2008-163). Singer and Terrill (2009) referred to this individual as a third-winter bird in 2007, but a comparison of photos suggests it may have been in only its second winter that year.

The three coastal records involved an adult at Mayfield Slough in Palo Alto, SCL, 14 Nov 2008 (MMR†; 2009-066), another adult at Alviso, SCL, 16 Dec 2007–13 Jan 2008 (SCR; MMR†; 2008-112), and a bird in at least its third winter at Dana Pt., ORA, 11 Nov 2008 (RBMcN†; 2008-179). The 15 records in 2008 (including one returning bird) extended a period in which an unprecedented number of Lesser Black-backed Gulls have been found in California (although numbers appear to be down in 2009–2010). The 31 new records established from September 2006 through December 2008 represent more than half of the 61 accepted records.

SLATY-BACKED GULL *Larus shistisagus* (35, 6). Single adults were near Ft. Dick, DN, 4 Feb–31 Mar 2008 (ADB†, KR†; 2008-049), the mouth of Redwood Cr. near Orick, HUM, 19 Jan 2008 (JA†; 2008-015), Hiller Park in McKinleyville, HUM, 1 Feb–8 Mar 2008 (LM; KMB, KR†; 2008-024), and at the Tri-cities Landfill, ALA, 18 Jan–4 Mar 2008 (MJM; 2008-017). A bird in at least its second winter was at the Ferndale bottoms in the Eel R. delta, HUM, 1 Feb 2008 (RF†; 2008-023), and a third-winter bird was at Venice Beach in Half Moon Bay, SM, 16 Feb 2008 (DSS†; MD; 2008-033).

IDENTIFICATION NOT ESTABLISHED: The report of a second-winter bird at Harkin’s Slough and Sunset Beach near Watsonville, SCZ, 26 Jan 2008 (2008-020) included photographs but no written description, and some members believed the bird to have been a Western Gull (*L. occidentalis*).

GREAT BLACK-BACKED GULL *Larus marinus*. IDENTIFICATION NOT ESTABLISHED: Documentation, including photographs, provided by a single observer of an adult at the mouth of Redwood Cr. near Orick, HUM, 30 Dec 2008 (2007-011) circulated through the committee four times. Before the final circulation, the record was discussed at length during the committee’s January 2009 meeting. Peter Pyle later compared the original photographs of the distant bird with specimens at the National Museum of Natural History and attached his findings to the documentation. In the end, the committee concluded that this dark-mantled gull may have been a Great Black-backed Gull, but because of discrepancies between the pattern of white on the primaries and that on correctly identified specimens, along with the apparent oiled condition of the wings and mantle and the consequent potential for abnormal darkening, it decided to await an unquestionable record before adding the species to the California state list. Given that the Great Black-backed Gull was first documented in British Columbia in 1988 (Campbell et al. 1990b), in Alaska in 1995 (Gibson and Kessel 1997), and in Washington in 2004 (Wahl et al. 2005), the wait may not be long.

BRIDLED TERN *Onychoprion anaethetus* (3, 1). An adult at Unit 1 of the Salton Sea N.W.R., IMP, 7 Jul–24 Aug 2008 (KCM†; DWA†, JLD†, TME, JSF, KLG, SNGH†, KZK†, PEL, CAM†, GMcC, DR†, MSanM; 2008-089; photo in *N. Am. Birds* 62:644) represents California’s first inland record. On the basis of the amount of white evident in the outer rectrices, the grayish cast to the underparts, the sooty brown mantle, and the extensively darkish undersides to the primaries, the commit-
The committee concluded the bird was the western Mexican *O. a. nelsoni*, the subspecies of the Bridled Tern occurring nearest California (Pyle 2008, Olsen and Larsson 1995, Cramp 1985, Ridgway 1919). *Onychoprion a. nelsoni* is a local summer resident from “at least” the states of Nayarit to Guerrero (Howell and Webb 1995).


**BLACK-BILLED CUCKOO** *Coccyzus erythropthalmus* (17, 1). A first-fall bird was in Huntington Beach Central Park, ORA, 14 Oct 2008 (JEP†; BED†; 2008-141; Figure 7, photo also in *N. Am. Birds* 63:191). Although nine Black-billed Cuckoos were recorded in California in the 1980s, only two were found in the 1990s, and this was just the second recorded in the 2000s (CBRC 2007).


**RUBY-THROATED HUMMINGBIRD** *Archilochus colubris* (11, 1). An adult male was at a feeder in Nevada City, NEV, 23–31 Aug 2008 (RD†; TB†, WC†, JLD†, JM†, JCS; 2008-107; photo in *N. Am. Birds* 63:191). California’s only previous record of an adult male also came from Nevada Co., in 1975, the specimen languishing as a mislabeled Broad-tailed Hummingbird (*Selasphorus platycercus*) in the collection.

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Figure 12. Two Baird’s Sparrows (*Ammodramus bairdii*) were found on Southeast Farallon Island, San Francisco County, in fall 2008, this one on 14 September. The orangish buff color of the head and absence of a postocular stripe, distinguishing Baird’s from the Savannah Sparrow (*Passerculus sandwichensis*), can be seen well in this photograph. The sinuose pattern of internal black with marginal rufous in the distal tertials is reminiscent of the Lapland Longspur (*Calcarius lapponicus*) and unlike any other species of North American sparrow. This individual can be aged as first fall on the basis of the combination of feathers of both the juvenal and formative plumages on the upperparts, wing coverts, and tertials; the retained juvenal mantle and scapular feathers create a scaly appearance that is not as marked in adults.

*Photo by Matt Brady*
of the University of California, Davis (WFB #972) until its reidentification eight years later (Cole and Englis 1986).

YELLOW-BELLIED FLYCATCHER Empidonax flaviventris. IDENTIFICATION NOT ESTABLISHED: Most committee members thought an Empidonax videotaped in Big Sycamore Canyon, VEN, 14 Oct 2002 (2008-167) may have been this species, but the quality of the images was problematic, as was the lack of a written description and, most importantly, the fact that the bird never called. By contrast, one photographed at Horse Thief Springs, SBE, 27 Sep 2008 (2008-130) received no support and was almost certainly a Western Flycatcher (E. difficilis/occidentalis). The discrimination of the Yellow-bellied from several of its congeners is an imposing identification challenge, and many records are rejected by the CBRC, especially when no calls are heard. Whitney and Kaufman (1986) and Heindel and Pyle (1999) treated this issue well.

DUSKY-CAPPED FLYCATCHER Myiarchus tuberculifer (79, 3). Surprisingly, a bird at Creek Park in La Mirada, LA, 27 Feb–7 Apr 2008 (JoR†; LS†; 2008-040) and at the same location 25 Nov 2008–6 Apr 2009 (JoR†; DWA†, PEL; 2008-187; Figure 8) furnished California’s first record of a Dusky-capped Flycatcher considered to have returned for a second winter. Given the difficulty of aging Myiarchus flycatchers in the field, especially in winter after the completion of preformative molt (Pyle 1997), this record constitutes the first confirmation of an adult Dusky-capped Flycatcher in California (CBRC 2007). Another individual was at Recreation Park in El Segundo, LA, 18–26 Jan 2008 (RB†; JSF, KGL; 2008-016; photo in N. Am. Birds 62:303), and a well-documented bird at Zzyzx, SBE, 17 Nov–13 Dec 2008 (DAG†; TAB†, JLD†, CAM†, LS†; 2008-183) supplied the first record for San Bernardino Co.

THICK-BILLED KINGBIRD Tyrannus crassirostris (18, 1). A first-year bird was at South Coast Botanic Garden, Palos Verdes Peninsula, LA, 9 Dec 2008–27 Apr 2009 (CAM, MSanM†, LS†, LSz†; 2008-206). Although four of the first five Thick-billed Kingbirds to be recorded in the state (1965–1978) were apparently fall transients, all but one record since have pertained to birds that were wintering (CBRC 2007).

WHITE-EYED VIREO Vireo griseus (58, 5). A silent bird at Galileo Hill, KER, on 18 May 2008 (BDy†; 2008-066) and singing males at Banner, SD, 20 May 2008 (KS; 2008-065), Paradise, MNO, 14 Jun 2008 (DHT; JLD; 2008-082), and at 8200 feet elevation 10 mi. wsw. of Bishop, on the “Buttermilks,” INY, 15 Jun 2008 (JnP, DPa; JLD, DHT; 2008-083) were spring vagrants. One at Ft. Rosecrans National Cemetery on Pt. Loma, SD, 11–27 Sep 2008 (DWA†; GMcC, MSa†, TRS†; 2008-113) was found in fall, when far fewer are recorded.

BLUE-HEADED VIREO Vireo solitarius (62, 11). One in Orick, HUM, 1–3 Sep 2007 (LaT S; 2008-194) is the earliest accepted for California in the fall and was well-documented by a colored sketch. Single first-fall birds were banded on Southeast Farallon I., SF, 9–10 Sep 2008 (JRT; MB†, RT†; 2008-154), 13–16 Sep 2008 (MB†; 2008-155), and 14–15 Sep 2008 (JRT; MB†; 2008-156). A first-fall male was at Ft. Rosecrans National Cemetery on Pt. Loma, SD, 21–22 Oct 2008 (SES S; DWA†, TAB†, EGK†, PEL, TRS†; 2008-149). One in Los Osos, SLO, 11 Nov–7 Dec 2008 (OJ, CAM, AFS†, JCS†, DVP; 2008-177) was apparently attempting to winter. In addition, the committee endorsed five records of single birds seen in the 1980s and 1990s: three in Huntington Beach Central Park, ORA, 4–6 Oct 1984 (DRW; BED; 2008-204), 20 Sep–4 Oct 1989 (BED; 2008-203), and 5–22 Oct 1996 (JEP; BED; 2009-008), one at Pismo Beach, SLO, 1 Oct 1987 (KJZ; 2008-190), and one in Montana de Oro State Park, SLO, 11 Oct 1993 (JR; 2008-192).

YELLOW-GREEN VIREO Vireo flavouridris (93, 3). Three first-fall birds, at De-Forest Park in Long Beach, LA, 11–12 Sep 2008 (RB, BED†; JSF; 2008-115), Ft. Rosecrans National Cemetery on Pt. Loma, SD, 21–22 Sep 2008 (MJB; DWA†;
2008-119), and Carpinteria, SBA, 5–14 Oct 2008 (DMC; CAM, MM†, BMM, DiR†, MV†: 2008-132), made about an average number for this species in the fall.

IDENTIFICATION NOT ESTABLISHED: One reported at North Vandenberg Air Force Base, SBA, 30 Oct 2008 (2008-228) was seen briefly by a single observer at close range but without the aid of binoculars, and the description did not definitively rule out a Red-eyed Vireo (*V. olivaceus*).

CAVE SWALLOW *Petrochelidon fulva* (4, 1). A first-spring bird 3 mi. sw. of Niland, IMP, 2–11 May 2008 (GMcC; BED†, JLD†, OJ†, KZK†, ABL†, PEL, TGM†, DWN†, JCS†; 2008-060; photo in *N. Am. Birds* 62:507) was California’s first Cave Swallow seen by many observers, as the previous three, also in Imperial Co., were present for only a single day and seen only by the finders.

To date, three of the state records are for May, the other for August. The first Cave Swallows to appear in Arizona three decades ago established a similar pattern, which culminated in breeding within a Cliff Swallow (*P. pyrrhonota*) colony in 1983 (Rosenberg and Witzeman 1999). More recent Arizona records have been in fall and winter (Rosenberg et al. 2007, Rosenberg and Stevenson 2008), illustrating the necessity of the Cave Swallow being considered when any apparent Cliff Swallow is encountered in California from late fall to mid-winter.

DUSKY WARBLER *Phylloscopus fuscatus* (13, 2). Individuals were at Pt. Isabel in Richmond, CC, 9 Oct 2008 (ES†; RoL†; 2008-136; photo in *N. Am. Birds* 63:190 and on the cover of *W. Birds* 40[3]) and at Antonelli’s Pond in Santa Cruz, SCZ, 16–18 Oct (OJ; MB†, MMa†, RT, BLS†; 2008-144). The latter bird was at the same spot as the first Dusky Warbler in Santa Cruz Co., in 1997. Documentation for both records provided careful differentiation from the very similar Radde’s Warbler (*P. schuwartzi*) and other congeners. Vocalizations heard from both birds were variously described as sounding reminiscent of the Common Yellowthroat (*Geothlypis trichas*), Lincoln’s Sparrow (*Melospiza lincolnii*), the “smack” of some subspecies of the Fox Sparrow (*Passerella iliaca*), or combinations thereof, and thus sounding distinctly different from the softer calls of Radde’s (Mullarney et al. 1999). The Radde’s Warbler is a long-distance migrant with a breeding range that extends to the southern Russian Far East, Sakhalin I., northeastern China, and northern Korea (Brazil 2009); it has yet to be recorded in North America. See Erickson and Terrill (1996) for a summary of identification criteria distinguishing the Dusky from Radde’s Warbler, with comments on some other similar, highly migratory species of *Phylloscopus* also found in east Asia.

BLUETHROAT *Luscinia svecica* (1, 1). A first-fall female at Lemon Tank on San Clemente I., LA, 14–18 Sep 2008 (JS; JF†; 2008-116; Figure 9, photo also in *N. Am. Birds* 63:192) was the first, not only for California, but also for the contiguous United States. This common Old World thrush had long been considered a candidate for vagrancy to California, given that its breeding range extends broadly across northern Eurasia into northern Alaska and the northern Yukon Territory. In the New World, migrants occur only casually in Alaska south of the Bering Strait region (CBRC 2007).

VEERY *Catharus fuscescens* (12, 1). One that hit a window at a home in Davis, YOL, 16 May 2003 (WH, AE Jr.†; 2009-072; Figure 10) is now a specimen in the Museum of Wildlife and Fish Biology (WFB #6995) at the University of California, Davis. Andrew Englis Jr. identified the specimen as a male (in its first spring, per Peter Pyle) *C. f. salicicola*, a subspecies with a breeding range that extends from British Columbia and eastern Washington south through the Rocky Mountains to Colorado and formerly ne. Arizona. He found it much duller on the upperparts than specimens of *C. f. fuscescens* in the collection at Davis and took it to the Museum of Vertebrate Zoology, University of California, Berkeley, where he found it to match
specimens of *salicicola*. The dorsum of *salicicola* is a duller, darker brown than that of the nominate subspecies of the eastern United States; it also has the ventral spots darker and more distinct (Pyle 1997). This Veery is only the second to be found in California in the past decade and establishes the state’s earliest spring record by one day (CBRC 2007).

**WOOD THRUSH** *Hylocichla mustelina* (24, 1). One was at Galileo Hill, KER, 9 Oct 2008 (K & BK†; 2008-135). Surprisingly, the Wood Thrush hasn’t been recorded from Southeast Farallon I., SF, although over half of the state’s 21 records of the more furtive and difficult-to-identify Gray-cheeked Thrush (*Catharus minimus*) have come from that locale (CBRC 2007).

**EASTERN YELLOW WAGTAIL** *Motacilla tschutschensis* (18, 1). A first-fall bird in Goleta, SBA, 1–2 Sep 2008 (NL; DMC†, OJ†, CAM, BKST†; 2008-110; photo in *N. Am. Birds* 63:187) was a first for Santa Barbara Co. and fit neatly within the interval of 27 Aug–25 Sep this Alaska-breeding species has established in California (CBRC 2007). All North American records of the Yellow Wagtail (*M. flava*, sensu lato) complex are assumed to represent *M. tschutschensis* (Banks et al. 2004) in spite of our current inability to distinguish first-fall birds definitively in the field. Such first-fall birds are responsible for most if not all of California’s records of the Yellow Wagtail (sensu lato). As the Western Yellow Wagtail (*M. flava*, sensu stricto) is a long-distance migrant with a breeding range that extends across most of northern Siberia as far east as the Kolyma R. (Brazil 2007, Alström and Mild 2003), it is possible that one or more California records pertain to this species.

*SPRAGUE’S PIPIT* *Anthus spragueii* (110, 9). Single birds at Fenner, SBE, 28–29 Sep 2008 (TABe†, SJM†, CAM†; 2008-127), Galileo Hill, KER, 8–9 Oct 2008 (JS†; KH-L†, MSanM†, LS†, CT†, MMT†; 2008-134), Santa Fe Dam in Irwindale, LA, 16–17 Oct 2008 (AL†; MSanM; 2008-143), and on Santa Barbara I., SBA, 21 Oct 2008 (WTF; 2008-230) were all migrants. Five additional birds near Calipatria, IMP, 11 Nov 2008–7 Mar 2009 (LdeC†, GE†, KZK†, PEL, GMcC; 2008-213) were in an area where this species has recently proven to be a regular, albeit rare, winter visitor. As a result, the committee has discontinued reviewing records after 2008.

**BLUE-WINGED WARBLER** *Vermivora cyanoptera* (43, 2). First-fall males were at Crystal Spring in the Kingston Mts., INY, 16–20 Sep 2008 (JEP†; CAM, TEW; 2008-118) and 13 mi. away at China Ranch, INY, 11 Oct 2008 (SLS†; 2008-227).

**IDENTIFICATION NOT ESTABLISHED:** A bird in Korbel, HUM, 17 May 2008 (2008-073), described as appearing similar to a photo of a male Blue-winged Warbler “found on-line,” but having a “black chin stripe,” was identified as this species. Most members considered the documentation inadequate, and two believed the observer may have misjudged the size of a first-spring male Bullock’s Oriole (*Icterus bullockii*).

**GOLDEN-WINGED WARBLER** *Vermivora chrysoptera* (72, 2). A first-spring female was at Butterbredt Spring, KER, 31 May 2008 (TToE†, OJ; 2008-077; photo in *N. Am. Birds* 62:480), and a first-fall female was on Southeast Farallon I., SF, 14 Sep 2008 (JRT; MB†, RT†; 2008-158).

**BLUE-WINGED × GOLDEN-WINGED WARBLER** *Vermivora cyanoptera × V. chrysoptera* (5, 1). A *Vermivora* on Southeast Farallon I., 17 Sep 2008 (JRT; MB†, RT†; 2008-157), looking most like an adult male Blue-winged Warbler but having the black eye-line broadening slightly and extending back to include some of the auriculars, was considered by six committee members to be this hybrid. While the bird’s phenotype was clearly not that of a classic Brewster’s or Lawrence’s Warbler, the consensus of expert opinions solicited by the committee (see Acknowledgments) was that it was the product of a Blue-winged × Golden-winged hybrid that had backcrossed
with several generations of pure Blue-winged. It is inherently difficult to determine whether an anomalous phenotypic trait on an individual bird of this species pair is the product of natural variation within the taxon or introgressed genes from the other species. Therefore, the committee acknowledges the possibility (if not probability) that some previously accepted state records of Blue-winged and Golden-winged may be of individuals with varying levels of introgressed genes. For additional information on this captivating topic, see Gill (1980, 2004) and Confer et al. (2010).

**YELLOW-THROATED WARBLER** *Dendroica dominica* (123, 3). First-spring males at Galileo Hill, KER, 25 May 2008 (EP†; 2008-074; photo in *N. Am. Birds* 62:480) and at the San Diego Zoo in San Diego, SD, 13 Jun 2008 (TRS†; 2008-079) were both of the western subspecies *D. d. albilora*, as was a wintering male along the Los Angeles R. in Glendora, LA, 14 Dec 2008–15 Feb 2009 (MSanM; MB†, CAM; 2008-216). The vast majority of California records have involved *albilora*, although the committee has endorsed a handful of late fall and winter records as apparently representing *D. d. dominica*, a subspecies that breeds in the eastern U.S. along the Atlantic seaboard and coast of the eastern Gulf of Mexico.

**GRACE’S WARBLER** *Dendroica graciae* (57, 1). One near Mendocino, MEN, 31 Dec 2008–31 Jan 2009 (GEC Jr., BEDo, KAHa, RH, RJKe†, MMat†, RiT, CW, JW; 2009-002) established the northernmost location for this species in California.

**PINE WARBLER** *Dendroica pinus* (91, 3). A male at Del Mar, SD, 10 Nov 2008 (SES S; 2008-176) was apparently a fall migrant. Wintering birds included a first-winter female frequenting Canary Island Pines (*Pinus canariensis*) in Riverside, RIV, 26 Jan 2008 (PT; 2008-021) and a first-winter male at Whittier Narrows Recreation Area, LA, 6 Dec 2008–5 Jan 2009 (AL†; MSanM†; 2008-201). Adult males at Friendship Park in Chula Vista, SD, 7 Dec 2008–14 Mar 2009 (JD; DWA†, GMCC; 2008-218) and at Estancia Park in Costa Mesa, ORA, 28 Dec 2008–6 Apr 2009 (JEP†; NAG†; 2009-063) were both present for their third winters at these locations (see CBRC records 2007-098 and 2007-263, and 2007-100 and 2008-007, respectively; Singer and Terrill 2009).

**CERULEAN WARBLER** *Dendroica cerulea* (17, 1). A first-fall Cerulean Warbler in Oceano, SLO, 20 Oct 2008 (JL; MB†, LHa, OJ, DVP; 2008-148; Figure 11, photo also in *N. Am. Birds* 3:158) was only the second to be found in California since 1997, a reflection of this species’ declining population in the eastern United States.

**WORM-EATING WARBLER** *Helmitheros vermivorum* (116, 13). An unprecedented number of this species reached California in the fall and winter 2008–2009. Single birds noted at Furnace Cr. Ranch, INY, 4 Oct 2008 (C & RH‡; JLD; 2008-226), Baker, SBE, 4–12 Oct 2008 (AEKH; TAB†, SJM†, MSanM; 2008-131), Ventura, VEN, 16 Oct 2008 (RM; 2008-202), the Daggett-Barstow Airport, SBE, 17–22 Oct 2008 (JCS; 2008-164), and at Coyote Cr. Field Station near Alviso, SCL, 16–17 Nov 2008 (GB†; 2008-184) were evidently fall migrants. Individuals at San Dieguito County Park, SD, 31 Oct 2008–16 Jan 2009 (SB; ToET, PAG, WTH†, EGK†, MMAT†, GMCC, JMM, GLR; 2008-171; photo in *N. Am. Birds* 63:159), Riverside, RIV, 7 Nov 2008–31 Jan 2009 (CAM; JLD, BHo†, GMCC, CMGC; 2008-173), the San Diego Zoo in San Diego, SD, 21 Nov 2008–20 Apr 2009 (BM†, GMCC, TRS†, JCS†; 2008-186), Camino Real Park in Ventura, VEN, 23 Nov 2008–11 Jan 2009 (MSanM, DP†, DVP; 2008-197; photo in *N. Am. Birds* 63:358), Laguna Niguel, ORA, 8 Dec 2008 (RBMcN; 2009-067), Ferry Park in San Francisco, SF, 11 Dec 2008–28 Feb 2009 (KMB, MgF, JM, DSS†, GT†, KT†; 2008-207), and the Tijuana R. valley, SD, 13 Dec 2008 (CMeF; ME; 2008-209) were all probably wintering locally. The bird in Riverside was a first for that county. In addition, one at Camino Real Park in Ventura, VEN, 6–25 Jan 1997 (RVS; BED; AEK; 1997-085A), which had failed to reach acceptance after four earlier rounds, was reconsidered and accepted after additional documentation surfaced.
CONNECTICUT WARBLER *Oporornis agilis* (111, 2). A first-fall female was trapped and banded at Muddy Hollow on Pt. Reyes, MRN, 21 Sep 2008 (WP†; 2008-120), and another first-fall bird that hit the window of a coffee shop in Brentwood, 3 Oct 2008 (2008-133) was photographed by local Project Wildlife personnel and constitutes a first for Contra Costa Co. and the Central Valley. The bird was rehabilitated and released on 9 Oct 2008.

MOURNING WARBLER *Oporornis philadelphia* (139, 2). First-fall birds were on Southeast Farallon I., SF, 14–17 Sep 2008 (MB†; 2008-159) and at Crystal Spring in the Kingston Mts., INY, 20 Sep 2008 (JLD; 2008-225). Nearly half of all California records of the Mourning Warbler have come from Southeast Farallon I., one reason the committee continues to review this species despite the relatively high number of records. Another reason is the difficulty in distinguishing the Mourning from its sibling species, the MacGillivray’s Warbler (*O. tolmiei*) (see records not accepted, below), a problem compounded by the recent discovery of an extensive zone in east-central British Columbia in which these species hybridize (Irwin et al. 2009). See Pyle and Henderson (1990), Curson et al. (1994), and Dunn and Garrett (1997) for additional treatments of this identification challenge.

IDENTIFICATION NOT ESTABLISHED: A reported Mourning Warbler photographed at Campbell Cove, Bodega Bay, SON, 30 Sep 2008 (2008-147) appeared to nearly all members to be an Orange-crowned Warbler (*Oreothlypis celata*); another at the Big Sur R. mouth, MTY, 20 Sep 2008 (2008-150) that looked most like a MacGillivray’s Warbler but called like a Mourning failed to reach acceptance on the second round, with several members mentioning the possibility of its being a hybrid.

CASSIN’S SPARROW *Peucaea cassinii* (50, 2). One in a residential yard in Lawndale, LA, 12 Oct 2007 (JI; 2007-239) was only the second definite fall migrant recorded on California’s mainland. Nine fall records are from offshore, with eight from Southeast Farallon I., SF, and the other from San Clemente I., LA (CBRC 2007). A “skylarking” male at the Carrizo Plain, SLO, 10–19 May 2008 (SDF†; TME†, JSF, BKS†, JCS†; 2008-062; photo in *N. Am. Birds* 62:481) provided the first record for San Luis Obispo Co.

IDENTIFICATION NOT ESTABLISHED: A drab sparrow 3–4 mi. sw. of Anaheim Hills, ORA, 10 May 2008, was stated to be singing in flight, so could well have been this species. However, the documentation was lacking, as the observer provided no description of the song and little about the appearance of the bird.

BAIRD’S SPARROW *Ammodramus bairdii* (6, 2). Single first-fall birds were well photographed on Southeast Farallon I., SF, 3–4 Sep 2008 (RT†; MB†, JRT; 2008-153) and 14 Sep 2008 (RT; MB†; 2008-152; Figure 12). Amazingly, five of California’s six records are from this same locale, also in September. The exception was one at Pt. Loma, SD, 5–10 Oct 1981 (Binford 1985). Notably, Nevada recorded its first Baird’s Sparrow on 6 Sep 2008 (Fridell 2009a; www.gbbo.org/nbrc/Web_Photos/2008-068.html) and Utah its first on 5 Oct 2007 (Fridell 2008; www.utahbirds.org/RecCom). California’s first record of this secretive sparrow was supported by a specimen (CAS #68476), while all others have been documented by photos.

SNOW BUNTING *Plectrophenax nivalis* (119, 2). One was near Arcata, HUM, 15 Dec 2007 (BS; 2008-125), and a freshly dead first-fall male was on the highway near Emigrant Pass, INY, 15 Nov 2008 (PH£; specimen prepared by Kimball L. Garrett, original number 3638, to be transferred from LACM to DVNPM; 2008-182).

RUSTY BLACKBIRD *Euphagus carolinus* (14**, 6). A male at Coyote Pt., SM, 15–16 Nov 2008 (JM†; RF, RST; 2008-181) and a female on San Clemente I., LA, 6 Nov 2008 (JTS†; 2008-217) were fall migrants, whereas males at Furnace Cr. Ranch in Death Valley National Park, INY, 3 Jan–2 Feb 2008 (AD; CMcC, V & GW; 2008-
005) and Buccaneer Park in Oceanside, SD, 27 Dec 2008–25 Feb 2009 (DWA†, EA†, TEBe, TABh†, DFu†, KH-L†, CAM, GMcC, GLR; 2008-229) and females near Ft. Dick, DN, 19 Dec 2008–15 Feb 2009 (ADB†, KMB, SC, KR†; 2008-221) and near Calipatria, IMP, 15–26 Dec 2008 (OJ†; GMcC, MSanM; 2008-214) were likely all wintering locally. The last record was a long anticipated first for the Salton Sink. Because this species was returned to the CBRC review list in January 2006 as a consequence of a declining population (Niven et al. 2004), it was surprising that five were found in late fall and winter 2008–2009 in California, while another six were found wintering during the same period in Nevada and Utah (Fridell 2009b).

COMMON GRACKLE Quiscalus quiscula (79, 3). A one-year old male was at Bassett’s Station, SIE, 26 Jun 2008 (MMcCo†; 2008-084), a first-fall female was at Zzyzx, SBE, 18 Nov 2008 (CAM; SJM†; 2008-185), and a wintering male was at Borrego Springs, SD, 30 Nov 2008–18 Feb 2009 (PDJ; GF†, MJ†; 2008-212).

IDENTIFICATION NOT ESTABLISHED: All members considered the identification of one seen briefly from a moving vehicle near Lodi, SJ, 5 Apr 2008 (2008-050) subject to error so were unwilling to endorse the record. The report of one in Big Pine, INY, on the very early date of 31 Aug 2006 (2006-215) circulated for four rounds but never garnered more than six votes for acceptance. Several members were concerned that the documentation did not eliminate the possibility of the bird being a Brewer’s Blackbird × Great-tailed Grackle (Euphagus cyanocephalus × Q. mexicanus), a hybrid that can appear remarkably similar to a Common Grackle. A male giving the appearance of this combination was documented 8 May–5 Jul 1999 (1999-122) in Santa Maria, Santa Barbara/San Luis Obispo Cos. (Rogers and Jaramillo 2002).

STREAK-BACKED ORIOLE Icterus pustulatus. IDENTIFICATION NOT ESTABLISHED: The description of an oriole seen for a short time in a residential yard in Los Angeles, LA, 24 Oct 2008 (2008-166) by an observer without binoculars lacked information regarding the presence of streaks on the back, so it was considered inadequate to document such a rarity.

BLACK ROSY-FINCH Leucosticte atrata (14, 1). One was with Gray-crowned Rosy-Finches (L. tephrocotis) near Bridgeport, MNO, 17 Dec 2008 (JLD; 2008-224). To date, all records of the Black Rosy-Finch in California have come from either Mono Co. or Inyo Co.

COMMON REDPOLL Acanthis flammea (79, 1). One photographed at Southeast Farallon I., SF, 5 May 2008 (ZC†; 2008-061) was not only exceptionally late but also provided the southernmost record of the Common Redpoll on the Pacific coast. Notably, several more southerly records of this species in Nevada and Texas in the past decade fit a similar May–June temporal window (CBRC 2007).

ORIENTAL GREENFINCH Chloris sinica. IDENTIFICATION NOT ESTABLISHED: A reported Oriental Greenfinch incompletely observed for approximately one minute on Southeast Farallon I., SF, 11 Oct 2008 (2008-161) received only two votes for acceptance. However, the committee noted that the observer was experienced with this species, an indicative call was heard, and what was seen was highly suggestive of this distinctive species. As a result, all members believed that the identification was likely correct but that the brevity of this single-observer sighting and the absence of photo documentation weighed against acceptance of what would be a first state record. The Oriental Greenfinch is a widespread and common resident across central, southern, and eastern China, Korea, the southern Russian Far East, and Japan and a summer visitor from Sakhalin I. through the Kuril Is. to southern and central Kamchatka (Brazil 2009). East of the Kamchatka Peninsula are the Aleutian Is., in the western and central portions of which the Oriental Greenfinch occurs intermittently in spring and casually in fall (Gibson and Byrd 2007). Although no records of the species have been accepted in North America outside of western Alaska, an Oriental Greenfinch in Arcata, HUM,
4 Dec 1986–3 Apr 1987 (1986-450; Patten and Erickson 1994) was rejected on the basis of questionable natural occurrence, as the species has some history of being kept in captivity. That record was sufficiently compelling that the species was placed on the CBRC’s supplemental list. Most compelling about the more recent sighting was that it followed several days of strong northwest winds and occurred at a time and location that militates against the probability of an escaped caged bird.

ACKNOWLEDGMENTS

The committee thanks the following persons for advice on records contained in this report: Chris Corben for his comments on a Wedge-tailed Shearwater, Frank Gill, Leo Shapiro, Rachel Vallender, and Ronald Canterbury for their analyses of a hybrid Blue-winged × Golden-winged Warbler, and Matt Heindel and Steve Leonard for comments on a Yellow-bellied Flycatcher record. The committee also thanks Stanley W. Harris for photo documentation of the Baikal Teal, 2008-035. Guy McCaskie provided invaluable guidance in the creation of this report. Furthermore, Paul Lehman’s editorial skills and avifaunal knowledge resulted in substantial improvements to the text, as did additional comments by Louis Bevier, Peter Pyle, Jon Dunn, and Dan Singer. We extend special thanks to James R. Tietz for updating the table of records published in Rare Birds of California, and to Joseph Morlan for maintaining the corrigenda to Rare Birds of California and for developing and updating the data query, all as available on the CBRC website. The Santa Barbara Museum of Natural History and H. T. Harvey and Associates in Los Gatos graciously hosted the two previous committee meetings. Lastly, much gratitude is extended to William C. Gabrielson of Trepte Construction Company for providing many years of unwavering moral and material support for Guy McCaskie’s activities as the committee’s secretary.

CORRIGENDA

The following corrections are noted for the CBRC’s previous report (Singer and Terrill 2009): The average number of records per report over the first 30 reports was 214.6 (Cole et al. 2006), not 214.4 (p. 159). The location of the reported Trumpeter Swan (2007-064) was Glenn Co., not Butte Co. (p. 162). The Smew at Soulsbyville, TUO, in January 2007 returned the following winter to near Standard, TUO, not nearby Soulsbyville (p. 162). The Crested Caracara reported from the Tijuana R. valley, SD, in 2006-127 was the same bird as involved in 2007-127, which was not listed by number, although the dates for the latter record were included in the date range given for 2006-127 (p. 169). The Iceland Gull reported in 2007-009 was present on 16 Feb 2006, not 16 Feb 2007 (p. 177). Under the Literature Cited, the citation for Iliff et al. (2007) should refer to 2005 records, not 2006 (p. 189). We thank Bruce Deuel for bringing the location discrepancy for the Trumpeter Swan to our attention.

The following corrections are noted for the 32nd annual report (Heindel and Garrett 2008): The committee accepted 14 new American Golden-Plover records, not 13 (pp. 130-131). The location of the reported Pine Warbler at Mission Viejo, ORA (2006-221) was in Barton Spendlove Park, not Bart Speedlove (p. 142).

The following correction is noted for the 30th annual report (Cole et al. 2006): At the top of p. 79, the common and scientific name and opening text for the initial account on the page were separated from the account by several pages. The opening text appears on p. 75 between photos of Bar-tailed Godwits and reads “Oriental Turtle-Dove Streptopelia orientalis (1, 2). One at Furnace Creek Ranch. . . .” We thank Joe Morlan for bringing this error to our attention.

The following correction is noted for the 16th annual report (Heindel and Garrett 1995): The author of the account of the record of an Oriental Turtle-Dove
Streptopelia orientalis) in British Columbia was Paterson, not Peterson (p. 23; p. 32 under Literature Cited). We thank Jon Dunn for bringing this discrepancy to our attention.

MISCELLANEOUS

Sightings for 2008 published in North American Birds for which no documentation was submitted to the CBRC include a possibly returning Smew near Standard, TUO, in mid-February (N. Am. Birds 63:319), a Yellow-billed Loon off Pacific Grove, MTY, 15 Jan–2 Feb (N. Am. Birds 62:298), a Crested Caracara at Pogonip, SCZ, 27 Feb (N. Am. Birds 62:298), one of the two Slaty-backed Gulls in the Smith R. bottoms, DN, 4–8 Feb (N. Am. Birds 62:299), a Thick-billed Murre at Pt. Reyes, MRN, 20 Dec (N. Am. Birds 63:152), a Worm-eating Warbler on Pt. Reyes, MRN, 11 Sep (N. Am. Birds 63:154), and a Rusty Blackbird at Lucas Valley, MRN, 20 Oct (N. Am. Birds 63:155). We welcome submission of documentation for these birds. However, until the committee has reviewed and accepted them, we recommend the records not be considered valid.

CONTRIBUTORS

LITERATURE CITED


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Accepted 6 September 2010
MOLECULAR DATA CONFIRM THE FIRST RECORD OF THE LONG-BILLED MURRELET FOR NEW MEXICO

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ABSTRACT: A small alcid of uncertain identity was salvaged from a brine pool associated with a potash mine in Eddy County, New Mexico, on 12 July 2009. The carcass was brought to the Museum of Southwestern Biology, prepared as a specimen, and tentatively identified as a Long-billed Murrelet (Brachyramphus perdix), but identification based on measurements and plumage characteristics was not conclusive. DNA sequence from the mitochondrial gene cytochrome-b confirmed the specific identity but revealed a previously unrecognized mitochondrial variant of the Long-billed Murrelet. This specimen provides the first documentation of the Long-billed Murrelet in New Mexico, a record that was anticipated from the species' established pattern of vagrancy across North America. This vagrant's novel mitochondrial DNA haplotype reveals previously undescribed population genetic structure within the Long-billed Murrelet.

The Long-billed Murrelet (Brachyramphus perdix), of northeastern Asia, has a well-established pattern of intercontinental vagrancy and a tendency to wander far from coastlines. As of 2003, there were over 50 documented records for inland areas of the United States and Canada (Thompson et al. 2003). Remarkably, there were no conclusive records of the species in North America before 1979 (Sealy 1982). It continues to occur in North America regularly (e.g. Barnes 2009, Svingen 2009), and the first record for Europe was in 1997 (Maumary and Knaus 2000). By contrast, there are no records of inland vagrancy of the Marbled Murrelet (B. marmoratus), which breeds in northwestern North America. The reason for the recent pulse of long-distance vagrancy by the Long-billed Murrelet is unknown, but various authors have proposed that cyclical regional weather patterns, erratic food supplies, and long-distance dispersal behavior might be contributing to this unique pattern (Sealy et al. 1982, 1991, Mlodinow 1997, Thompson et al. 2003). A better understanding of patterns of geographic variation, dispersal, and migratory behavior in the Long-billed Murrelet will be critical to explaining this phenomenon.

The Long-billed Murrelet was considered to be an Asiatic subspecies of the Marbled Murrelet until genetic studies revealed it to be highly divergent (Friesen et al. 1996). Phylogenies of the genus based on nuclear and mitochondrial DNA demonstrate that the Long-billed Murrelet is sister to a clade containing Kittlitz's Murrelet (B. brevirostris) and the Marbled Murrelet (Friesen et al. 1996, Pereira and Baker 2008). Estimates of the time of divergence between the Long-billed Murrelet and its congeners range from 35 to 48 million years, which is surprisingly ancient given the overall phenotypic similarity of the three species of Brachyramphus (Pereira and Baker 2008). Previously published DNA sequences from the Long-billed
Murrelet are based on birds collected near Magadan, Russia, and archived at the Burke Museum (University of Washington, Seattle).

On 12 July 2009, staff of Mosaic Corporation found a small alcid dead in a pool of brine associated with a potash mine southeast of Carlsbad in southern Eddy County, New Mexico. The finders did not provide a more exact location, but we estimate it at approximately 23 km east-southeast of Carlsbad. They took the carcass to Desert Willow Veterinary Services where it underwent necropsy, at which time the gonads were discarded without being noted. The carcass was subsequently brought to the Museum of Southwestern Biology (University of New Mexico, Albuquerque), where we tentatively identified it to the genus *Brachyramphus*, pending further investigation. Andrew B. Johnson prepared the specimen as a traditional study skin, partial skeleton, spread wing, and frozen tissue sample (catalog number MSB 29200, tissue number NK170062, preparator number ABJ2319; record accessible at http://arctos.database.museum/guid/MSB:Bird:29200). Its feathers were heavily encrusted with salt, only a portion of which could be removed during specimen preparation. Although not weighed, the bird was not emaciated, and Johnson noted its fat as “light.” No evidence of molt was noted. The tip of the maxilla was broken but remained attached.

**PLUMAGE**

Feathers of the underparts were white, with dark tips forming short bars or scallops that were sparse on the throat and upper breast, becoming dense on the abdomen and flanks (Figure 1A). The plumage of the upperparts, wings, and tail was dark grayish brown. A narrow stripe was formed by white feathers that extended from the side of the neck around to the nape. White scapulars formed a prominent V pattern on the back (Figure 1B, C). The wing, including the underwing coverts, was uniform dark grayish brown with light gray tips on the outer secondaries and on all primaries except the outermost (Figure 1D, E). The Long-billed Murrelet’s underwing coverts have been widely reported as being extensively white, but Thompson et al. (2003) showed that white in the wing linings is associated with immature plumages of the Long-billed and, to a lesser extent, Marbled Murrelet. Thus, the color of this bird’s wing lining is consistent with that of an adult, even though the breast plumage is much more extensively white than in specimens of adult or subadult Long-billed Murrelets taken during August in California (Sealy et al. 1991) and Washington (Thompson et al. 2003), respectively.

Another characteristic that has been used to diagnose the Long-billed Murrelet is whitish marbling in the outer vanes of the rectrices. Thompson et al. (2003) showed that this characteristic is present in some Long-billed Murrelets but never present in the Marbled Murrelet. Curiously, this specimen has whitish marbling in the outer vanes of the rectrices on the left but not the right half of the tail. Both left and right rectrices have fine pale edging on the tips.

**MEASUREMENTS**

The measurements were as follows: flattened wing 135.0 mm, tarsus 16.2 mm, exposed culmen 17.1 mm, bill depth at anterior end of nares
Figure 1. *Brachyramphus perdix*, MSB 29200. Ventral view (A), dorsal view (B), lateral view (C), dorsal surface of spread wing (D), and ventral surface of spread wing (E).
LONG-BILLED MURRELET IN NEW MEXICO

6.2 mm, and tail 36 mm. None of the measurements was diagnostic for identification with the possible exception of the tail length, which fits that reported for the Long-billed Murrelet (mean adult tail length 35.9 ± 1.5 mm, n = 5) and would be slightly long for a Marbled Murrelet (mean adult tail length 32.8 ± 2.2 mm, n = 35; Sealy et al. 1982, 1991, Thompson et al. 2003). By contrast, the exposed culmen was shorter than previously measured for an adult Long-billed Murrelet (18.0–23.5 mm, n = 23; Nelson 1997) and fell within the normal range for the Marbled Murrelet (mean for after-hatching-year males 15.5 ± 0.8 mm, n = 36, range 13.7–17.6 mm; mean for “adult” females 17.4 ± 0.9 mm, n = 108; Sealy 1975, Sealy et al. 1982, 1991). Although the tip of the culmen was partially broken off, we believe the measured length to approximate the intact length closely.

GENETIC METHODS

Following the manufacturer’s protocol, we used a Qiagen DNEasy kit to extract DNA from pectoral muscle and a contour feather separately. The feather was used because the muscle tissue appeared to be heavily degraded and impregnated with salt. For the feather extraction, we removed the barbs with a razor blade and added 30 μL of 0.1 M dithiothreitol to the initial tissue incubation and digestion to reduce the disulfide bonds of the keratinous rachis and calamus. Using a NanoDrop spectrophotometer (Thermo Fisher Scientific, Pittsburgh, PA), we assayed each extraction for DNA content. The mitochondrial gene cytochrome-b was amplified in a 25-μL reaction with 1 μL of the DNA extract and the following reagents: 2.5 units of Taq polymerase (ExTaq, Takara, Shiga, Japan), 200 μM of each dNTP, 1.5 mM MgCl2, and 1 μM of each primer. Primers used for amplification and sequencing are primers universal for avian cytochrome-b, L14841 (Kocher et al. 1989) and H4a (Harshman 1996). We used Eppendorf Mastercycler (Eppendorf, Hamburg, Germany) thermal cyclers to carry out the polymerase chain reaction as follows: 95 °C for 8 min, (95 °C for 45 sec, 50 °C for 30 sec, 72 °C for 45 sec) × 35 cycles, 72 °C for 10 min. We visualized the reaction’s products on a 1% agarose gel and cleaned them with Exo-Sap-It (USB, Cleveland, Ohio). For sequencing reactions, with external primers, we used BigDye 3.1 chemistry (ABI, Mountain View, CA), and we read the sequences with an ABI 3130 automated sequencer. Using Sequencher 4.7 (GeneCodes, Ann Arbor, MI), we assembled sequence contigs and inspected chromatograms manually. We used the software package MUSCLE (Edgar 2004) for alignment with all cytochrome-b sequences previously published for the genus Brachyramphus, as well as with sequences of representatives of the related genera Synthliboramphus, Cepphus, and Fratercula (Pereira and Baker 2008). We used the program MEGA (Kumar et al. 2008) to calculate pairwise distances and for distance-based phylogenetic analysis. We used the program Phylm (Guindon and Gascuel 2003) to analyze phylogeny by maximum likelihood. Using the HKY85 model of molecular evolution and simultaneous estimation of the model’s parameters, we ran 500 bootstrap replicates of the maximum-likelihood analysis.
GENETIC RESULTS

According to the Nanodrop, the extraction from muscle tissue contained no detectable levels of DNA (0.0 ng/μL). By contrast, the extraction from the feather contained 4.1 ng/μL of DNA. The cytochrome-b gene was successfully amplified and sequenced only from the feather extraction, and reactions using the external primers produced sequences comprising 1036 base pairs, with an overlap between the two strands of 429 base pairs. The chromatograms of the sequences were clean and unambiguous, with no double peaks or conflicts between readings that would suggest the possibility that we had mistakenly sequenced a nuclear DNA pseudogene. The complete sequence is available on Genbank (accession HM072000).

Comparison of the sequence with published sequences for species of the Alcidae revealed uncorrected divergence levels of 0.5% with the Long-billed Murrelet but 8.4% and 9.8% with Kittlitz’s and Marbled murrelets, respectively (Table 1). Divergences between the New Mexico specimen and representatives of the related genera Cepphus (10.1%), Fratercula (11.5%), and Synthliboramphus (11.8%) were higher than those within the genus Brachyramphus. The five DNA substitutions observed between the New Mexico specimen and published sequences of the Long-billed Murrelet were all transitions, and four out of the five were synonymous changes. The one nonsynonymous difference (codon 23) was at a site for which the New Mexico specimen shares the same amino acid (leucine) with all other alcids examined, but published Long-billed Murrelet specimens uniquely represent a different amino acid (phenylalanine). Phylogenetic analysis based on maximum likelihood corroborated the distance results. The New Mexico specimen’s sequence was grouped with previously published sequences of the Long-billed Murrelet with strong bootstrap support (Figure 2).

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aMSB 29200; tissue NK170062; Genbank accession no. HM072000.
bBased on 1036 base pairs of the sequence of the cytochrome-b gene. Genbank accession numbers of the previously published sequences used for this analysis: Fratercula arctica, DQ385228; Synthliboramphus hypoleucus, U37305; Cepphus columba, U37293; Brachyramphus marmoratus, U63050; B. brevirostris, U63058; B. perdix, U63057.
DISCUSSION

Mitochondrial DNA data confirm that the New Mexico specimen can be identified as a Long-billed Murrelet and therefore represents a transoceanic vagrant and a first state record. We caution that the date of collection, 12 July 2009, should be taken as only an approximation of the bird’s date of death. We cannot be certain how long the bird was dead before being discovered because of the unusual circumstance of the carcass being preserved by the salt in the brine pool. A long interval between death and salvage might explain the bird’s unusual plumage (for July), the lack of molt, and the absence of DNA of high molecular weight in the muscle tissue.

The mitochondrial DNA of the specimen was not identical to sequences published for the Long-billed Murrelet, diverging by 0.5%. This difference

Figure 2. Phylogeny of Brachyramphus and related genera based on the cytochrome-\(b\) gene, estimated by maximum likelihood (HKY85 model). The values at the nodes represent the proportion of 500 bootstrap replicate analyses in which that node appeared. Numbers that are preceded by “U,” “DQ,” or “AF” correspond to Genbank accession numbers. The New Mexico specimen is grouped with Brachyramphus perdix, with strong support.
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suggests that significant population structure exists within the Long-billed Murrelet and that this vagrant is unlikely to have originated from the same population represented by sequences already recorded in Genbank. The high ratio of transition to transversions and the absence of stop codons in the DNA sequence indicate that the sequence was mitochondrial in origin and did not represent a nuclear DNA pseudogene. The previously published sequences all represent birds collected in the northern Sea of Okhotsk, in the vicinity of Magadan, Russia (Friesen et al. 1996, Pereira and Baker 2008). The breeding distribution of the Long-billed Murrelet extends from Kamchatka, in the Russian Far East, south to Hokkaido, Japan, and is highly fragmented, reflecting the complexity of coastlines in the species’ range (Friesen et al. 1996, Dickinson 2003). A phylogeographic study with population-level sampling from throughout this range is clearly warranted. Such a study is likely to reveal that the mtDNA variation we observed has a geographic basis and might shed light on the geographic origins of these transoceanic vagrants. Furthermore, this specimen’s anomalous variation in plumage and measurements may reflect previously undescribed geographic variation in the Long-billed Murrelet.

ACKNOWLEDGMENTS

We thank Melody Russo, Samantha R. Uhrig, and Kerry Mower for coordinating the salvage effort and recognizing the importance of this specimen. We thank Andrew B. Johnson for preparing the specimen. We thank Robert W. Dickerman, Christin L. Pruett, and Spencer G. Sealy for helpful comments on the manuscript.

LITERATURE CITED

Long-billed Murrelet

Computer painting by George C. West
COUNTING THE COUNTLESS: ESTIMATING THE NUMBER OF LEAST AUKLETS ATTENDING THE COLONY ON ST. GEORGE ISLAND, ALASKA

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ABSTRACT: Estimating the abundance of auklets at breeding colonies has proven extremely difficult, and no satisfactory method has emerged. Auklets nest in concealed rock crevices and socialize on the sea’s surface during portions of the day. Several methods of estimating population trends have been attempted, but a true census has so far been unattainable at any colony. On St. George Island, Alaska, an unusually late snow cover in 2008 made possible a photo count of Least Auklets (Aethia pusilla) attending the inland colony at Ulakaia Ridge. We estimated the number of birds in the colony on 15 May 2008 to be 88,263 ± 3056. Because of the timing of the count and the known life history of the species, the count likely represented almost the entire population breeding at the colony that year.

The Least Auklet (Aethia pusilla) is among the most abundant seabirds in the North Pacific (Stephensen and Irons 2003), breeding typically in huge colonies on a few islands in the Bering Sea, Aleutian Archipelago, and Sea of Okhotsk. Numbers of these birds attending colonies were described by Gabrielson and Lincoln (1959) as “impossible to estimate and difficult to exaggerate.” Indeed, even today, only subjective or highly variable guesses are available for breeding populations of auklets (Shuntov 1999). The reason populations are so hard to enumerate is that auklet nests are concealed in rock crevices. Adults are typically above ground during two daily activity periods (morning and evening) when they socialize on the surface between trips to and from subsurface nest sites or feeding areas at sea (Jones 1993). Their nesting strategy makes it difficult to determine the proportion of the population visible on the surface of the colony at any particular time, and counting is complicated by the presence of tremendous numbers of birds moving erratically both in the air and on the ground.

In recent decades numerous attempts have been made to assess the absolute abundance or to derive population indices of auklets at colonies, including use of “surface” counts, “net movement” counts, time-lapse photography, mark–resighting analysis, and colony mapping (Bédard 1969, Byrd et al. 1983, Piatt et al. 1990, Jones 1992, Sheffield et al. 2006, Renner et al. 2006). Many of these efforts tried to account for aspects of the species’ behavioral ecology that might bias counts, but no monitoring method has proven satisfactory primarily because of the high variability of the resulting counts (e.g., Harding et al. 2005; summarized by Renner et al. 2006).

In 2008, we had a rare opportunity to obtain a census of Least Auklets at the Ulakaia colony on St. George Island, Alaska. An unusually late snow cover that spring made it possible to photograph birds at the colony site before they could enter crevices. Because of the timing of the count and the
known life history of the species, the effort produced the first total count of
auklets at the Ulakaia colony and thus offers a bench mark from which other
methods of population assessment can be measured (Anderson 2001).

METHODS

On 15 May 2008, Nikolay Konyukhov photographed the Ulakaia Least
Auklet colony at about 10:30 ADT over 2–3 minutes during the morning
activity period. He used a digital single-lens reflex camera (with an 80-mm
lens at aperture f/11) set on a tripod approximately 500 m downslope
of the center of the colony. Following boundaries mapped in 2004 and
2006, Konyukhov provided us with a set of 30 overlapping images of the
colony (Renner et al. 2006). We digitally stitched the images together into
a composite image by means of the panorama-photo-stitching software
Hugin (http://hugin.sourceforge.net/). We omitted one small portion of
the colony (see upper left portion of Figure 1—about 3% in a low-density
area; Renner et al. 2006) from the composite image because we could not
resolve the photo’s placement.

Three observers counted the auklets on the composite image (both those
in the air and those on the ground) independently. Using Adobe Photoshop,
we added a transparent layer to the image, and the observer systematically
scrolled across the photo, placing a small dot on the image of each bird with
the pencil tool. When all birds had been marked, we converted the layer to
a grayscale GIF and counted the dots digitally with the “measure particles”
tool in the image-processing software ImageJ (available from the National
Institutes of Health at http://rsb.info.nih.gov/ij). Also with ImageJ, we
estimated the proportion of the colony covered with snow as well as the
extent of snow-free polygons on 15 May by counting pixels in the portion
of the photograph corresponding to the occupied colony.

RESULTS

Figure 1 shows the composite of stitched images of the colony taken on
15 May, the approximate 93% snow cover on that date, and the auklets
clearly visibly against the white background. The mean of three indepen-
dent counts of auklets visible on the stitched image was 88,263, standard
deviation (SD) 3056.

DISCUSSION

The unusually late snow cover at St. George Island in the spring of 2008
provided a rare opportunity for a snapshot estimate of the number of Least
Auklets attending the Ulakaia colony. On 15 May, when the images were
taken, huge numbers of birds were present at the colony but they were
prevented from reaching their nesting sites under the snow. Thus they were
visible and countable against the white background.

The photo count is likely a very close estimate of the number of auklets
nesting in the colony that year, but several factors could have biased the
number we counted with respect to the number that actually nested in 2008.
Figure 1. (A) Composite photograph of the Least Auklet colony on Ulakaia Ridge, St. George Island, Alaska, on 15 May 2008. The colony extends approximately 1330 m from left to right. (B) Magnification of a portion of the colony to show how auklets appeared for counting.

*Image from photos by Nikolay Konyukhov*
For example, about 7% of the colony was snow-free, and, while we could distinguish some auklets against dark backgrounds on the images, there were likely others present that we did not detect. Conversely, we are confident that no birds were in crevices under the snow and thus not counted. And, although a minor factor, about 3% of the colony (in a low-density area) was omitted from the composite photo.

We also had to consider that some breeding birds stayed at sea that particular morning and/or that an unknown, but likely small, proportion of the auklets that eventually nested at the colony were not yet attending the colony when the images were taken. We have no information on birds that may have been at sea that morning, but in previous years, resightings of marked birds imply that most individuals that nested were at the colony daily before laying (U.S. Fish and Wildlife Service unpubl. data). Despite the late snow cover on the colony in 2008, the chronology of Least Auklet breeding appeared normal that year. The first birds were observed flying to the colony on 18 April (K. Holser pers. comm.), and the distribution of dates of hatching in 2008 (16 July ± 3.7 SD, n = 39) was similar to that during the preceding and following years when there was no snow cover on 15 May (2007: 18 July ± 4.2 SD, n = 17; 2009: 9 July ± 3.2 SD, n = 67; U.S. Fish and Wildlife Service unpubl. data). Given an incubation period of about 30 days (Jones 1993), the mean date of laying in 2008 would have been 16 June, almost two months after the birds arrived at the colony.

All these factors could lead to underestimates of the number of breeding birds, but the possibility that some birds at the colony on 15 May were
prospecting nesting sites but did not nest that year would have produced an overestimate. Mark–resighting data from previous years suggest this rarely occurs when the colony is initially occupied, and it is not until the incubation and chick-rearing stages that nonbreeding adults are common (H. and M. Renner pers. obs.; Jones 1992). Taken together, the factors contributing to this one-day snapshot of the colony’s size preclude much of the variability within a day typically observed on small plots within auklet colonies (e.g., Jones 1992) and thus offer a fairly precise measure of the number of Least Auklets breeding at Ulakaia in 2008. This has not been achieved at any other auklet colony.

Our estimate of 88,000 auklets (or 44,000 pairs) is markedly lower than the previous estimate of 129,000 birds at the Ulakaia colony in the 1970s (Hickey and Craighead 1977), but it is difficult to assess whether this difference is rooted in the census method or is a true decline due to vegetation encroachment, as suggested by Roby and Brink (1986) and Renner et al. (2006).

In conclusion, we realize what we report here resulted from a rare seasonal event and that it can be replicated only opportunistically rather than on a formal schedule. Counts from photos might be most practical at colonies farther north and during late springs when retention of snow should be more common. Indeed, during late springs at colonies on St. Lawrence and Little Diomede islands, Least Auklets have often been observed sitting on snow (Sealy 1975). However, because of the inherent difficulties in assessing populations of crevice-nesting alcids the method should be capitalized on whenever possible as an added means of calibrating population estimates.

ACKNOWLEDGMENTS

We thank Brie Drummond and Sarah Thomsen for countless hours placing digital dots on photos, and Nikolay Konyukhov for photographing the Ulakaia colony. Vernon Byrd, Brie Drummond, Adrian Gall, Robert Gill, Arthur Kettle and an anonymous reviewer provided useful comments which improved the manuscript.

LITERATURE CITED


Accepted 23 June 2010
WINTER MOVEMENTS BY CALIFORNIA SPOTTED OWLS IN A BURNED LANDSCAPE

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ABSTRACT: The movements and habitat requirements of the California Spotted Owl (Strix occidentalis occidentalis) during the nonbreeding season remain poorly understood in comparison with those during the breeding season, and no data are available on the subspecies’ use of burned landscapes in fall and winter. From October 2006 to March 2007, we estimated the locations of daytime roosts of five radio-marked California Spotted Owls in an area of the southern Sierra Nevada that burned in a 60,985-ha wildfire 4 years previously. Our objectives were to determine whether these owls expanded their movements during the nonbreeding season and whether they roosted in the area burned. During the nonbreeding season, two males increased the distance between locations of successive roosts while still remaining within their breeding-season ranges. One pair migrated from its breeding territory for the winter but returned by 1 March. One female dispersed to a new breeding territory. Three of the five owls roosted in burned landscapes during the nonbreeding season, and 30% of all roost locations were within the fire’s perimeter. Burned forests may therefore represent important winter habitat for the California Spotted Owl.

The California Spotted Owl (Strix occidentalis occidentalis) is an important species for management in the Sierra Nevada and southern California because it is strongly associated with older coniferous forests for nesting, roosting, and foraging (Gutiérrez et al. 1992, Blakesley et al. 2005, Seamans 2005). Spotted Owl populations are highly sensitive to reductions in adult survival (Noon et al. 1992), and mortality of adults is greatest in winter (Franklin et al. 2000, Seamans and Gutiérrez 2007), yet the species’ needs for winter habitat are seldom considered in efforts at management (Laymon 1989). Severe fire is invoked as one of the primary threats to the Spotted Owl because of its potential to eliminate suitable habitat (Weatherspoon et al. 1992, SEI 2004). Bond et al. (2009), however, found that during the breeding season California Spotted Owls with burned areas in their home ranges forage preferentially in severely burned forest, suggesting that severe fire may enhance short-term habitat suitability under certain circumstances, possibly by increasing the abundance of prey or the owls’ access to it.

Only three studies in the Sierra Nevada have documented habitat use of the California Spotted Owl with radio-telemetry during the nonbreeding season (Laymon 1989, Zabel et al. 1992, Call et al. 1992), but none of these studies took place in a burned landscape. Management of burned forests to conserve the Spotted Owl requires understanding how individuals use such habitat year round because in fall and winter home ranges sometimes expand to incorporate habitats different from those within the breeding range (Laymon 1989, Zabel et al. 1992). Yet the winter habits and habitat requirements of the Spotted Owl in the Sierra Nevada remain poorly understood in comparison to those in the breeding season, and in burned landscapes they are virtually unstudied.

From the air, we estimated the locations of the daytime roosts of five
radio-marked California Spotted Owls biweekly during the nonbreeding season (Oct–Mar) in an area that burned in a large wildfire 4 years prior to our study. Our specific objectives were to determine if during the nonbreeding season these owls (1) remained in their breeding ranges, enlarged or shifted their home ranges, or migrated to new areas and (2) whether they roosted in burned landscapes.

METHODS

Study Area

Our study took place in the Greenhorn Mountains, Sequoia National Forest, southern Sierra Nevada, California, at elevations from 1500 to 2500 m. From 1971 to 2000, annual precipitation at the nearest National Weather Service weather station, at Johnndale (1427 m), averaged 57 cm. The vegetation is Sierran mixed conifer forest (Allen 1988), dominated by ponderosa pine (*Pinus ponderosa*), Jeffrey pine (*P. jeffreyi*), and white fir (*Abies concolor*). Above 2100 m, a transition zone is dominated by red fir (*A. magnifica*). Other common trees include the sugar pine (*P. lambertiana*), incense cedar (*Calocedrus decurrens*), canyon live oak (*Quercus chrysolepis*), and California black oak (*Q. kelloggii*). In July and August of 2002, the McNally Fire burned approximately 60,985 ha in the Sequoia and Inyo national forests, including 33,704 ha of conifer-dominated forests (Odion and Hanson 2006). Like most forest fires, the McNally Fire burned with variable severity, leaving a mosaic of disturbance in the study area.

Capturing and Tracking Owls

Using techniques described by Bond et al. (2009), we captured and radio-marked three male and two female Spotted Owls in three burned territories. These birds were a subsample of the Spotted Owls that had been radio-tracked from May to September 2006 as part of a study of selection of foraging habitat during the breeding season (Bond et al. 2009). We affixed backpack-style radio transmitters designed to minimize contact with the owl’s back (AVM Instrument Company, Ltd., Colfax, CA) with Kevlar ribbon (0.63 cm wide; Bally Ribbon Mills, Bally, PA). We sewed the transmitter in place with cotton thread to allow it to be lost within 12–24 months, if we failed to recapture a marked owl and remove the transmitter. With the harness, our transmitter units weighed <20 g, or <4% of each owl’s body mass.

Verner et al. (1992) reported that some adult Spotted Owls begin their fall migration early in October. Therefore, we defined the nonbreeding season as beginning on 1 October. During the breeding season (May–September 2006), we visually located Spotted Owls at roosts or nests every 7–10 days by following the strongest signal to the owl’s roost or nest site. We used hand-held three-element collapsible directional Yagi antennas and portable receivers supplied by AVM Instrument Company and Telonics (Mesa, AZ) for deciphering signal strength and direction. During the nonbreeding season from 11 October 2006 to 23 March 2007 (January excluded for logistical reasons), we used a Cessna 182 fixed-wing aircraft with an ATS 1000/4
Element Yagi receiver and antennae to locate radio-marked owls every other week. We estimated the error of the telemetry by placing three transmitters at known locations and having a naive observer estimate their locations from the aircraft on five separate occasions. The average error was 673 m (standard error 118 m, range 79–1585 m, n = 15). We recaptured all five owls and removed their backpack transmitters at the end of the study (May 2007).

Data Analysis

We compared the dispersion of locations of successive Spotted Owl roosts in the breeding and nonbreeding seasons to determine whether owls remained in their breeding ranges, enlarged or shifted their ranges, or migrated during the nonbreeding season. We calculated dispersion as the mean of the linear distances between each owl’s successive roosts; larger values indicate greater dispersion (Conner and Leopold 2001). We used a one-tailed repeated-measures t test to compare dispersion by season because we expected nonbreeding-season movements to be greater on the basis of previous studies (Laymon 1989, Zabel et al. 1992). If an owl moved significantly farther from roost to roost during the nonbreeding season than during the breeding season, we presumed that it had enlarged or shifted its breeding-season range. If during the nonbreeding season an owl moved >10 km from the center of its breeding-season territory, we considered it to have migrated.

Because of substantial radio-telemetry error during the nonbreeding season, we could not describe use of roosting habitat at a fine scale. Therefore, we described whether each Spotted Owl roost was inside, on the edge, or outside the fire’s perimeter. To define the fire’s perimeter, we used digital maps of the severity with which vegetation burned, generated by the U.S. Forest Service (Region 5 Remote Sensing Lab, Sacramento, CA; see Bond et al. 2009). We plotted roosting owls’ estimated locations with ArcMap 9.1 (ESRI, Redlands, CA). The overall accuracy of the fire-severity map was 93% correct, as determined by vegetation sampling at 80 randomly located sites within the breeding-season ranges of foraging Spotted Owls (Bond et al. 2009).

We identified breeding-season roosts by visually locating the owl, so we plotted the exact locations as either outside or inside the fire’s perimeter without the need to incorporate any telemetry error. On the basis of our average telemetry error during the nonbreeding season, we defined an error circle with a radius of 673 m around each estimated roost location to categorize the location as either outside or inside the fire’s perimeter. We categorized locations where the error circle included the perimeter as “edge” roosts. Thus each location was categorized as (1) within the fire perimeter (>673 m inside), (2) at the edge of the fire (within 673 m of the edge, either outside or inside), (3) outside the fire (>673 m from the perimeter but within 10 km of the center of the breeding-season territory), or (4) that the owl had migrated (moved >10 km from the center of the breeding-season territory). We defined the center of an owl’s breeding-season territory as the tree in which it nested in 2006 (all pairs attempted to nest, as determined by behavior and evidence of brood patches on females).
RESULTS

During the breeding season (May–September 2006) we identified 7 to 11 daytime roost locations per Spotted Owl (mean = 9), for a total of 45 roosting locations. One male owl’s (Mill Creek) nest tree and all daytime roost locations were outside the perimeter of the fire but within 1 km of it, giving this owl access to burned habitat (Bond et al. 2009). The nest tree and roost locations of the other two pairs (Speas Ridge and Burnt Ridge) were located primarily within the fire’s perimeter (Bond et al. 2009). During the nonbreeding season, we estimated nine roost locations per owl from 11 October 2006 to 23 March 2007, excluding two fall locations for the Speas Ridge male (pilot had the incorrect radio frequency), for a total of 43 locations.

Our sample of five Spotted Owls moved a mean of 625 m (SE [standard error] 136 m) between successive roost locations during the breeding season and 2468 m (SE 613 m) during the nonbreeding season. For all five, movements between successive roost locations were significantly greater during the nonbreeding season than during the breeding season ($t = -2.78$, $df = 4$, $P = 0.02$).

One female (Burnt Ridge) moved 2.6 km from the center of her breeding-season territory on 12 September, roosted >1800 m apart from her mate of 2006 for the duration of the nonbreeding season, and was relocated the following spring in a different territory >4 km from the 2006 breeding territory. Two males (Burnt Ridge and Mill Creek) expanded their movements during the nonbreeding season while still remaining within 10 km of their nests of 2006. One pair (Speas Ridge) migrated approximately 13 km southeast of the center of their breeding-season territory from mid-December to mid-February before returning to their previous breeding territory. During the breeding season, the mean distance between same-day roosts of the male and female of the Speas Ridge pair was 406 m (SE 255, range 0–1582 m, $n = 7$). This distance was strongly influenced by one instance on 29 August when the pair roosted 1582 m apart; from May through July these owls roosted in the same tree on three occasions and 35 and 51 m apart on two occasions. During the nonbreeding season, the mean distance between same-day roosts of the male and female was 2801 m (SE 1350, range 116–9852 m, $n = 7$), suggesting that this pair roosted separately more often in the nonbreeding season than during the breeding season.

Of the 45 locations of breeding-season roosts, 29 (64%) were inside the fire perimeter and 16 were outside. During the breeding season, when ground-based telemetry allowed us to identify actual roost trees, we found that all roosts within the fire’s perimeter were in burned stands. Of 43 error circles for roosts in the nonbreeding season, 13 (30%) were located entirely within the burned area, 8 (19%) were near the fire’s perimeter, and 22 (51%) were completely outside the burned area (Table 1). Two of the five owls roosted mostly inside the fire’s perimeter (Speas Ridge male and female), and two roosted mostly outside the perimeter (Burnt Ridge female and Mill Creek male), while 1 owl’s roost locations were equally distributed between sites inside and on the edge of the perimeter (Burnt Ridge male). Because of the substantial error associated with aerially based estimates,
WINTER MOVEMENTS BY CALIFORNIA SPOTTED OWLS IN BURNED AREA

## DISCUSSION

During the winter, these five radio-tracked Spotted Owls either increased their movements or migrated fully out of their breeding-season territory. One female moved permanently in an apparent instance of dispersal. In the spring following this study, this female was resighted in a new territory, while her former mate remained on their 2006 breeding territory and was paired with a new, unbanded female.

Our results from a burned study area are similar to those reported from unburned sites. In the Eldorado National Forest of the central Sierra Nevada, Laymon (1989) found that 8 of 10 California Spotted Owls migrated downslope during the winter, whereas none of the 4 owls in the adjacent Tahoe National Forest monitored by Call et al. (1992) migrated. In the Sierra National Forest of the southern Sierra Nevada, Zabel et al. (1992) reported that 7 of 21 owls enlarged or shifted their home ranges and 5 migrated during the nonbreeding season. It remains unknown why some individual owls migrate, shift, or enlarge their ranges and others do not, as no correlation between migration patterns and habitat quality or quantity as defined by vegetation has been found (Verner et al. 1992). Zabel et al. (1992) suspected that the size of the California Spotted Owl’s home range may be correlated with variation in its prey, with larger ranges associated with a greater proportion of the northern flying squirrel (Glaucomys sabrinus) and smaller ranges associated with a greater proportion of the dusky-footed or big-eared woodrats (Neotoma fuscipes and N. macrotis). Owls may be enlarging ranges or migrating in response to availability of prey. Patterns of the California Spotted Owl’s movement in burned areas in the nonbreeding season appear to be as varied as those in unburned areas. Nonetheless, the

### Table 1

<table>
<thead>
<tr>
<th>Date</th>
<th>Mill Creek male</th>
<th>Speas Ridge male</th>
<th>Speas Ridge female</th>
<th>Burnt Ridge male</th>
<th>Burnt Ridge female</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Oct 2006</td>
<td>Out</td>
<td>—</td>
<td>Edge</td>
<td>Edge</td>
<td>Edge</td>
</tr>
<tr>
<td>25 Oct 2006</td>
<td>Out</td>
<td>—</td>
<td>Edge</td>
<td>Edge</td>
<td>Out</td>
</tr>
<tr>
<td>22 Nov 2006</td>
<td>Out</td>
<td>In</td>
<td>In</td>
<td>Out</td>
<td>Out</td>
</tr>
<tr>
<td>7 Dec 2006</td>
<td>Edge</td>
<td>In</td>
<td>In</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>20 Dec 2006</td>
<td>Out</td>
<td>Migrated</td>
<td>Migrated</td>
<td>Edge</td>
<td>Out</td>
</tr>
<tr>
<td>3 Feb 2007</td>
<td>Out</td>
<td>Migrated</td>
<td>Migrated</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>14 Feb 2007</td>
<td>Out</td>
<td>Migrated</td>
<td>In</td>
<td>Edge</td>
<td>Out</td>
</tr>
<tr>
<td>1 Mar 2007</td>
<td>Out</td>
<td>In</td>
<td>In</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>23 Mar 2007</td>
<td>Out</td>
<td>In</td>
<td>In</td>
<td>In</td>
<td>Out</td>
</tr>
</tbody>
</table>

*In, >673 m inside fire’s perimeter; edge, ≤673 m from perimeter, either outside or inside; out, >673 m outside of perimeter but ≤10 km from center of breeding-season territory; migrated, >10 km from center of breeding-season territory.*

during the nonbreeding season we were unable to assess the severity of the fire at locations where the owls roosted within the perimeter.
expansion of movements, as attested by greater distances between successive roost locations during the nonbreeding season in postfire landscapes, underscores the importance of identifying and conserving winter habitat in addition to that used during the breeding season.

During the nonbreeding season, three of five Spotted Owls roosted within the burned landscape to some degree (Table 1). During the breeding season, this sample of Spotted Owls typically roosted in unburned or lightly burned forest but foraged selectively in severely burned areas close to the territory center (Bond et al. 2009). Spotted Owls often roost near where they foraged the previous night (Guetterman et al. 1991), which may be particularly true during the nonbreeding season when adults are not required to return to a nest to provision young. Thus Spotted Owls that roost in the burned landscape during the nonbreeding season may be continuing to forage in the burned areas throughout the fall and winter. These burned forests may represent important habitat for the California Spotted Owl during both the breeding and nonbreeding seasons.

Further studies of the Spotted Owl’s habitat use during the nonbreeding season, as well as research on the population dynamics of key prey species, are needed in both burned and unburned landscapes for a better understanding of how patterns of landscape disturbance affect the owl’s pattern of movement in fall and winter.

ACKNOWLEDGMENTS

We thank R. van Wagenen of Ecoscan Resources, Watsonville, California, for obtaining roost locations for this study. W. Rannals and R. Galloway of the Sequoia National Forest provided Spotted Owl locations prior to our field work and offered valuable input and field support during our study. The U.S. Forest Service’s Region 5 Remote Sensing Lab supplied GIS data. P. Carlson and D. Wiens provided valuable suggestions for improving the manuscript. This study was funded by a grant from the Resources Legacy Fund Foundation awarded to The Institute for Bird Populations (IBP) and was conducted by IBP’s Sierra Nevada Bird Observatory. This is contribution 367 of The Institute for Bird Populations.

LITERATURE CITED


Accepted 21 July 2010
NOTES

FIRST EVIDENCE SUGGESTING HYBRIDIZATION BETWEEN THE SUMMER TANAGER AND WESTERN TANAGER

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There are very few reported cases of hybridization among the four species of Piranga commonly found in North America north of Mexico, the Hepatic Tanager (Piranga flava), Summer Tanager (P. rubra), Scarlet Tanager (P. olivacea), and Western Tanager (P. ludoviciana). McCormick (1893) reported a bird presumed to be a hybrid between the Scarlet and Summer tanagers. Subsequently, Tordoff (1950) and Mengel (1963) described birds hypothesized to be products of hybridization between the Scarlet and Western tanagers. The one hybrid of Piranga regularly occurring in the United States is the Western Tanager × Flame-colored Tanager (P. bidentata) (Morse and Monson 1985, Rosenberg and Jones 2001, Williams 2007, Retter 2008, S. O. Williams pers. comm.). This hybridization is not unexpected, as the Flame-colored Tanager is at the extreme northern edge of its range in the United States (Arizona) and the two species are each other’s closest relatives (Burns 1998). Rosenberg and Jones (2001) suggested that, in Arizona, these hybrids may be more frequent than pure Flame-colored Tanagers, particularly in the Huachuca Mountains (G. Rosenberg pers. comm.). There are no published reports of hybridization between the Summer and Western tanagers, in spite of large areas of the southwestern United States in which both the Western Tanager and the western subspecies (cooperi) of the Summer Tanager occur.

During the first week of May 2006 P. and L. Risser observed an adult male Summer Tanager on their property near Colfax, Placer County, California (39° 04’ N, 120° 55’ W; elevation 790 m), representing only the second record of the species for Placer County. This location is well outside the normal range of this species, the nearest area where Summer Tanagers regularly breed being over 400 km southeast of Colfax in the Kern River Valley in northern Kern County. The local habitat is low-density rural residential with mixed conifer and oak (Quercus spp.) woodland. This Summer Tanager mainly frequented an area of open pine (Pinus spp.)/oak woodland dominated by ponderosa pine (Pinus ponderosa) and black oak (Quercus kelloggii) interspersed with areas of chaparral and burned snags left over from a recent fire. The bird remained until late July and sang frequently during its stay. Many observers saw this bird, and many photographs were taken. On 5 May 2007 the (presumably) same bird returned to this site. On 4 June 2007 P. Risser observed the Summer Tanager feeding a female Western Tanager sitting on a nest in a ponderosa pine, approximately 8 m above ground and 2 m from the trunk. Over the next few days P. and L. Risser and other observers saw the Summer Tanager feed the female Western Tanager on the nest at least ten times. During the first week of July 2007, P. and L. Risser saw the Summer Tanager feeding the two, possibly three, nestlings. Both the Summer Tanager and the female Western Tanager fed these nestlings regularly over next two weeks.

During the third week of July, P. and L. Risser first observed two fledglings within 12 m of the nest. The fledglings were difficult to see, and observers were unable to obtain useful photographs. The fledglings were generally dull yellowish with noticeably darker wings, lacking evident whitish wingbars. However, the nature of the observa-
tions made it difficult to conclude with certainty whether wingbars were absent or not. These observations (at least four) were generally from more than 15 m away, and thick foliage often obscured the views and kept the fledglings largely in shadow. Both the adult Western and Summer tanagers brought food to the fledglings on at least 15 occasions. A fledgling pursued the Summer Tanager on 22 July and was fed. The fledglings were last observed in late July, and the Summer Tanager remained in the area until 16 September. The Summer Tanager returned for the third consecutive year on 6 May 2008. It sang frequently and remained until 13 July. There was no evidence of its attempting to breed during 2008. On 21 May 2009 the Summer Tanager returned for a fourth year and on 14 June was again seen feeding a female Western Tanager on a nest. P. and L. Risser observed the female being fed on the nest numerous times over the next week. On 23 June both birds appeared to be feeding nestlings as they flew to the nest and leaned in (photos taken), but nestlings were neither seen nor heard. We made plans to obtain blood samples once the presence of nestlings was confirmed. After 25 June neither bird visited the nest, and subsequently P. and L. Risser inspected the nest and found no signs of nestlings. The Summer Tanager returned for the fifth consecutive year on 4 May 2010.

We conclude that these observations constitute evidence of probable hybridization between these two species. In the absence of photographs or specimens we cannot rule out the possibility that the young observed were the offspring of a male Western Tanager. The apparent lack of visible wingbars on the young birds suggests that they were hybrids, as this feature should be obvious on fledgling Western Tanagers (Pyle 1997). However, the observations were insufficient to confirm this conclusion absolutely. Although Western Tanagers breed in the general vicinity of this location, observers never noted a male Western Tanger near the female or the young. However, it is possible that a Western Tanager fathered these birds and either abandoned the female or died. It is also possible that the male Summer and female Western Tanager were paired but the young were the result of an extra-pair copulation with a male Western Tanager. There are no confirmed reports of extra-pair copulation in the Western Tanager, but male Western Tanagers often follow females early in the breeding season, seemingly guarding them from extra-pair opportunities (Hudon 1999).

Given the large areas of general sympatry between Western and Summer tanagers, there should be ample opportunity for hybridization. Within the Summer Tanager’s range in the southwestern U.S., significant numbers of Western Tanagers migrate in late April and May through riparian areas where Summer Tanagers of the subspecies cooperi are simultaneously present and singing on territory (B. Barnes pers. comm.). The species’ different habitat preferences during the breeding season may limit the opportunities for hybridization. While the western-breeding subspecies cooperi of the Summer Tanager prefers deciduous riparian habitats at lower elevations for breeding (Robinson 1996), the Western Tanager uses mainly higher-elevation mixed conifer habitats (Hudon 1999). Differences between these two species in songs and calls may also provide an effective barrier to hybridization. The calls of the Western and Flame-colored tanagers are similar, and their songs are practically indistinguishable (G. Rosenberg pers. comm.), while the songs and calls of the Western and Summer tanagers are very different (Shy 1984, Shy 1985, Robinson 1996, Hudon 1999). Thus the degree of difference in vocalizations between these species pairs is consistent with the observed high frequency of hybridization between the first pair of species and the lack of prior evidence of hybridization between the second. The combination of different preferences in breeding habitat and elevation, plus differences in songs and calls, may explain the lack of hybridization between Summer and Western tanagers, despite their sympatry.

We thank Walt Carnahan and Brian O’Connor for providing information about their observations of the Summer Tanager, nestlings, and fledglings. Walt Carnahan, John Sterling, and others provided photos of the Summer Tanager. Ted Beedy, Dan
NOTES

Airola, Bob Barnes, Clait Braun, and Joyce Hudon provided valuable comments on earlier drafts of the manuscript, and suggestions from Kimball Garrett, Kathy Molina, and Gary Rosenberg greatly improved the clarity and focus of the final product.

LITERATURE CITED


*Accepted 4 June 2010*
KILLDEER OBSERVED DEPREDATING A WESTERN SNOWY PLOVER NEST

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CAITLIN ROBINSON-NILSEN, San Francisco Bay Bird Observatory, 524 Valley Way, Milpitas, California 95035
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Since 2001, the East Bay Regional Park District has managed nesting habitat for the California Least Tern (Sternula antillarum browni) at the Hayward Regional Shoreline (37° 37’ 47” N, 122° 8’ 46” W) on the eastern shore of San Francisco Bay, California. As has happened elsewhere in coastal California (Powell and Collier 2000), our efforts have resulted in the recent attraction of breeding Western Snowy Plovers (Charadrius alexandrinus nivosus) to the site. In 2008 and 2009 the plovers attempted one and four nests, respectively, within the Least Tern colony.

In 2009, from a distance of 25 m, we witnessed a nesting Killdeer (C. vociferus) harass two pairs of breeding Snowy Plovers. The Killdeer repeatedly ran up to a Snowy Plover, crouched, then lunged toward it with fluttering wings in an apparent attempt to drive it from its nest. Each time, in response to the Killdeer’s approach, the attending Snowy Plover crouched and depressed its body over its nest. The two Snowy Plover nests, containing two and three eggs, were 14 and 47 m, respectively, away from the nest of the harassing Killdeer. On 29 May, after the Killdeer chased the closer of the two Snowy Plovers from its nest, it picked up one of the two eggs, pierced it with its bill and dropped it about 0.5 m away from the nest. After the Killdeer left the area, the Snowy Plover returned to the damaged egg, tried to push it back into its nest, but failed and later abandoned it. The plover resumed incubation of the remaining egg.

To avoid any further disturbance to nesting plovers and terns, we made no attempt to enter the colony on that date to recover and examine the depredated egg. On the next day, after repeated episodes of harassment by the Killdeer, the pair of Snowy Plovers nearest the Killdeer abandoned their nest. The three eggs in the more distant Snowy Plover nest hatched, but we did not observe the chicks again.

Along the Pacific coast, important predators taking Snowy Plover eggs include the Common Raven (Corvus corax), American Crow (C. brachyrhynchos), coyote (Canis latrans), red fox (Vulpes vulpes), and striped skunk (Mephitis mephitis) (Page et al. 2009). Anecdotally, the Long-billed Curlew (Numenius americanus), Marbled Godwit (Limosa fedoa), and Willet (Tringa semipalmata) are suspected nest predators in Ventura County (R. Smith pers. comm.), but the Whimbrel (N. phaeopus) is the only shorebird known to depredate Snowy Plover eggs (Page et al. 2009). At Monterey Bay, California, Snowy Plovers defend territories against migrating Semipalmated Plovers (C. semipalmatus) and Whimbrels but are often not aggressive toward Black-necked Stilts (Himantopus mexicanus) or American Avocets (Recurvirostra americana) unless they approach within a meter of the plovers’ nest (Page et al. 2009). At Cheyenne Bottoms, Kansas, Boyd (1972) reported that Snowy Plovers defend territories against both Killdeers and American Avocets.

To our knowledge, and on the basis of our informal conversations with other Snowy Plover biologists, ours is the first observation of the Killdeer as a cause of mortality of Snowy Plover eggs. Although the prevalence of such behavior by the Killdeer and its effect on Snowy Plover populations are unknown, observations such as these may bring to light complex and potentially important interactions between closely related species that often share the same nesting habitats.
LITERATURE CITED


Accepted 9 July 2010
NESTING OF THE GOLDEN EAGLE IN THE GUADALUPE VALLEY, BAJA CALIFORNIA, MEXICO

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The Golden Eagle (Aquila chrysaetos) has a wide global distribution (Kochert et al. 2002), in North America covering Alaska, Canada, the contiguous United States, and Mexico. In Mexico its distribution ranges from the Baja California Peninsula east to the highlands of northeastern Sonora (Russell and Monson 1998) and Chihuahua and south to Colima, San Luis Potosí, Guanajuato, and Querétaro (Howell and Webb 1995). In Mexico, the Golden Eagle inhabits temperate forest, grasslands, and xeric scrub (Rodríguez-Estrella 2002). It may be extirpated as a breeding species in the central area from Guanajuato and Querétaro (Kochert et al. 2002) and is listed as a threatened species in the Norma Oficial Mexicana (SEMARNAT 2002) as a result of mortality caused by electrocution, pesticide poisoning, hunting, and habitat loss.

In the Baja California Peninsula, juveniles as well as adults of the Golden Eagle have been reported (Rodríguez-Estrella et al. 1991, Rodríguez-Estrella 2002, Erickson et al. 2002, Ruiz-Campos et al. 2005), but there is little information about nesting sites. Nesting in Baja California has been reported previously from San Telmo (30° 49′ N; Anthony 1893, cited by Grinnell 1928), San José (30° 48′ N; nest in good repair, Hill and Wiggins 1948), and along the Río Santo Domingo (30° 45′ N; active nest, Erickson et al. 2002). But no systematic effort to find Golden Eagle nests has been made in northern Baja California (L. F. Kiff pers. comm. through R. A. Erickson).

On 6 and 14 July 2007 we observed three Golden Eagles, two adults and one juvenile, in Arroyo El Barbón, Guadalupe Valley, 31 km northeast of Ensenada and 12 km east of the community of Guadalupe. The juvenile was identified by white coloration at the base of primary feathers and a wide white band in the base of rectrices. We observed the eagles for 2 hours on 6 July and 1 hour on 14 July 14. On 18 August we did not observe any eagles at the site.

On 6 July, we located the nest on a cliff 80 m high, situated in cracks of the rocks. One of the adults carried a Black-tailed Jackrabbit (Lepus californicus) toward the top of the cliff. Suitable prey, both the jackrabbit and California Ground Squirrel (Spermophilus beecheyi), are common in the area. The three eagles were near the nest, but the juvenile, accompanied by both adults, was already flying within the canyon and vocalizing. On the basis of the Golden Eagle’s incubation and nestling periods and the apparent age of the juvenile, in the process of becoming independent, the egg was likely laid at the end of March.

The nest was in a canyon with vegetated with scrub, coast live oaks (Quercus agrifolia), willows (Salix lasiolepis), and cottonwood trees (Populus fremontii). Along the canyon are several hot springs connected by a stream. The nest is above the natural pools, 4 km from the closest agricultural area, consisting of vineyards, in an area often visited by local tourists. Human access to the eagle’s nest is difficult but not impossible, but we expect the main threats to be fires, disturbance, and hunting. According to the landowner, raptors occur in the canyon every year, although he had not identified them as Golden Eagles. The site offers the opportunity for further research.

LITERATURE CITED

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Accepted 21 July 2010
SOFTWARE AND BOOK REVIEWS

DIGITAL REVOLUTION IN PACKAGING RECORDINGS OF BIRDS


There are many reasons birders and field ornithologists use pre-recorded bird sounds in the field, and we used to have but one option: a tape player and cassette, and our choices for sounds were limited to a very few commercially available recordings or our own. Through a dizzying series of technological steps over the past 20 years, we have arrived at solid-state digital players, the most advanced today being the popular iPod Touch.

For those who are unfamiliar with this gizmo but know what a regular iPod is (classic, nano, or whatever), there is one basic difference: whereas older iPods and other mp3 players are capable of very little other than playing sounds (or displaying photos or even video) that were uploaded from a desktop or laptop computer, an iPod Touch is like a miniature computer with a wireless internet connection. Just as your desktop computer allows you to create memos, play video games, read your e-mail, and surf the web, so does an iPod Touch, just on a more limited level. Not to make things confusing, there is also the iPhone, which is nearly identical to an iPod Touch, the added function of a cell phone being the most obvious difference.

In this review, I compare five products for the iPod Touch (Table 1); four are stand-alone applications (called “apps” by iPod users), while the fifth is a product that merely adds a function to the iPod application called Music, which is essentially the same as iTunes. The four applications have multiple features that make them more like a field guide (such as photos, drawings, range maps, and other identification aids and information); here I look only at their utility related to the playback of bird voices. In

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Comparison of Five Applications Providing Recordings of Bird Sounds through the iPod Touch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Audubon</td>
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<tr>
<td>Time to reach species list (sec)</td>
<td>15</td>
</tr>
<tr>
<td>Time to reach a species (average of seven species; sec)</td>
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</tr>
<tr>
<td>Number of clicks needed to play song (browsing excluded)</td>
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<tr>
<td>Average length of recordings (sec)</td>
<td>43</td>
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<tr>
<td>Average number of vocalization types</td>
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</tr>
<tr>
<td>Progress bar shown?</td>
<td>Yes</td>
</tr>
<tr>
<td>Source of recordings</td>
<td>Stokes and Martyn Stewart</td>
</tr>
</tbody>
</table>
judging how well these applications work, rather than trying to cover every imaginable use one might have for bird sounds on an iPod, I start from the assumption that the user has a species in mind and simply wishes to play a vocalization. From there, the existence of that species in the application, the ease and speed of getting to it, the number of vocalization types available, and the quality of the recordings are the focus of my review. I offer subjective comments on the general use of each application, especially its user-friendliness in the field.

One might wonder what makes any of these tools any different from just playing bird sounds uploaded to your classic iPod, and the answer is “not much.” Assuming that the source of your recordings is one of the many commercially available CD sets, the primary difference is that with these iPod applications, the announcement of the species name has been removed. The added functions of the newer iPod Touch also allow for more information about each track to be displayed, whereas formerly all you saw was whatever information was included with just the track, album, and artist names that scrolled across the iPod screen upon playback.

I’ll start off by describing birdJam, which stands out from the rest in not actually being its own application but rather a utility that adds a function to the Stokes CDs for North America (Elliot et al. 1997, Colver et al. 1999). You must first actually own a copy of this CD set and have it uploaded to your computer’s iTunes program. Then, once you upload birdJam, it does in just a few minutes what would otherwise take you days with sound-editing software (e.g., Raven, Amadeus, Audacity): it edits the information in each track so that playback begins after the voice announcement. For those tracks that included two species, a duplicate copy is made so that each species has its own track (I remember once being driven mad by not being able to find MacGillivray’s Warbler on my iPod; it turns out it is the latter half of the Stokes Northern Waterthrush track). BirdJam also puts a phonetic description in place of the artist’s name, the scientific name as the album information, and what would be lyrics appear as notes about the recordings, such as a more thorough description, subspecies, location, and season of the recording. Furthermore, the common names are repackaged in index style so that the group name appears first, and one scrolls down a list that goes from Bittern, Least, to Blackbird, Brewer’s, and from Swift, White-throated, to Tanager, Hepatic.

The other four applications come with their own system of organizing and presenting data and are uploaded with a full set of self-contained recordings. You start each of them by clicking on the icon on the iPod’s main screen. After the application loads, you then have to navigate to the species you want (by either browsing a list or searching via a virtual keypad), which then brings up only the species account; it’s then another click or two before you actually play the vocalization.

Speed of Access and Playback Looping

Getting to a particular recording quickly is always important to me. I timed myself how long it took with a not-so-random set of species: the Rufous-crowned Sparrow, Montezuma Quail, Lazuli Bunting, Brown-crested Flycatcher, American Wigeon, Hutton’s Vireo, and Whiskered Screech-Owl. I also timed how long it took to play the species that appeared first when I started the application. The primary difference between birdJam and the other four applications is that birdJam does not have species accounts, so the vocalization begins playing the moment you click on the bird’s name—but it also does not have a search function. This means that though any recording is no more than three clicks away, you need to be proficient at scrolling, something that takes practice. If you’re good, birdJam is by far the quickest of the applications—up to five times faster than the slowest. One more difference that stands out with birdJam is that it’s easy to tell the iPod to loop a track; without having to touch or look at the iPod, one could play a track for, say, a 90-second broadcast survey. None of the other applications have this option, and once the
cut is finished playing, you must click on it (on some twice) to play it again. Among
the other four applications, speed of access varied with the size of the application
(which affects how long it takes to upload) and how many screens you have to click
through. Those applications that brought up a list of species as the first screen (NGS
and iBird) were the fastest, while the Audubon application took the longest, with a
large database of sounds and the necessity of having to click through several layers
to get to the sounds.

Quality and Source of Recordings

The recordings are all of high quality, as they are derived from pre-published
sources and professional recordists. The NGS application is the only one that has a
set different from the others, taken from the Cornell Lab of Ornithology’s Macaulay
Library—the Rufous-crowned Sparrow and Montezuma Quail are the same recordings
by Geoff Keller used on Keller (2001) and Cornell’s CDs for southeastern Arizona
and northwestern Mexico, for example. All the others share some or all vocaliza-
tions: birdJam is strictly from the Stokes Field Guide to Bird Songs (both western
and eastern regions), while Audubon and Sibley (which share exactly the same set of
recordings) provide a combination of some cuts from the Stokes guides and record-
ings from Martyn Stewart. All but iBird actually give credit to their sources, so I had
to compare recordings of several species to figure that one out, and it appears that
iBird simply uses recordings from Martyn Stewart, and, for the ones I checked, they
are the same recordings included in the Audubon and Sibley apps. The only drop in
quality I noticed was a tinny, filtered sound in some cuts, such as those of the Rufous-
crowned Sparrow and Lazuli Bunting, on the NGS application.

Species Included

While all five applications appear to include every bird breeding regularly in North
America (except Audubon and Sibley are missing the White-tailed Ptarmigan for some
reason), iBird is the most thorough for species coverage. It is the only one to have
Nutting’s Flycatcher, for one example, and it is the only one to include all three of
the Streak-backed Oriole, Black-capped Gnatcatcher, and Red-throated Pipit; among
the other applications, birdJam and NGS have two of the three, while Audubon and
Sibley have none of these rarities.

Length and Variety of Recordings

It is in these variables where these products differ the most, I think, each has
strengths and weaknesses. In a comparison of the seven species considered above,
the Audubon and Sibley apps (remember, their database of recordings is identical) offer
the most in the number of recordings, total length of recordings, vocalization types,
and how their information is presented. Each vocalization type, whether represented
by examples of different song types, songs from different populations, or call notes,
receives its own track and is clearly labeled. The birdJam recordings usually have a
good variety of vocalization types represented but are included in one long track.
The NGS and iBird applications similarly have only one track, but NGS has fewer
vocalization types (generally two, such as a song and a call), and iBird includes just
one short cut, usually limited to one song type for each species.

Added Information

Some of the applications include further information on the vocalizations. As
mentioned above, Audubon and Sibley do this well. BirdJam does sometimes include
information on subspecies, location, and time of year, but only irregularly (and it is not
always correct; for the Lazuli Bunting, the information given is actually from the Indigo
Bunting track). NGS offers the least information, with comments such as “songs” or
“calls” being the limit; hardly better is what iBird offers—a phonetic transcription of the song, which is often close to no use at all (such as “chip-chip,” “deer”) for the Rufous-crowned Sparrow.

User Interface

Finally, some general comments on how these applications work overall. BirdJam is the most straightforward, especially if you’ve used an iPod before or even have used iTunes on a computer. Bird sounds are organized by playlists (the most useful for me is one with all the birds of North America organized alphabetically), and you merely browse the list and click on the species you want.

iBird isn’t that much different when it comes to finding the species you want, and it’s straightforward to play the sound by clicking on the icon that looks like a speaker. But once the cut is over it’s not obvious how to play it again. It turns out you must click on the bird name under the list of “similar sounding” species to uncheck it, then click on it again to choose it; the speaker icon remains but is no longer active on that screen unless you navigate away and then back—so in any event replaying the song is still two clicks away. Also, there is no progress bar, so you can’t know where you are at in the recording or how long it is.

NGS works in a similar way, with a “play” button available on the first screen, from which you hear the recording but have no other controls or information. If you scroll down, there is an “audio” button that brings up a screen with a progress bar, play, pause, and stop buttons, and volume control. I find this a little more user-friendly, but the lack of information on where the recording was made is not good.

Sibley has one more click on a main menu before you can see a list of birds, which is annoying (you have to choose whether you want to browse them taxonomically, alphabetically, or do a search; the previous two applications allow you to toggle between similar options with small buttons on the first screen). After that extra click, it’s then much like the others with the icon to play the vocalizations being an eighth note. Clicking on this icon starts the sound right away and brings up a screen with a clever scrolling dial that lets you choose among the various vocalization types. Each one is labeled as a song, call, etc., and with an abbreviation of the state or province where recorded (usually, in any event; this is missing from Harris’s Sparrow, and I looked at only a few species). Each cut stops at its end and cannot be played again without scrolling away from it or clicking on the eighth-note icon twice. There is also no progress bar.

Finally, the Audubon guide has the most laborious process of getting to the actual bird recordings. Since the application comes with additional references on other branches of natural history, once it loads you first have to click on the one for birds. Then, as with Sibley, you must click on which format you wish to browse (taxonomic, alphabetic, etc.). Once you finally get to a species list and click on the species name, clicking on the sound icon (another eighth note here, but with the word “voice” next to it) brings up the page that lists the available sounds but does not start playing the sounds – that is yet one more click away on the arrow next to each cut. There is a progress bar, each cut is labeled with vocalization type and location, and the duration of the recording is indicated, all positive features. It requires one click to replay any of the cuts.

In summary, none of these apps is perfect, and for my own use I’ll probably be spending the time to edit and label recordings manually with sound-editing software and create my own playlists. The perfect application would combine the simplicity of birdJam (and its ability to loop tracks), the species coverage of iBird, the variety of recordings and separated vocalization types from Audubon, the user interface of Sibley, and the speed of NGS.
LITERATURE CITED


BOOK REVIEW


Birds of Wyoming is a handsome book with a color photo of a Great Gray Owl on the cover. It is a grand first attempt to summarize the distribution and status of birds in one of the most lightly birded states in the nation. The entire human population of Wyoming is only about 550,000, with a land area of roughly 100,000 square miles.

The book seems to show considerable bias toward the eastern half of the state and would have benefited from a year’s delay and input from western Wyoming birders/ornithologists. Inside the front and back covers is a map showing Wyoming’s counties and 67 well-known birding localities. There is no table of contents, which would have made finding a species account easier, as the accounts are somewhat arbitrarily categorized by “resident” and “non-resident” species. There is, however, an index at the back of the book with scientific and common names.

Each of the 242 “resident species” gets a full page (often leaving unused space), a color photo (usually of a breeding male), and a color-coded distribution map (yellow for summer, blue for winter, and green for year-round). The maps are rather coarse and vague with many gaps, especially in the west. For example, the Rough-legged Hawk, Northern Shrike, Black-billed Magpie, Mourning Dove, and Eurasian Collared-Dove are all found in the Jackson area, where the maps show white gaps on the maps.

Each species account has a discussion of seasonal status, taxonomy, and subspecies if relevant, distribution, and conservation status. The last is a code maintained by the Wyoming Game and Fish Department for the status of native species and ranges from 1 through 7 from the most to least threatened in the state. Only species ranked NSS1 through NSS4 are considered priority species and have their code listed in this book.

There are 184 “non-resident” species, which include regular migrants, winter residents, and truly rare species. These are covered in the back third of the book at two per page, with no pictures or maps but with the same status categories as the resident species. Then follows a list of 28 species for which the Wyoming Bird Records Committee has insufficient evidence. This committee has been in existence since 1988, but the book does not refer to its website.

Finally, there are 14 pages of references with about 580 citations. These provide a tremendous historical summary of Wyoming bird distribution.

The front of the book contains six short essays by knowledgeable ornithologists that add considerably to an understanding of bird distribution. The history of Wyoming ornithology is described in 12 pages by Jane Dorn. We learn that Thomas Nuttall and John Kirk Townsend crossed the state on the Oregon Trail in 1834, collecting the Mountain Plover and Sage Thrasher that first introduced those species to science.
Many collections were made by the railroad surveys and by surgeons at early forts. C. Hart Merriam joined a collecting party in the Tetons and Yellowstone area in 1872 at the tender age of 16. The Game and Fish Department began an atlas of Wyoming bird distribution by latilong in 1976.

The conservation of birds in Wyoming is discussed by Bob Oakleaf, Andrea Ora-bonn, and Alison Lyon-Holloran in five pages. Global warming may kill off 20% of the conifers in the state, so special attention should be paid to the Brown Creeper and Northern Goshawk. Habitat fragmentation from oil and gas drilling is frightening—in 2000 there were 12,477 producing wells, but by 2007 it was projected that 58,000 new wells would be drilled in the state. Populations of the Greater Sage Grouse have been in decline since the 1930s, but all this new development may well render it an endangered species.

Richard Hutto uses two pages to ask whether stand-replacement fire is good for the birds. Most fires at mid- to high elevations indeed replace most of the forest, and there are fifteen species, such as the Black-backed Woodpecker and Mountain Bluebird, that increase after fires. As practiced, most logging is a poor substitute for replacement fires, as it leaves few snags standing. Hutto does a good job of helping us understand fire ecology and how it affects bird populations.

Terry Rich discusses the sagebrush habitat in a wonderfully aesthetic two-page essay. He suggests that the Greater Sage Grouse would be an excellent umbrella species for the protection of other birds restricted to sagebrush, such as the Sage Sparrow, Brewer’s Sparrow, and Sage Thrasher. The grouse needs large preserves where such disturbances as off-road vehicles, fences, invasive weeds, livestock, power lines, wind farms, and drilling roads and rigs are at a minimum. In short, he suggests we need a Sagebrush National Park.

Management of short-grass prairie is discussed in two pages by Scott Gillhan. Populations of grassland birds are declining faster and across a wider area than those of any other group of birds. Prairie dogs provide habitat for nesting as well as prey for a whole suite of birds, and they are still being poisoned. Gillhan lists fourteen specific management practices that are needed, including control of invasive weeds, maintenance of large patches, rotational grazing, and limiting invasion by trees.

Finally, Robert Dorn provides an excellent three-page discussion of Wyoming’s landforms and vegetation, which gives an overview of the state’s varied habitats and their distribution. He again emphasizes the negative effects of fragmentation, development, drilling, and livestock grazing in a very dry environment. All these chapters should be required reading because they add depth to the understanding of bird distribution not only in Wyoming but in much of the West.

All in all I would say that this book is a pretty good first attempt at the Birds of Wyoming. Knowledge of Wyoming bird distribution can be expected to grow rapidly because of it, as well as because of reports to e-Bird and an effective Wyoming list server. As Paul Lehman says on the back cover, “Every serious student of bird distribution in North America should own a copy.”

Chuck Trost
The red hues of a typical male Cassin’s Finch can be described as crimson. In March 2009 I noted an aberrant male, with yellow-orange coloration instead of crimson visiting seed feeders in the company of a large flock of normally colored Cassin’s Finches 19 km west-southwest of Livermore, Larimer County, Colorado, elevation 2440 m.

In almost all birds, plumage coloration is determined by two primary types of pigments, melanins and carotenoids. Melanins are responsible for black, gray, brown and chestnut feathers and are synthesized by the birds and deposited as granules in the skin and feathers. Carotenoid pigments produce colors ranging from pale yellow to scarlet red. For the most part birds cannot synthesize these pigments and must obtain them from food in the diet. These fat-soluble pigments are non-granular and are deposited during a feather’s growth before its keratinization is complete (Gill 1990). Many different carotenoid pigments may be responsible for a particular shade of color in a bird, and a diet unbalanced in one or more of these necessary pigments may produce an aberrant yellow, orange, or red color. An abnormality of carotenoid pigmentation, called carotenism, “results from one or more of four causes: (1) change in the normal distribution or extent of carotenoid pigments; (2) increase or decrease in carotenoid concentration, resulting in a change in color or color intensity; (3) change in carotenoid pigment type and therefore a change in color; and (4) total absence of carotenoids from all or part of the plumage or skin” (Davis 2007).

Xanthochromism (or xanthochroism or flavism) is another term that has been applied to this type of aberrant coloration where a bird’s normally red plumage is yellowish or orange. According to Wapedia (http://wapedia.mobi/en/Xanthochromism), “xanthochromism is a term that may be applied to birds, fish and other animals whose coloration is unusually yellow through an excess of yellow pigments, or possibly a loss of darker pigments that allows yellow pigments to be unusually dominant. It is often associated with the lack of usual red pigmentation and its replacement with yellow.” In aviculture, several species of parrot have been bred for unusual yellow or orange variants. Wild birds in which xanthochromism has been identified include the Yellow Wagtail (Motacilla flava), Wood Warbler (Phylloscopus sibilatrix), Cape May Warbler (Dendroica tigrina), Rose-breasted Grosbeak (Pheucticus ludovicianus), Evening Grosbeak (Coccothraustes vespertinus), Red-bellied Woodpecker (Melanerpes carolinus), Scarlet Tanager (Piranga olivacea), Northern Cardinal (Cardinalis cardinalis), Purple Finch (Carpodacus purpureus), Crimson-breasted Shrike (Laniarius atrorococineus) (Wapedia), and Eastern Bluebird (Sialia sialis; Welty and Baptista 1988).

It is well known that wild male House Finches (Carpodacus mexicanus) vary in plumage color from pale yellow to bright red. Hill (1992) found by experiment that the red in a male House Finch is dependent on the carotenoid content of its diet and that a normal red individual can be made to become yellow through manipulation of its diet. Variation in access to carotenoid pigments at the time of molt causes the variations in plumage color (Hill 1992). Inouye et al. (2001) proposed that variation in the red pigment of male House Finches may be due to differences in carotenoid metabolism, dietary access to carotenoids, or exposure to environmental factors, such as parasites, that may affect pigmentation.

In Cassin’s Finch, carotenism has been reported rarely, and the photograph featured on this issue’s back cover may be the first one of this aberration published. Van
Rossem (1921) reported that an adult male Cassin’s Finch collected in Sierra County, California, on 17 July 1916 had the normally red areas entirely replaced by lemon yellow. Arvey (1938) reported that a normal red captive Cassin’s Finch grew yellow instead of red feathers while on an artificial diet. Once pyracantha berries were added to the diet, new feathers grew in as normal red, resulting in a mottling of yellow and red head and breast feathers.

I thank Jeff N. Davis, who commented on an earlier version of this note.

LITERATURE CITED

IN MEMORIAM
MICHAEL R. SAN MIGUEL, 1939–2010
PRESIDENT OF WESTERN FIELD ORNITHOLOGISTS, 1999–2003

While attending California State University, Long Beach, in 1990, I had a course in marine biology. One of the labs for this class involved a field trip to Upper Newport Bay and Bolsa Chica to study coastal flora and fauna of southern California. It brought back many of my memories as a child in the 1970s, when my father and I ran around the state looking for birds. I recollect phoning my Dad and suggested that we spend a day birding, just like we had done in the “old days.” From that day forward, he was hooked all over again, and obsessed with an enthusiasm and passion that never waned for the next 21 years of his life. He was an unstoppable presence in the birding community of California and the West until his untimely death on 14 July 2010. Not only did I lose my father, I lost my best friend in the world.

Many people have asked me when my interest in birding started. My answer has always been, “it is in my blood.” For as long as I can remember, Dad had a pair of binoculars around my neck. Memories of being in our old VW van, heading to his banding stations at Buckhorn Campground in the Angeles National Forest, Morongo Valley, Fish Canyon near Duarte, California, and Deep Springs College in Inyo County as a child in the early ’70s are forever chiseled into my memory. Trips to the far reaches of California as a child will never be forgotten. The “Big Year” trip in 1975 may have been the most memorable. Sleeping under the stars at Furnace Creek or Mesquite Springs, tombstone-hopping at Fort Rosecrans National Cemetery, crossing the Whitewater River on his shoulders at the north end of the Salton Sea are fond memories. I recall days where he contemplated pulling me out of elementary school to take me down to San Diego to look for a Philadelphia Vireo and Blackburnian Warbler at Fort Rosecrans Cemetery. Or another time where he dragged me down to Malibu in 1974 to look for the King Eider. A classic “Mike” moment was when he left my mother, Gayle, and sister, Lisa, and a house full of guests on New Year’s day with Robert and Elizabeth Copper and several other birders to chase a Trumpeter Swan at Legg Lake. To say my mother was upset is an understatement.

As I grew into my junior- and high-school years, my interest in birding faded and so did my father’s. In the late 1980s he focused on his job and our family. He took up hobbies such as playing basketball, collecting baseball cards, collecting wine, and building his rock walls in the backyard. He never quit teaching me and Lisa valuable life lessons. Although birding and banding were no longer there to keep us connected, we certainly found other activities to keep our relationship strong. Our marathon sessions of cribbage or gin rummy were dramatic and certainly heated at times. We constantly were running around the San Gabriel Valley in search of great Chinese or Mexican food. We certainly made a few “all you can eat” sushi restaurants groan every time we entered.

But my father’s concern for the environment and local conservation remained constant. His battles against the Army Corps of Engineers in the late ’60s and early ’70s were epic. Confronting quarrelsome and arrogant representatives of various construction firms, city managers, or just people he ran across butchering native habitats.
never ended. He was well respected because he always fought for what is right. He
did this with such grace and poise that rarely did he make enemies. His battles for
conservation were also waged at home. The oak trees around the yard were never
trimmed, despite years of pleading from both my mother and my sister. His backyard
“native grass garden” was never pleasing to the eye and horrified my mother as it
looked unkempt and cluttered. But Dad never gave in.

A few years ago I suggested to him that he set up more than two hummingbird feed-
ers in the backyard, just to see what would happen. Well, thousands of hummingbirds
later, and gallons upon gallons of sugar water later, Dad had easily one of the greatest
hummingbird-feeding stations west of Arizona. I recall the hours we spent during peak
hummingbird migration looking at those feeders, drinking wine, talking about the kids,
the Dodgers, birds, whatever was on our minds. His yard list was nothing short of
spectacular. I am not sure of the final number, but he amassed well over 225 species.
Such rarities for southern California as the Dickcissel, Bobolink, Broad-winged Hawk,
Eastern Kingbird, Blackpoll Warbler, Summer Tanager, are just a few that come to
mind. I remember his “best” bird of the yard was either a White-headed Woodpecker
or the Yellow-bellied Sapsucker that spent the winter this past year. We spent hours
in early June scouring the skies above his house every year looking for Black Swifts or
Purple Martins. I treasure the memories of awakening to him hunched over the table
on the back patio, measuring and banding birds. In some years he banded hundreds
of Lazuli Buntings, Purple Finches, and Wilson’s Warblers in the backyard.

In recent years the two of us started birding together more often. Birding trips to
southeastern Arizona, Texas, Michigan, the Salton Sea, Death Valley, Galileo, the
Los Angeles River, and the big days shared with Jon Feenstra, Todd McGrath, and
Kimball Garrett remain some of the fondest memories with my father. As I grew older
and began the process of raising a family, my hours in the field dropped significantly.
Essentially, birding for me has been narrowed to local patches near my home in La
Verne, California. But I was always in constant contact with my father, who was
updating me on what rarities were around or just to tell me about his frustration with
the Dodgers. We always made a point to have lunch with one another and catch up
on all the things that were going on in our lives. I was able to spend some time on
the phone with him the day of his death. The conversation was the same as it always
was, “What time is Jake’s game on Saturday, how is Alex, are you guys coming over
for dinner on Sunday, did you get the e-Bird list I shared with you from 1993?” I
hung up the phone and that was it…. .

Birdwatching and conservation aside, Lisa and I could not have asked for a better
father. He was an astonishing grandfather to my two children, a wonderful husband
to my mother, and a mentor to so many. The loss of my Dad is indefinable, but I
have a lifetime of memories to cherish, and the lessons in life he taught me will not
go to waste on my two children.

Rest well, mi amigo!!!

Michael J. San Miguel

Mike San Miguel’s family specified that donations in memory of Mike be made to
Western Field Ornithologists. WFO and the family gratefully acknowledge the donation
of $5000 from the Pasadena Audubon Society to establish a Mike San Miguel Youth
Scholarship Fund. We also thank and recognize the following people, organizations,
and companies who have contributed so generously, over $10,000, to the Mike San
Miguel Memorial Fund or the Youth Scholarship Fund.

Larry Allen, Rosemead, CA
Aquistapace Family, Manhattan Beach, CA
Liga Auzins, Monrovia, CA

Lance Benner, Altadena, CA
Tom Benson, San Bernardino, CA
Jean Brandt, Encino, CA
Clarissa Bush, Redwood City, CA

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Financial Designs Corporation, Claremont, CA
Sam Fitton, Oxford, OH
Steven Fleming, Elgin, IL
Kimball Garrett and Kathy Molina, Tujunga, CA
Laura, Jim, John, and Eleanor Garrett, Pasadena, CA
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Susan and Frank Gilliland, Pasadena, CA
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Rachel Irish, Riverside, CA
Timi Johnson, La Verne, CA
Virginia P. Johnson, San Diego, CA
Cynthia Knight Johnston, Montgomery, TX
Margaret Johnstone, Lafayette, CA
Amelia Jones, Pasadena, CA
Denise and Richard Kodani, Rancho Palos Verdes, CA
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David Krueper, Corrales, NM
Brenda and Ken Kyle, Bakersfield, CA
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Lucille Pagano, New York, NY
Ed Pandolfino, Carmichael, CA
Kathleen Peck, Pasadena, CA
Jim Pike, Huntington Beach, CA
Pomona Valley Audubon Society, Claremont, CA
Rachael Poston, Long Beach, CA
Susan and Lee Ridgeway, Monrovia, CA
Mikael Romich, Yucaipa, CA
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Rich Stallcup, Inverness, CA
Don Sterba, Culver City, CA
Jones and Stokes, Irvine, CA
Ellen and James Strauss, Pasadena, CA
Jeannie Tamaki, Culver City, CA
Philip Unitt, San Diego, CA
Duane Vander Puyrm, Ventura, CA
R. Dean Vanier, St. Augustine, FL
Vision Services of the Los Angeles County Office of Education, Long Beach, CA
Jerry Wakefield, La Habra, CA
Judith Dean Walraven, Williamstown, MA
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The California Bird Records Committee of Western Field Ornithologists revised its 10-column Field List of California Birds in July 2009. The new list covers 641 species, plus 6 species on the supplemental list. Please send orders to WFO, c/o Robbie Fischer, Treasurer, 1359 Solano Drive, Pacifica, CA 94044. Price for 9 or fewer, $2.75 each, for 10 or more, $2.50 each, which includes tax and shipping. Order online at http://checklist.westernfieldornithologists.org.

Published September 30, 2010
ISSN 0045-3897
Photo by © Thomas A. Blackman of San Diego, California: Bar-tailed Godwit (Limosa lapponica) Imperial Beach, San Diego County, California, 3 August 2010. Thanks to the work of the U.S. Geological Survey’s Alaska Science Center, the subspecies of the Bar-tailed Godwit nesting in Alaska, Limosa lapponica baueri, has been revealed as the bird undertaking the longest nonstop migration of any bird, up to 11,700 km from Alaska to New Zealand. Tracked by satellite with a transmitter attached to the bird, one female made the flight in 8 days (http://alaska.usgs.gov/science/biology/shorebirds/barg.html). Very rarely do Bar-tailed Godwits stray from this route to be noted as vagrants farther south along the Pacific coast of North America.