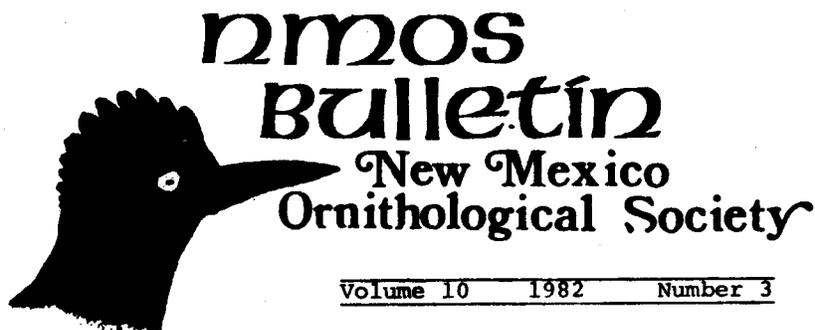


**Disclaimer:** This file has been scanned with an optical character recognition program, often an erroneous process. Every effort has been made to correct any material errors due to the scanning process. Some portions of the publication have been reformatted for better web presentation. Announcements and add copy have usually been omitted in the web presentation. We would appreciate that any errors other than formatting be reported to the NMOS at this web site. Any critical use of dates or numbers from individual records should be checked against the original publication before use as these are very difficult to catch in editing.



**RESULTS OF THE NMOS SITE SURVEY OF THE SANDIA MOUNTAIN**

Dustin Huntington  
11 Calle Pueblo Pinado NW  
Albuquerque, NM 87120

On 29-30 May 1982 NMOS sponsored a survey of the breeding birds of the Sandia Mountains. Only nine birders participated in the count, which was barely adequate to cover the major habitat types on the mountain. The participants were divided into five groups that covered trails on the west side on 29 May and the east side on 30 May. The species totals were kept by habitat-type on the trails censused. Determination of where one habitat-type ended and another began proved to be a problem in some areas. The question which *Empidonax* flycatchers breed in the Sandias was a question of particular interest. A special form was provided for *Empidonax* sightings for details of various characteristics to provide more "hard" data on the sightings.

The count produced 94 species and 2515 individuals (Table 1). Virtually all are breeders in the Sandias. However, the Wilson's Warblers are almost certainly late migrants. While none of the species was particularly unexpected in the Sandias, the distribution of the sightings was surprisingly different between the east and west sides. The basic habitat types from pinyon-juniper up are the same on both sides, but the west side is considerably drier and has steep, rocky canyons, while the east side is more evenly sloping throughout and gets more rain. Despite the habitat types being similar and about equal time spent counting on each side, many species were found on only one side. In the pinyon-juniper zone almost 75% of the species were seen on only one side, and even in the ponderosa pine zone, which is more similar on both sides, over 50% of the species were seen on only one side. Some of the distribution differences were expected because of differences in topography. For example, the Canyon Wren was common only on the west side, while the House Wren was common only on the east side. Likewise, the White-throated Swift was far more common near the

steep cliffs of the west side than on the east. Less expected was the Mountain Chickadee distribution. Of the 109 Mountain Chickadees seen, only nine were on the west side. The Red-breasted Nuthatch also was more common on the east side. The Bushtit, however, overwhelmingly seemed to prefer the conditions on the west side. Certainly some of these differences result from sampling error, since there were only five groups in the field for two days, and there are many other possible confounding variables in the data (e.g. time of day, observer, etc.), but the extent of the difference was unexpected.

Table 1. Species and numbers of birds recorded in the Sandia Mountains, 29-30 May 1982. Habitat-types: West Side: (1) juniper-rabbitbrush, (2) pinyon-juniper, (3) ponderosa pine (4) mixed conifer; East Side: (5) pinyon-juniper, (6) ponderosa pine, (7) mixed conifer, (8) spruce-fir; Crest: (9) spruce-fir; Las Huertas Canyon: (10) pinyon-juniper/riparian.

Species	Habitat-types										Totals
	1	2	3	4	5	6	7	8	9	10	
Turkey Vulture	1	2	1	-	-	3	-	-	-	-	7
Sharp-shinned Hk.	-	-	-	1	-	-	-	-	-	-	1
Cooper's Hawk	-	-	-	-	-	-	-	-	1	-	1
Red-tailed Hawk	-	-	-	1	1	-	-	-	-	-	2
Golden Eagle	-	-	-	1	-	-	-	-	-	-	1
American Kestrel	-	-	1	-	-	-	-	-	1	-	2
Scaled Quail	10	-	-	-	-	-	-	-	-	-	10
Band-tld. Pigeon	-	-	1	-	-	1	12	2	-	4	20
Mourning Dove	38	2	-	-	4	3	3	-	2	-	52
Roadrunner	-	1	-	-	-	-	-	-	-	-	1
Flammulated Owl	-	-	-	-	-	-	6	-	-	-	6
Pygmy Owl	-	-	3	-	-	-	-	-	-	-	3
Poor-will	-	-	-	-	-	-	1	-	-	-	1
Com. Nighthawk	-	-	-	-	-	-	1	-	-	-	1
White-thr. Swift	-	13	52	-	-	-	-	-	2	-	67
Black-ch. Hum.	3	-	-	-	-	-	-	-	-	-	3
Brd.-tld. Hum.	9	8	1	3	3	1	7	6	3	12	53
Common Flicker	1	4	3	3	-	2	10	11	8	1	43
Yel.-bel. Saps.	-	-	-	-	-	1	2	-	1	-	4
Wms. Sapsucker	-	-	-	-	-	-	-	1	-	-	1
Hairy Woodpecker	-	2	1	1	-	1	3	2	2	1	13
Downy Woodpecker	-	-	-	-	-	-	1	1	-	-	2
Lad.-bckd. Woodp.	3	-	-	-	-	-	-	-	-	-	3
N. Thr.-td. Woodp.	-	-	-	-	-	-	-	1	-	-	1
Western Kingbird	-	1	-	-	-	-	-	-	-	-	1
Ash-thr. Flyc.	2	-	-	-	-	1	-	-	-	-	3
Hammond's Flyc.	-	-	-	2	-	-	-	-	-	-	2
Dusky Flycatcher	-	-	-	-	-	-	10	-	-	5	15
West. Flycatcher	2	2	-	6	-	2	4	14	7	20	57
<u>Empidonax</u> sp.	1	-	-	-	-	-	-	-	-	-	1
W. Wood Pewee	1	1	1	3	1	1	1	-	-	1	10
Olive-sided Flyc.	-	2	-	-	1	-	-	-	-	1	4
Viol.-grn. Swal.	8	-	3	11	3	-	12	7	15	-	59
Stellar's Jay	1	2	2	7	4	10	23	1	7	9	66
Scrub Jay	49	15	2	1	8	-	-	-	-	1	76
Common Raven	-	2	1	2	4	-	1	1	4	-	15
Common Crow	-	-	-	-	4	-	-	-	-	-	4
Pinyon Jay	17	-	-	-	6	-	-	-	-	-	23
Clark's Nutcracker	-	-	-	-	-	-	3	-	4	1	8
Mtn. Chickadee	-	2	2	5	-	4	27	37	26	6	109



The question of the breeding *empidonaces* was only partially answered. Clearly Western and Dusky Flycatchers are present in good numbers. There was one report of two Hammond's Flycatchers, by vocalization, however the birds were not seen or documented. The *Empidonax* sighting forms were not used in all areas and many reports were based only on the observer's perception of the subtleties of, perhaps variable, vocalizations. The final determination of *Empidonax* distribution in the Sandias will have to await further study.

Overall, however, the count seemed to serve its objective.

**REPORT OF THE NMOS BIRD RECORD COMMITTEE: NO. 2**

(continued from page 35, volume 10(2))

John P. Hubbard  
2016 Valle Rio  
Santa Fe, NM 87501

23. SHORT-BILLED DOWITCHER (*Limnodromus griseus*). (1) One at Bosque del Apache N.W.R., Socorro Co., 5/4/1980, by D.L. and S. Huntington. Evaluation: highly probable (KK), probable (JPH, DAZ); color slides 1980-28A-H do not confirm the identification. (2) One on the Rio Grande, N of the Corrales bridge, 3/29/1981, by D.L. and S. Huntington. Evaluation: probable (DAZ), possible (JPH).

24. CALIFORNIA GULL (*Larus californicus*). One on the Pecos River, 5 mi (8 km) upstream from the mouth of the Delaware R., Eddy Co., 12/16/1978, by R. Wilt. Evaluation: possible (JPH, KK).

25. LAUGHING GULL (*Larus atricilla*). (1) One at Lake McMillan, Eddy Co., 9/15/1979, by R. and L. Wilt. Evaluation: possible (JPH, KK). (2) One at Bitter Lake N.W.R., Chaves Co., 11/10/1979, by D.L. and S. Huntington. Evaluation: possible (JPH), questionable (KK).

26. COMMON TERN (*Sterna hirundo*). (1) One at Willow Lake, two at Lake Carlsbad, and two at Lake McMillan, Eddy Co., 9/16/1978, by Steve West et al. Evaluation: probable (JPH, DAZ). (2) One at Lake McMillan, 5/3/1980, by William Howe and Miriam R. Axelrod. Evaluation: possible (JPH, DAZ). (3) Up to 4 at Holloman Lakes, Otero Co., 8/13 and 9/1/1980, by Bill Murphy et al. Evaluation: possible (JPH), questionable (DAZ). (4) Two at Bill Evans Lake, Grant Co., 9/7/1980, by Myra McCormick et al. Evaluation: questionable (DAZ, JPH).

27. ROSEATE TERN (*Sterna dougallii*). (1) Two at Bitter Lake N.W.R., Chaves Co., 4/21/1978, by V.L. Grover and D. Renwalt. Evaluation: questionable (WHB, RJR, JRT, DAZ). (2) One at Phelps White Ranch, near Roswell, Chaves Co., 5/1/1978, by J.P. White, III. Evaluation: incorrect, based on color slides 1978-1B and 1D (KK, Mary LeCroy, Joe Morlan, Kenneth C. Parkes, DAZ). Comment: the photographed bird was initially thought to be this species by some (K.C. Parkes et al.), but is now accepted as a Forster's Tern (*Sterna forsteri*); these are the first reports of the Roseate Tern the state.

28. GROOVE-BILLED ANI (*Crotophaga sulcirostris*). One at Oasis State Park, Roosevelt Co., 6/15/1978, by Doug Danforth. Evaluation: highly probable (JPH, DAZ); color slide NMOS 1978-5 confirms the genus but not the species.

29. WHISKERED OWL (*Otus trichopsis*). One heard at Clanton Canyon, Peloncillo Mtns., Hidalgo Co., 5/26/1979, by D.L. and S. Huntington. Evaluation: probable (DAZ), possible (JPH).

30. FERRUGINOUS OWL (*Glaucidium brasilianum*) . One seen 1 1/4 mi (2 km) W (=N?) of Lordsburg, Hidalgo Co., 6/7/1977, by M. McCormick and Robert Mannus. Evaluation: possible (WHH, RJR, JRT, DAZ). Comment: The only previous report for the state was later withdrawn.
31. SPOTTED OWL (*Strix occidentalis*). One at Hollene Community, 3/1979, by Mark Harrison (fide M. Chandler). Evaluation: questionable (JPH, DAZ).
32. LESSER NIGHTHAWK (*Chordeiles acutipennis*). (1) Seen in the Clovis area 5/25, July, and 8/20/1979, by M. Chandler et al. Evaluation: questionable (JPH, DAZ). (2) One between Malaga and Black River Village, Eddy Co., 12/12/1979, by S. West. Evaluation: probable (JPH, DAZ), at least for the genus.
33. BLUE-THROATED HUMMINGBIRD (*Lampornis clemenciae*). A female or immature at Capitan, Lincoln Co., 8/19/1979, by Edward L. Morton et al. Evaluation: possible (JPH, DAZ).
34. LUCIFER HUMMINGBIRD (*Calothorax lucifer*). A male and 2 females at Post Office Canyon, Peloncillo Mtns., Hidalgo Co., variously from 6/10–10/9/1980, by Robert and Kathryn Scholes. Evaluation: highly probable (JPH, DAZ).
35. BUFF-BELLIED HUMMINGBIRD (*Amazilia yucatanensis*). One at Santa Fe, Santa Fe Co., 8/11/1980, by Claudia B. and Harold N. Baxter. Evaluation: questionable (JPH, DAZ).
36. BROAD-BILLED HUMMINGBIRD (*Cynanthus latirostris*). A male at Rattlesnake Springs, Eddy Co., 5/13/1979, by S. West. Evaluation: probable (JPH, KK).
37. WHITE-EARED HUMMINGBIRD (*Hylocharis leucotis*). A female in Clanton Canyon, Peloncillo Mtns., 7/19/1979, by R. Wilt. Evaluation: possible (JPH, KK).
38. PILEATED WOODPECKER (*Dryocopus pileatus*). One at Apache Spring, Bandelier National Monument, Sandoval Co., 11/27/1977, by Roland Wauer. Evaluation: possible (JPH), questionable (DAZ).
39. GOLDEN-FRONTED WOODPECKER (*Melanerpes aurifrons*). A female at Clovis, 11/2/1979, by D.C. Chandler. Evaluation: probable (JPH, DAZ).
40. WHITE-HEADED WOODPECKER (*Picoides albolarvatus*). One at Cebolleta Peak, Acoma Indian Reservation, Cibola Co., about 11/14–15/1977, by Al Dart. Evaluation: questionable (JPH, DAZ).
41. "TROPICAL" KINGBIRD (*Tyrannus melancholicus/couchii*). One at Rodeo, Hidalgo Co., 12/14–21/1980, by Joseph Schatz, Jr. et al. Evaluation: definite, based on color slides NMOS-1980-36A-36F (JPH, DAZ); unfortunately, which of the two species was involved cannot be ascertained, although *melancholicus* is more likely. Comment: this is only the second report from the state.
42. KISKADEE FLYCATCHER (*Pitangus sulphuratus*). One on the N side of the Zuni R., about 1/2 mi (1 km) W of highway bypass to Gallup, Zuni Indian Reservation, 8/10/1978, by Brian Hanson. Evaluation: questionable (JPH, KK). Comment: this is the first report from the state.
43. OLIVACEOUS FLYCATCHER (*Myiarchus tuberculifer*). One at Alto, Lincoln Co., 9/18/1979 by M. and D.C. Chandler. Evaluation: questionable (JPH, DAZ).

44. SHORT-BILLED MARSH WREN (*Cistothorus platensis*). One at Holloman Lake, 3/25/1979, by Anneliese Ballhorn. Evaluation: questionable (JPH, EK).
45. GRAY CATBIRD (*Dumetella carolinensis*). One at Capitan, Lincoln, Co. 11/3/1978 and 3/27/1979, by E.L. Morton et al. Evaluation: highly probable (DAZ), probable(JPH).
46. BENDIRE'S THRASHER (*Toxostoma bendirei*). One seen 3 mi (5 km) N of Roswell, Chaves 12/16/1978, by Elmer Schooley et al. Evaluation: possible (JPH, DAZ).
47. GRAY-CHEEKED THRUSH (*Catharus minimus*). One at Capitan, Lincoln Co., 2/7-15/1980 by E. L. Morton et al. Evaluation: possible (DAZ), questionable (JPH).
48. BLACK-TAILED GNATCATCHER (*Polioptila melanura*). One at Sturgeon Ranch, 27 mi (43 NE of Roswell, Chaves County, 5/19/1980, by M.R. Axelrod. Evaluation: possible (JPH, DAZ).
49. WHITE-EYED VIREO (*Vireo griseus*). One at Rattlesnake Springs, Eddy Co., 5/4/1979, by R.A.Wilt. Evaluation: possible (JPH), questionable (KK).
50. GRAY VIREO (*Vireo vicinior*). One on West side road, Sacramento Mtns., Otero Co., 9/2/1980, by B. Murphy and Ellen Heiner. Evaluation: probable (JPH, DAZ).
51. PHILADELPHIA VIREO (*Vireo philadelphia*). (1) One at Percha Dam State Park, Sierra Co., 9/23/1979, by D.L. and S. Huntington. Evaluation: definite (KK, DAZ). (2) One at Rattlesnake Springs, Eddy Co., 9/25/1979, by R.W. Wilt. Evaluation: possible (JPH, KK).
52. GOLDEN-WINGED WARBLER (*Vermivora chrysoptera*). One at Bandelier National Monument, Sandoval Co., 1/2 mi (1 km) S of headquarters building, 8/21/1977, by R.F.Ruddell, Jr. Evaluation: highly probable (JPH, DAZ).
53. TENNESSEE WARBLER (*Vermivora peregrina*). One at Rattlesnake Springs, Eddy Co., 10/14/1978, by S. West and R.A. Wilt. Evaluation: probable (JPH, DAZ).
54. OLIVE WARBLER (*Peucedramus taeniatus*). (1) A male and 2 females in Whitewater Canyon, about 5 mi (8 km) NE of Glenwood, Catron Co., 12/29/1979, by Roger W. and Kate E. Skaggs. Evaluation: highly probable (JPH, DAZ). (2) Female, same area as above, 12/26/1980, by R.W. and K.E. Skaggs. Evaluation: probable (JPH, DAZ).
55. HERMIT WARBLER (*Dendroica occidentalis*). A female at Rattlesnake Springs, Eddy Co., 4/25/1979, by R.A. Wilt. Evaluation: possible (JPH), questionable (DAZ).
56. CERULEAN WARBLER (*Dendroica cerulea*). A male at Ruidoso, Lincoln Co., about 7/4/1978, by Helen Hoffman. Evaluation: definite, based on color slide 1978-20A (JPH, DAZ). Comment: this is the second report and first verified record for the state.
57. BLACKBURNIAN WARBLER (*Dendroica fusca*). (1) A female at Rattlesnake Springs, Eddy Co., 9/15/1979, by S. Huntington. Evaluation: highly probable (KK), probable (JPH). (2) A probable female at Rattlesnake Springs, Eddy Co., 9/17/1979, by S. West. Evaluation: highly probable (KK), probable (JPH).

58. YELLOW-THROATED WARBLER (*Dendroica dominica*) . One at Kirtland, San Juan Co., 6/2/1977, by Carol Shryock. Evaluation: possible (JPH, DAZ).
59. BAY-BREASTED WARBLER (*Dendroica castanea*). (1) A female or immature at Santa Fe, Santa Fe Co., 10/20/1976, by John C. Egbert. Evaluation: definite, based on color slides NMOS 1976-13A-13D (JPH, DAZ). (2) A female or immature on Mary Mccauley Ranch, on the Gila R., south of Cliff, Grant Co., 11/26/1978, by J.C. Egbert. Evaluation: definite, based on color slides 1978-7A (JPH, DAZ).
60. LOUISIANA WATERTERUSH (*Seiurus motacilla*). One at La Cienega Picnic Area, Sandia Mtns., Bernalillo Co., 4/14/1980, by D.L. and S. Huntington; first found there on 4/6/1980, by Mary Lou Arthur. Evaluation: definite. based on color slides NMOS 1980-A-G. (KK, DAZ). Comment: this is the first record for the state.
61. CANADA WARBLER (*Wilsonia canadensis*). One at Rattlesnake Springs, Eddy Co., 5/25/1979, by R.A. Wilt. Evaluation: highly probable (JPH, KK).
62. OCHRE ORIOLE (*Icterus fuertesi*). Three males and perhaps a female at Rattlesnake Springs, Eddy Co., 7/3/1977, by Ralph Clearman et al. Evaluation: questionable (JPH, DAZ).
63. BLACK-VENTED ORIOLE (*Icterus wagleri*). A male at Pancho Villa State Park, Luna Co., 5/21/1980, by Frank Becherer. Evaluation: questionable (JPH, DAZ). Comment: this is the first report for the state.
64. BLACK-HEADED ORIOLE (*Icterus graduacauda*). One at Panco Villa State Park, Luna Co., 5/21/1980, by F. Becherer. Evaluation: questionable (JPH, DAZ).
65. STREAK-BACKED ORIOLE (*Icterus pustulatus*). A female at Panco Villa State Park, Luna Co., 5/21/1980, by F. Becherer. Evaluation: questionable (JPH, DAZ). Comment: this is the first report from the state.
66. RUSTY BLACKBIRD (*Euphagus carolinus*). Several at Clovis, Curry Co., 5/31/1980 and 3/23/1981, by M. and D.C. Chandler. Evaluation: possible (JPH, DAZ).
67. SCARLET TANAGER (*Piranga olivacea*). A male in breeding plumage at Rattlesnake Springs, Eddy Co., 9/16/1979, by S. West. Evaluation: probable (KK), possible (DAZ), questionable (JPH).
68. CARDINAL (*Cardinalis cardinalis*). A male at Rattlesnake Springs, Eddy Co., 4/23/1978, by V.L. Grover. Evaluation: highly probable (RJR, DAZ), probable (WHB, JPH, JRT).
69. PYRRHULOXIA (*Cardinalis sinuatus*). A male at Hollene Community, Curry Co., 4/1979, by M. and D.C. Chandler. Evaluation: highly probable (JPH, DAZ).
70. VARIED BUNTING (*Passerina versicolor*). A male in the San Francisco Valley, near Glenwood, Catron Co., 6/12/1977, by Daniel M. McKnight, Evaluation: highly probable (DAZ), probable (JPH).
71. PURPLE FINCH (*Carpodacus purpureus*). (1) Two females at Percha Dam State Park, Sierra Co., 11/29/1978, by Kevin J. Zimmer. Evaluation: highly probable (DAZ), possible (WHB, JPH). (2) Single females or immatures at Elephant Butte Dam, Sierra Co., 12/27/1980, and Percha Dam State Park, Sierra Co.,

12/28/1980, by Richard C. and Dorothy J. Rosche. Evaluation: highly probable (JPH, DAZ).

72. WHITE-WINGED CROSSBILL (*Loxia leucoptera*). A male at Capitan, Lincoln Co., 8/14/1979, by E.L. and Dorothe J. Morton. Evaluation: highly probable (DAZ), probable (JPH).

73. ABERT'S TOWHEE (*Pipilo aberti*). Two at San Simon Cienega, Hidalgo Co., 1/2/1980 and one about 12 mi (19 km) N of Rodeo on U.S. 80, Hidalgo Co., 1/1/1980, by Robert Morse et al. Evaluation: highly probable (DAZ), probable (JPH).

74. BAIRD'S SPARROW (*Ammodramus bairdii*). (1) One at Cochiti Lake, Sandoval Co., 10/9 (or 9/10), by Bill F. Isaacs et al. Evaluation: highly probable (DAZ), probable (JPH). (2) One at Bosque del Apache N.W.R., Socorro Co., 2/11/1979, by D.L. and S. Huntington. Evaluation: questionable (JPH, KK, DAZ); color slides NMOS-1979-4A-4B may be of a Savannah Sparrow (*Passerculus sandwichensis*). (3) One at Bitter Lake N.W.R., Chaves Co., 10/16/1979, by D.L. and S. Huntington. Evaluation: possible (KK), questionable (JPH, DAZ); color slides NMOS-1979-43A-43C may be of a Savannah Sparrow.

75. LECONTE'S SPARROW (*Ammospiza lecontei*). At least 4 at East Grande Plains, Chaves Co., 12/11/1977, by V.L. Grover. Evaluation: possible (JPH), questionable (DAZ).

76. RUFOUS-CROWNED SPARROW (*Aimophila ruficeps*). Seen in the Clovis area, Curry Co., 4/28/1979 and 4/23-23/1981, by M. and D. Chandler. Evaluation: questionable (JPH, DAZ).

77. BOTTERI'S SPARROW (*Aimophila botterii*). Three to six pairs near Rodeo, Hidalgo Co., 6/21 to mid-Aug., Will Moir et al. Evaluation: highly probable, especially based on songs reported by Stephen Russell (JPH, DAZ). Comment: this is the first record for the state.

78. OLIVE SPARROW (*Arremonops rufivirgata*). One in San Mateo Canyon, San Mateo Mtns., Socorro Co., 4/21/1980, by Robert H. Moffitt. Evaluation: questionable (JPH, KK). Comment: this is the first report for the state.

79. WHITE-WINGED (DARK-EYED) JUNCO (*Junco hyemalis aikenii*). One in Cienega Canyon, Sandia Mtns., Bernalillo Co., 11/22/1980, 1/1/1981, and 2/1/1981, by Hart Schwartz et al. Evaluation: probable (JPH, DAZ—or highly probable).

80. YELLOW-EYED JUNCO (*Junco phaeonotus*). (1) One in Clanton Canyon, Hidalgo Co., by D.L. and S. Huntington. Evaluation: highly probable (DAZ), probable (JPH). (2) One in upper Post Office Canyon, Peloncillo Mtns., Hidalgo Co., 6/5/1980, by R. and K. Scholes. Evaluation: highly probable (JPH, DAZ).

81. FIELD SPARROW (*Spizella pusilla*). Seen at Hollene Community, Curry Co., 11/1979, by M. Chandler. Evaluation: questionable (JPH, DAZ).

82. SNOW BUNTING (*Plectrophenax nivalis*). Flock of about 12, W of Roswell, Chaves Co., 12/15/1979, by S. West et al. Evaluation: questionable (KK, DAZ).

## HOUSE SPARROWS CONSTRUCTING NESTS IN ACTIVE RED-TAILED HAWK NEST

John P. Hubbard  
2016 Valle Rio  
Santa Fe, MM 87501

On 10 April 1982, I watched as at least one male and two female House Sparrows (*Passer domesticus*) carried nest materials into the underside of an active Red-tailed Hawk (*Buteo jamaicensis*) nest. The latter was located near Alma, Catron County, New Mexico, about 15 m (49.5 ft) up in a leafless Arizona sycamore (*Platanus wrightii*). The observations were made at a distance of 200-300 m between 0840 and 0900, during which time an adult Red-tail sat apparently incubating.

The hawk nest was supported on its sides by several main branches of the sycamore, but it was largely exposed on the underside. I estimated it to have been about 78 cm (30 in) in diameter and 52 cm (20 in) high. It was constructed of large sticks, probably mainly from the sycamore and adjacent oaks (*Quercus griseus*). The nest is at least two years old, and it appears somewhat larger than typical nests of Red-tails in the area.

During some 15 min under my observation, the sparrows made numerous flights into the bottom of the hawk nest. These forays typically were from the lower parts of the sycamore, and the sparrows were seen to glean twigs and leaf petioles from that tree for their nest construction, it was my impression that at least two sparrow nests were being constructed, but at the time of my observations the sparrow nests were not visible as entities separate from the hawk nest. However, a closer approach might well have revealed them. The male sparrow occasionally perched near the top level of the hawk nest, but the females mainly remained lower. The incubating Red-tail appeared to ignore the smaller birds.

The advantage to the sparrows of nesting in an active *Buteo* nest appears obvious: the presence of the hawks would likely discourage or negate attacks by predators, such as accipiters (*Accipiter* spp.). By selecting the bottom of the nest, the sparrows probably would have been safe from the Red-tails themselves, had the latter shown any interest in preying on the smaller birds.

That such protection is assured might be questionable, not only in regards to the Red-tails--which might find fledgling sparrows easier prey than nest contents or adults--but for other birds as well. For example, as I watched the events described above, I saw a Scrub Jay (*Aphelocoma coerulescens*) land in the sycamore and approach the hawk nest. It is possible that a jay might be ignored by the Red-tail(s) to the extent that it could successfully attack and rob the sparrow nests. Thus, small predaceous birds, especially non-raptors such as the Scrub Jay, may circumvent the sparrow-hawk nest system. Nonetheless, one can see the benefit to the sparrows from the association as far as other raptorial species may be concerned.

### NMOS PUBLICATIONS AVAILABLE

The following NMOS publications are in print and may be purchased from the Secretary, Sue Huntington, 11 Calle Pueblo Pinado NW, Albuquerque, NM 87120: Revised Check-list of the Birds of New Mexico, by John Hubbard (price \$3.50 + \$1.00 postage and handling, bulk discount for 10 or more, \$2.75 ea. + \$2.00); Breeding Birds of Elephant Butte Marsh, by Chuck Hundertmark (\$1.35 + \$.50); Summer Birds of the San Juan Valley, by Greg Schmitt (\$1.50 + \$.50).

## FIELD IDENTIFICATION OF GULLS IN NEW MEXICO

### I. INTRODUCTION

Eirik A. T. Blom  
T-6, Orchard Park  
Davis, CA 95616

No group of birds presents so challenging a problem in field identification as the gulls (subfamily Larinae). Not only are they a notoriously complex and variable group, their natural complexity is exacerbated by the misleadingly simplified treatment given them in the standard field guides (e.g. Peterson 1941, Robbins et al. 1966). But despite their difficulty, all gulls in New Mexico deserve the close attention of birders. Increased attention undoubtedly will result in the finding of vagrant individuals of unexpected species, but more importantly it will elucidate the imperfectly understood and indeed dynamic distribution of an important element of the state's avifauna.

The purpose of this paper and the ones to follow is to aid birders in New Mexico in the identification of gulls. This first installment will address gulls in general and provide an outline of the plumages and molts of gulls. Mastery of this background information is essential before a birder attempts to move from the relatively straightforward identification of adult gulls into the murky world of sub-adults. Furthermore, it would be unthinkable to begin without expressing the strongest possible warnings about the pitfalls of gull identification and without making the case for the total, exhaustive documentation of every out-of-range record.

All species of gulls with which an observer in New Mexico might expect to deal, at present or in the near future, will be treated in this series. Eleven species have been admitted to the state list, and three more are listed as hypothetical (Hubbard 1978; J. Trochet, pers. comm.). In addition, six others might reasonably be expected to occur eventually or present problems because of recent or expected changes in taxonomic status.

These 20 species have been divided into seven groups (Table 1) for the purpose of comparing similar birds. No artificial grouping will be pleasing to every eye, and this system is far from perfect. But within the constraints of space it allows us to attack the gull identification problems most often met in the field. The order in which these groups will be treated has not yet been determined.

TABLE 1. Groups of species in which gulls will be discussed in this series.

Laughing Gull <u>Larus atricilla</u>	Glaucous-winged Gull
Franklin's Gull <u>L. pipixcan</u>	<u>L. glaucescens</u>
Heermann's Gull <u>L. heermanni</u>	Western Gull <u>L. occidentalis</u>
	Yellow-footed Gull <u>L. livens</u>
Bonaparte's Gull	
<u>L. philadelphia</u>	Glaucous Gull <u>L. hyperboreus</u>
Sabine's Gull <u>Xema sabini</u>	Iceland Gull <u>L. glaucoides</u>
Black-legged Kittiwake	Thayer's Gull <u>L. thayeri</u>
<u>Rissa tridactyla</u>	
Ring-billed Gull	Black-headed Gull <u>L. ridibundus</u>
<u>L. delawarensis</u>	Little Gull <u>L. minutus</u>
Mew Gull <u>L. canus</u>	Great Black-backed Gull
	<u>L. marinus</u>
Herring Gull <u>L. argentatus</u>	Lesser Black-backed Gull
California Gull <u>L. californicus</u>	<u>L. fuscus</u>

A few explanations are required. The Heerman's Gull does not closely resemble any other North American gull, and is included here primarily for completeness. Except for some material on ageing, the standard field guides are adequate for this species. The Glaucous-winged and Western Gulls are hypothetical for the state, but are recorded for Arizona (Monson and Phillips 1981), and additional reports are anticipated. The Yellow-footed Gull was previously considered a race of the Western Gull, but recent studies (Hand 1981) suggest it is a separate species, and it has been recognized as such by the Check-list Committee of the American Ornithologists' Union (A.O.U. 1982). This species is resident in the Gulf of California (A.O.U. 1957), and is a regular post-breeding wanderer to the Salton Sea (Garrett and Dunn 1981). Since the other races of the Western Gull are strictly coastal, this form might be considered more likely to occur inland.

The Iceland Gull has never been recorded in New Mexico but is a possibility. Any confusion would occur between it and the other two gulls in the group. Confusion of the Iceland and Thayer's Gulls has already caused trouble in the neighboring state of Texas (Oberholser and Kincaid 1974). The final group includes four species which have been recorded in the West and may eventually show up in New Mexico. Observers should be aware of their patterns of occurrence and how to separate them from similar species.

Much of the information presented here is a synthesis of earlier works. Anyone interested in gull study is urged to track down the original sources; much of what is in them will perforce not appear here. Some of the information is from my own field study and museum research. Much comes from conversations and communication with dedicated, talented birders. My debt to them will be acknowledged later. Still, the decisions of what to use and how to use it are mine, so I can claim full credit for at least one aspect of the work, the mistakes.

Many sources were important in constructing this series, but two deserve special mention: Jonathan Dwight's (1925) "Gulls of the World," though over half a century old, is still the point at which all discussion of gulls begins; Peter Grant's exceptional series on gull identification in British Birds (Grant 1978, 1979, 1980, 1981a and b) covers many of our species and demonstrates how a series of articles about a difficult group should be done.

Most of the following information on molts and plumages is from Dwight (1925), with other sources cited.

Gulls can be divided into three groups: those species which take two years to reach adult plumage, those which take three years, and those which take four. It is because they take so long to reach adult plumage, and because each year brings a usually recognizable change that gulls are the despair of the field birder. Since in many instances it is necessary to age a gull in order to identify it, it is important to understand the sequence of molts and the terminology used to describe them.

All gulls go through two molts a year, a pre-basic (post-nuptial in the old terminology) in the fall and a pre-alternate (pre-nuptial) in the spring. The fall molt is complete, but the spring molt involves only the head and body, with the wing and tail feathers being retained. The only exceptions are the Franklin's Gull, which is unique in having two complete molts each year, and the Sabine's Gull, which appears to reverse the normal pattern by having a head and body pre-basic molt and a complete pre-alternate molt (Grant 1981a).

Before fledging, young gulls molt from their downy natal plumage to their first feathered plumage, the juvenal (It might be appropriate here to point out that the plumage is juvenal, while the bird is juvenile). This is retained until the first pre-basic molt, when the first basic (winter) plumage is acquired. In the first pre-basic molt only the head and body feathers are replaced, the juvenal flight feathers being retained. In all

subsequent pre-basic molts all feathers are replaced. First basic is replaced by first alternate (summer) in the pre-alternate molt of head and body. First alternate is followed in sequence by second basic, second alternate (or adult alternate for two-year species), and so on until the adult alternate (breeding) plumage is reached. After a bird has acquired its first breeding plumage, it alternates between adult basic and adult alternate for the duration of its life.

Gull plumages are a sequence and molting is a prolonged process. Many individuals will be in transition and will not be assignable to one plumage. Different species molt at different times, and within a species there is great variation in the timing of molts. In some (maybe all) gulls males begin molting before females (Hume 1980), and males have proportionately heavier bills and shorter wings than females (Ingolfsson 1969).

Juvenal and first alternate tend to be the most consistent sub-adult plumages. Second and third year plumages tend to be less consistent and are frequently partly retarded or accelerated (Monaghan and Duncan 1979, Hume 1980). Some individuals in first breeding plumage will retain traces of earlier plumages, especially in soft-part colors (Poor 1946, Monaghan and Duncan 1979). Two-year species are usually quite consistent, three-year species less so, and four-year gulls the most troublesome.

Since flight feathers are renewed only in the pre-basic molt they tend to be quite worn in the spring and summer. This can make the wings look shorter than normal. A good example of a bird with obviously worn primaries is one figured in plate 20 of the Western edition of the Audubon photo field guide (Udvardy 1977).

These variations are some of the problems facing birders working with gulls. There are others. Albinism, partial and complete, is well documented in gulls (Gross 1964) and has caused misidentifications (Hume 1980). Most birds exhibiting albinism are obvious, but observers need to be aware of the problem. Specific problems caused by albinism, particularly with the "white-winged" gulls, will be dealt with in the appropriate article.

Hybrids are also a serious problem. In some species-pairs, hybridization is well known and documented: Glaucous-winged X Western, for example (Hoffman et al. 1978). Many other combinations are also known, especially among the large, four-year, white-headed gulls, including Herring X Glaucous (Ingolfsson 1970, Jehl 1971, Andrlé 1980), Herring X Great Black-backed (Andrlé 1972), Herring X Lesser Black-backed (Harris et al. 1978), and Glaucous-winged X Herring (Williamson and Peyton 1963). The possibility of hybridization in smaller gulls also exists, as shown by the unlikely pairing of a Ring-billed and a Franklin's (Weselob 1982).

Specific instances where known hybrids might cause problems will be addressed in the appropriate article. Every hybrid combination cannot be described, however, and observers must keep in mind the possible occurrence of a hybrid. A bird I saw in Baltimore, Maryland was thought by some observers to be a Slaty-backed Gull (*L. schistisagus*). Though the bird was not collected, photographs and notes taken at the time support the conclusion that it was a Great Black-backed X Herring hybrid. Though only recorded in the literature a few times this hybrid should not be considered less likely on the East Coast than an Asiatic species recorded in North America only from the coasts of Alaska, and there only as a vagrant (Kessel and Gibson 1978).

When an individual gull does not fit into the normal plumage sequence of a regularly-occurring species, and before it is "positively" identified as a rare or previously unrecorded species, the observer should sort through the possibilities of albinism, hybridization, and unusual plumage variation. If it is a vagrant, it should fit the description of the supposed species in almost every detail (vagrants are variable, too), not just one or two. A bird which is in every respect a Ring-billed Gull except for white primaries is still a Ring-billed, not an Iceland.

Which leads to documentation. In dealing with a rare gull (or any other bird), and one not collected, exhaustive documentation is mandatory. Noting what are the presumed field marks is not adequate. A complete description, including soft part colors, is required. Even on collected specimens notes about eye, leg, and bill color should be made immediately, since these colors fade after death. Photographs should be taken if possible. However, no set of photographs, no matter how good, relieves the observer of the obligation to take notes which are adequate in themselves to document the identification. Too often photographs have proven insufficient to document the key characters. All birders should read Binford's (1978) account of the first record of the Lesser Black-backed Gull from California. There is no better example of what constitutes documentation of a rare bird.

There are key features to note in identifying any gull. First put the bird in a size category. This usually requires direct comparison with other gulls of known identity. Is it the size of a Herring, a Ring-billed, or a Bonaparte's? Then try to age the bird. Try is the appropriate word. Even in the hand some specimens of the larger gulls cannot be aged with certainty. Many will appear to fit reasonably well into the pattern of a specific age-class.

Once the bird has been sized and aged (if it can be), check eye color, bill shape and color, and leg color. Those three characters can quickly eliminate many possibilities. Primary pattern and mantle color also help. Even if it appears to be an easily identified plumage of an easily identified species, if it is unusual or out of range make detailed notes.

Despite an admirable caution and careful note-taking, not every gull will yield its identity up to the observer. THERE ARE GULLS WHICH CANNOT BE IDENTIFIED. Not all plumage variations are known, not all hybrids recognizable, not all circumstances satisfactory to record the necessary detail. Don't force the issue. Don't feel compelled to put a name on every single bird. Identifying everything is the mistake of the birder who does not really understand the rules or the purposes of the game.

Finally, no series like this is without flaws and omissions. The shortcomings should serve as a stimulus to dialogue. Readers are encouraged to contribute as the series progresses with their own ideas and experiences, and with corrections and additions. The exchange of information benefits us all.

#### LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1957. Check-list of North American birds, fifth ed., Baltimore, Amer. Ornithol. Union.
- \_\_\_\_\_. 1982. Thirty-fourth supplement to the American Ornithologists' Union check-list of North American birds. Auk (suppl.) 99: 1CC-16CC.
- ANDRLE, R.F. 1972. Another possible hybrid of *Larus marinus* and *L. argentatus*. Auk 89:669-671.
- \_\_\_\_\_. 1980. Three more probable hybrids of *Larus hyperboreus* and *L. argentatus*. Wilson Bull. 92:389-393
- BINFORD, L.C. 1978. Lesser Black-backed Gull in California, with notes on field identification. West. Birds 9:141-150.
- DWIGHT, J. 1925. The gulls (Laridae) of the world: their plumages, molts, variations, relationships, and distribution. Bull. Amer. Mus. Nat. Hist. 52:63-408.
- GARRETT, K., AND J. DUNN. 1981. Birds of Southern California, status and distribution. Los Angeles, Los Angeles Audubon Society.
- GRANT, P.J. 1978. Field identification of west Palearctic gulls. Part I. Brit. Birds 71:145-176.
- \_\_\_\_\_. 1979. Field identification of west Palearctic gulls. Part II. Brit. Birds 72:147-182.

- \_\_\_\_\_. 1980. Field identification of west Palearctic gulls. Part III. Brit. Birds 73:113-158.
- \_\_\_\_\_. 1981a. Field identification of west Palearctic gulls. Part IV. Brit. Birds 74:111-142.
- \_\_\_\_\_. 1981b. Field identification of west Palearctic gulls. Part V. Brit. Birds 74:363-394.
- GROSS, A.O. 1964. Albinism in the Herring Gull. Auk 81:551-552.
- HAND, J.L. 1981. A comparison of the vocalizations of Western Gulls (*Larus occidentalis occidentalis* and *L. o. livens*). Condor 83:289-301.
- HARRIS, H.P., C. MORLEY, and G.H. GREEN. 1978. Hybridization of Herring and Lesser Black-backed Gulls in Britain. Bird Study 25:161-166.
- HOFFMAN, W., J.A. WIENS, and J.M. SCOTT. 1978. Hybridization between gulls (*Larus glaucescens* and *L. occidentalis*) in the Pacific Northwest. Auk 95:441-458.
- HUBBARD, J.P. 1978. Revised check-list of the birds of New Mexico. New Mexico Ornithol. Soc. publ. No. 6.
- HUME, R.A. 1980. Identification and ageing of Glaucous and Iceland Gulls. Pp. 170-182 IN Sharrock, J.T.R. The frontiers of bird identification. London, Brit. Trust Ornithol.
- \_\_\_\_\_. 1978. Variations of Herring Gulls at a Midlands roost. Brit. Birds 71:338-345.
- INGOLFSSON, A. 1969. Sexual dimorphism of large gulls (*Larus* spp.). Auk 86:732-737.
- \_\_\_\_\_. 1970. Hybridization of Glaucous Gulls *Larus hyperboreus* and Herring Gulls *L. argentatus* in Iceland. Ibis 112: 340-362.
- JEHL, J.R., Jr. 1971. A hybrid Glaucous X Herring Gull from San Diego. Calif. Birds 2:27-32.
- KESSEL, B., and D.D. GIBSON. 1978. Status and distribution of Alaska birds. Stud. Av. Biol. 1:1-100.
- MONAGHAN, P.A., and N. DUNCAN. 1979. Plumage variations of known age Herring Gulls. Brit. Birds 72:100-103.
- MONSON, G., and A.R. PHILLIPS. 1981. Annotated checklist of the birds of Arizona. Tucson, Univ. Arizona Press.
- OBERHOLSER, H.C., and B. KINCAID, Jr. 1974. The bird life of Texas. Austin, Univ. Texas Press.
- PETERSON, R.T. 1941. A field guide to the Western birds. Boston, Houghton Mifflin Co.
- POOR, H.H. 1946. Plumage and soft part variations in the Herring Gull. Auk 63:135-151.
- ROBBINS, C.S., B. BRUUN, H.S. ZIM, and A. SINGER. 1966. Birds of North America, a guide to field identification. New York, Golden Press.
- UDVARDY, M.D.F. 1977. The Audubon Society field guide to North American birds, Western region. New York, Alfred A. Knopf.
- WESELOH, D.V. 1982. A probable Franklin's X Ring-billed Gull pair nesting in Alberta. Can. Field-Nat. 95:474-476.
- WILLIAMSON, F.S.L., and L.J. PEYTON. 1963. Interbreeding of Glaucous-winged and Herring Gulls in the Cook Inlet Region, Alaska. Condor 65:24-28.

Editor's note: Rick Blom is the author of the gull section, and the preparator of the range maps, for the forth-coming National Geographic field guide. We welcome his contribution.