FROM FIELD AND STUDY

Notes on the Use of the Creosote Bush by Birds.—It is generally known that the extensive, pure stands of the creosote bush (*Larrea divaricata*) in the southwestern deserts seldom attract many birds. In the Tucson region of Arizona, we have walked through a mile of this inhospitable-looking shrub without seeing a single bird. However, when it occurs intermixed in or at the fringes of cacti, mesquite, and catclaw associations we have observed that a considerable number of birds make use of it.

Verdins (Auriparus flaviceps) and gnatcatchers (Polioptila sp.) forage in the bushes throughout the year, evidently finding some insect food. Occasionally during the winter we have seen Audubon Warblers (Dendroica auduboni) and, in the spring, Pileolated Warblers (Wilsonia pusilla) travelling from plant to plant searching the twigs. In April Cactus Wrens (Heleodytes brunneicapillus) begin to walk around the bushes peering upward into the branches for larger insects. When one is located it is caught by a quick jump. Then the wren usually climbs through the entire bush in search for more. This method is repeated at the next bush. Buds are nibbled by English Sparrows (Passer domesticus) and House Finches (Carpodacus mexicanus), and we have seen both of these species pull off and crush the fuzzy fruits with their bills to get at the seeds inside. Although the creosote bush fruits ripen in enormous numbers each year, and are easily accessible, we have never observed any of the desert birds feeding on them regularly. We have a record of the Green-backed Goldfinch (Spinus psaltria) sampling the fruit, also. Occasionally the abundant yellow flowers are visited by the Black-chinned Hummingbird (Archilochus alexandri).

English Sparrows sometimes break off the smaller, flexible green twigs and use them for the exterior part of their nests. Evidently the slender upright branches, the lack of support-forming intertwining twigs, and the scarcity of suitable forking make this shrub undesirable for nest location. The only nest we have ever observed in a creosote bush was that of a Black-tailed Gnatcatcher (*Polioptila melanura*), found on May 26, 1944, near Rillito Creek, $2\frac{1}{2}$ feet above the ground in a small, slanting fork of a branch.—Anders H. Anderson and Anne Anderson, *Tucson, Arizona, May 3, 1946*.

The Oregon Junco in Sonora, Mexico.—In "A Distributional Survey of the Birds of Sonora, Mexico," by A. J. van Rossem (Occ. Papers Mus. Zool., Louisiana State Univ., no. 21, 1945:300), Junco oreganus montanus is listed as a form of unverified occurrence. Van Rossem states that according to his notes a specimen had been taken by or for Griffing Bancroft, and that it had previously been identified as J. o. shufeldti, but that he believed it would fall under montanus as defined by Miller. This specimen, which I obtained from Bancroft several years ago, is now in my collection. The label bears the following data: "Ad. male. Arizona Ranch, 15 m.s. of Nogales, Sonora, Mexico. Feb. 17, 1929. Coll. J. Elton Green. No. 2230." On the reverse is an early identification: "J. or Shufeldti. V. R." and a recent identification, "Montanus. A. H. M." Miller adds "female?" Van Rossem notes that 15 miles south of Nogales should be 15 miles southwest of Nogales.—Max Minor Peet, Ann Arbor, Michigan, April 1, 1946.

Pacific Gull Color-banding Project, 1942-1945.—Earlier banding on this project, sponsored by the Western Bird-banding Association with the cooperation of the United States Fish and Wildlife Service, was reported in the Condor (44, 1942:78). In spite of war circumstances, 2969 nestling gulls of two species were color-banded in the summers of 1942, 1944, and 1945. This brings the total color-banding for the summers of 1938 through 1945 to 14,629 nestling Western, Glaucous-winged and California gulls at fifteen nesting colonies.

	Arrangement of Color-bands on Legs of Gulls					
Colony Utah Lake, Utah:	right	left	right	left	right	1945 left
316 California Gulls Vasco M. Tanner.	yellow aluminum	red	aluminum red	yellow		
Great Salt Lake, Utah: 1500 California Gulls A. M. Woodbury, J. W. Sugden.	red	yellow aluminum	1			
Farmington Bay, Utah: 383 California Gulls (also 417 aluminum only) A. M. Woodbury, and W. H. Behle.			aluminum	red yellow	yellow	aluminum red

Point Lobos, California: 50 Western Gulls (also 24 aluminum only) H. M. Hill and T. H. Work.

blue aluminum white

Tomales Bay, California: 17 Western Gulls H. M. Hill and T. H. Work.

black aluminum black

green

Farallon Islands, California: 174 Western Gulls (also 82 aluminum only) H. M. Hill and T. H. Work.

white

aluminum

Records on these gulls have come in, even during the war; every record helps to fill in the picture of migration and life history. Location of banded adults during the summer months is especially desired for data on breeding colonies.

The numbered aluminum bands from birds found dead should be sent to the United States Fish and Wildlife Service, Washington, D.C. If a living gull is seen, observe carefully the color combination, and report with date, place, and your name to the writer.—Mrs. M. C. SARGENT, Box 109, La Jolla, California, April 10, 1946.

Copulation Performed by Killdeer During Incubation Period.—On April 29, 1946, at the Bear River Migratory Bird Refuge, Brigham, Utah, a female killdeer (Oxyechus vociferus) was closely observed leaving her eggs, which she had been incubating for 16 days, and advance about 8 feet from her nest site to meet an approaching male. Almost immediately copulation took place, after which the female wiggled her tail and shook her feathers, then returned to her nest and resumed incubation.—LLOYD F. GUNTHER, Bear River Refuge, Brigham, Utah, May 1, 1946.

An Unusual Flight of Sharp-tailed Grouse.—A long flight of a flock of Sharp-tailed Grouse (*Pedioecetes phasianellus*) was observed along the foothills east of Providence in Cache County, Utah, on March 22, 1946. The flock of twenty-three was sighted at 10 a.m. on a stormy cold day. Snow had been falling just prior to the time of observation. When first sighted the grouse were approximately a quarter mile south of the observers traveling in a northward direction at approximately 200 feet above the ground.

The grouse were identified by both writers. Field glasses were used to follow the flight as the birds flew north along the base of the mountains. The grouse were still progressing north when they were last seen approximately $2\frac{1}{2}$ miles north. The birds undoubtedly came from the south end of Cache Valley where the largest remaining numbers of this grouse in Utah are found. A refuge has been established in this end of the valley for the grouse. A few have been reported within the past year in the north end of the valley. Speculation arises as to whether these birds were migrating from an area of too great concentration of grouse or whether the flight was part of a regular spring movement which we have not detected before. If flights of such length occur with any regularity, the one small refuge area in the south end of the valley may be inadequate to protect and to supply other needs of this grouse.—Jessop B. Low, Utah Cooperative Wildlife Research Unit, and David M. Gaufin, State Fish and Game Department, Logan, Utah, April 22, 1946.

Notes on Distribution and Color of the Mexican Turkey Vulture.—Friedmann's synopsis of the North American races of Cathartes aura (Proc. Biol. Soc. Wash., 55, 1933:187-190) cites Mazatlán, Sinaloa, as the northernmost point of occurrence for the Mexican Turkey Vulture on the west coast of México. While there has been a suspicion that the actual range of the race, northwardly, would be found to be approximately coextensive with the Lower Arid Tropical Zone, no specimens have been collected in order to settle the question until recently.

On March 7, 1946, I recorded the wing and tail measurements of two dried carcasses found on one of the harbor beaches at Guaymas, Sonora. A few days later, on March 14, I shot two males from an assemblage of some half-dozen breeding pairs on Isla de los Burros, a sand island sometimes designated as Isla Lechuguia, off Topolobampo, northern Sinaloa. One of these was prepared as a specimen (Dickey Coll. no. 33341), the other was measured and the colors of the soft parts recorded. On the basis of these four individuals it is evident that the range of Cathartes aura aura extends northward on the west coast of México to at least latitude 28° in Sonora. The measurements in millimeters of the four birds are given below. The wing length is that of the natural chord (not flattened) from the carpal edge to the tip of the longest primary; the tail length is measured from the insertion of the central pair of rectrices to the tip of the longest.