

LIBRARY
UNIVERSITY OF CALIFORNIA
29

Shrike Captures Bat.—On July 27, 1939, at Daylight Pass, Death Valley National Monument, California, a small bat, probably the little pallid bat (*Myotis californicus pallidus*), was seen flying in an easterly direction at a height of from six to ten feet. The hour was approximately 6:45 a.m. The sun had barely emerged from behind the low ranges in adjacent Nevada, but already on the open desert the light was bright enough for photographic snap shots. The writer had just time for a mental note that the hour was phenomenally late for a bat before the latter paid the penalty for this departure from the normal behavior pattern of its species. Suddenly a Loggerhead Shrike (*Lanius ludovicianus nevadensis*) darted from the sagebrush, quickly overtook the wavering night flier and nabbed it as a flycatcher nabs a moth. The two slanted earthward, locked in a violent struggle, but hardly had they touched the ground before the shrike rose again and with the bat now fluttering only feebly as it hung from his bill, sped away in triumph. The average weight of nineteen specimens of the related and but slightly larger *Myotis lucifugus carissima* collected by the writer in previous years is 6.2 grams; seven shrikes of the *ludovicianus* group averaged 46.5 grams.—E. LOWELL SUMNER, JR., National Park Service, San Francisco, California, November 21, 1939.

Notes on the Birds of Crater Lake National Park, Oregon.—While at Crater Lake National Park, Oregon, from June 1 to September 4, 1939, some changes in the avifauna were noted in comparison with that of the preceding summer season. Although few new species were found, the numbers of some were either notably increased or decreased. A factor which might have affected many birds was the advanced condition of the season. It was estimated, according to the amount of snow on the ground, that the season was about one month in advance of normal. Nesting, however, seemed to be advanced only about two or three weeks, as judged from dates of nests of the following species: Rufous Hummingbird, Red-shafted Flicker, Hairy Woodpecker, Red-breasted Nuthatch, Mountain Bluebird, Rosy Finch, and Chipping Sparrow.

One prominent difference was the increased abundance of certain waterfowl occurring on the lake. Crater Lake, which is geologically relatively young, does not afford a variety of habitats for water birds. In this respect it is quite different from Upper Klamath Lake, about fifty miles distant, which supports a dense waterfowl population. Because Crater Lake water is relatively pure, with only about eighty parts per million of dissolved salts, it does not sustain luxuriant aquatic vegetation. There are few shoals with muddy bottom which can support such plants as tules or sedges. Most of the shore is steep and boulder covered, and the cliffs continue nearly vertically below the surface so that at a distance of fifty yards off-shore the water may be as deep as 500 feet. The lake does, however, support a good population of rainbow trout and silverside salmon that is maintained by annual plantings. The fish reproduce very little if at all, probably because of lack of spawning beds (Hasler, Jour. Wildlife Management, vol. 2, 1938, pp. 94-103). Their diet is largely made up of various invertebrates such as insects, snails, worms, and certain crustaceans such as *Daphnia*, which at certain times of the year constitutes nearly half of the fishes' diet. These invertebrates may also be utilized by some of the waterfowl. It is believed, however, that the most common water birds, such as the Double-crested Cormorant (*Phalacrocorax auritus*), American Mergansers (*Mergus merganser americanus*), and gulls feed largely on fish. By comparison of recorded numbers with records of last year it is evident that birds of these species were nearly twice as abundant this year as previously.

This increase in fish-eating waterfowl may be due directly to a disease which affected some of the fish or to an increase in the fish of a certain age group, or both. The problem of the disease is not solved as yet but it is certain that it is a species of water mould (*Saprolegnia*). The infection apparently is specific in its attack and only the silverside salmon that are about five inches long and between two and three years of age are bothered; none of the rainbow trout was so affected. *Saprolegnia* causes a light-colored, ragged sore on the dorsal surface of the fish between the dorsal fin and the head, and sometimes slightly behind this fin. Ordinarily the dark color of the dorsal surfaces of the fish renders them practically invisible against the extremely deep blue of the water, but with the *Saprolegnia* on them their protective coloration is gone. This makes them very easily seen, even from the cliffs 1000 feet above. Cormorants, while flying over, were several times seen to swerve suddenly in their course and alight amidst a school of diseased fish. This sudden change in course while flying was never observed the year before. From the rim above the lake surface it was interesting to watch with binoculars the cormorants diving into a school of fish, and at times, see them chasing one fish until it was caught. No use of the wings under water was noted.

Not only were the fish of this age group that was parasitized more sluggish and thus more easily caught, but they seemed more abundant. Many times large schools of such fish were seen close to the surface where they made the water seemingly boil with their movements. The roosting and probable

nesting site of the greatest number of cormorants was on the island known as Phantom Ship where as many as 54 were counted at one time, some perching on the coniferous trees as well as the rocky crags. Many immatures were observed later on in the summer season.

The schools of diseased fish provided food for the California Gulls (*Larus californicus*) and American Mergansers, and a few Ring-billed Gulls (*Larus delawarensis*). The gulls probably fly in from Klamath Lake and most of them leave before nightfall. Some days they may be seen in a large flock flying in circles high above the center of the lake. They hunt singly or in flocks and may be seen dipping into a dense school of fish that is swimming close to the surface. The American Mergansers are believed to be transients and the largest number seen in one day was fourteen, which was more than seen by me last year.

Also connected with the fish problem was the presence this year of more Ospreys (*Pandion haliaëtus*) than usual. Although no nests were found, the birds were seen about ten times throughout the summer and were observed to be chased by Bald Eagles (*Haliaeetus leucocephalus*) which made them drop their prey.

Other raptors also were more abundant. Two probable nesting ledges of the Duck Hawk (*Falco peregrinus anatum*) were found on the crater wall and later in the season one adult and two young were seen maneuvering together near Pumice Point. Two possible nesting ledges of the Prairie Falcon (*Falco mexicanus*) were found on the northeast crater wall, and in August one bird of this species used as a perch a tree above the Sinnott Memorial beneath which there was a concentration of people. The movement of people below seemed not to bother the activities of the falcon and twice it was seen to make unsuccessful stoops at golden-mantled ground squirrels.

Noticeable was the decided decrease in Red Crossbills (*Loxia curvirostra*). In the summer of 1938, crossbills came in great numbers to the rim area coincident with the maturing of the cones of the white-bark pines and mountain hemlocks. This year there were relatively few mature cones of the white-bark pine, which cones require two years to mature. By census counts, crossbills were much more abundant in 1938 than in 1937 and 1939. Only three small flocks and occasional solitary individuals were seen in 1939. These were seen to feed on cones of the mountain hemlock which mature in one year and which were as abundant as ever, but it is believed the ripe cones of the white-bark furnish a more desirable source of food for crossbills. The factor of cone production as a cause for the erratic distribution and variation in nesting times of the Red Crossbill has recently been reviewed by Griscom (Proc. Boston Soc. Nat. Hist., vol. 41, 1937, p. 82).—ELMER C. ALDRICH, *Oakland, California, November 2, 1939.*

The Osprey in New Mexico.—The Osprey (*Pandion haliaëtus*) is an uncommon bird in New Mexico; it has been reported from only ten localities in Dona Ana, Grant, Catron, Chavez, Taos, and San Miguel counties (F. M. Bailey, *Birds of New Mexico*, 1928, pp. 184-185). With exception of two records from Taos and San Miguel counties, these are all from the southern half of the State. In view of this relative scarcity it is desirable to report the following observations.

At about 11:00 a.m. on April 23, 1936, one was seen at Mariana Lake, Mariana Lake Trading Post, McKinley County. It was perched on the top of a telephone pole near the water, at the west end of the lake, and was eating a fish. At the time of this observation Mariana Lake held considerable water and provided fair sport fishing for bass, blue-gill, and catfish. Because of drouth, silting, and excessive growth of cattails, the lake has since become much reduced in size. To the best of my knowledge this is the first record of this species on the Navajo Indian Reservation.

A dead Osprey was found on October 24, 1937, wired to the top west girder of the Alameda Bridge over the Rio Grande, one and one-quarter miles west of Alameda, Bernalillo County. The bird was in a relatively fresh condition, possibly dead no more than one or two days. Although one cannot be certain, it is possible that this Osprey was shot along the Rio Grande, somewhere in the general vicinity of the Alameda Bridge.

On the afternoon of September 18, 1939, an Osprey was seen at Caballo Dam, Sierra County. It was perched on top of a telephone pole beside the main highway, west of the dam. The bird flew from its perch as our car approached and it was then seen to be carrying a fish about eight inches long. Caballo Dam is on the Rio Grande and was completed in September, 1937; the lake that is now forming behind it provides an enlarged habitat for this bird. The Rio Grande at this point contains bass, blue-gill, catfish, carp, and chub.

Mr. A. E. Borell of the Soil Conservation Service at Albuquerque, New Mexico, has provided the following observation: "In late afternoon of September 19, 1938, an Osprey was seen perched on a telephone pole near a playa lake, twenty-three miles southwest of Hatch, Luna County. Flood waters had made a large shallow pond in an area where there usually is no water."—LAWRENCE V. COMPTON, *Soil Conservation Service, Albuquerque, New Mexico, September 28, 1939.*