

afternoon (the cavity faced in a westerly direction), and this platform was apparently leaves and cedar bark covered with dirt. As a food supply there were the hindquarters of a cottontail rabbit, a pocket gopher (*Thomomys*), and three young Pinyon Jays, just about large enough to leave the nest. The heads of these latter were missing.

When I passed through Paonia in 1903, I had no time to investigate the nest, even if it was not probably too late in the season, June first.

While staying at Gaume's ranch in the northwestern part of Baca County, the last of May, 1905, a pair of Horned Owls had two young in a hole or small cave in the sandstone bluffs which formed the back of the corrals. I could see at times an adult and young bird, and at times both the young, sitting at the edge of the hole. I estimated this as thirty feet above the bottom of the bluff, and ten below the top. I did not visit the place itself, though I could have done so easily enough, but put it off too long, and then the time came for me to leave. I first saw the place May 20; on the 24th I found on the hill above and back of the nest a dead young owl. My notes say that its body was covered with down, and the wing feathers about half grown out. I did not see any birds about the nest after this.

The people at the ranch told me that the owls had never molested their poultry though there were many chickens of all sizes and ages running about everywhere below the nest. This seems rather strange, considering the reputation of the birds as poultry thieves, and for general destructiveness. Perhaps the owls appreciated the fact that their existence depended on their good behavior, and acted accordingly.

MAY NOTES FROM SAN JACINTO LAKE

By G. WILLETT and ANTONIN JAY

WITH THREE PHOTOS

ON THE morning of May 27, the present year, the writers left Los Angeles by automobile for a short ornithological trip, our objective point being San Jacinto Lake, or Mystic Lake as it is called on most maps, which is situated in west central Riverside County, California. This lake is in the San Jacinto Valley, at an altitude of about 1500 feet. It is in reality nothing more than a slough or sink, being only about two miles long and from a quarter to a half mile wide. In no part of it is the water more than waist deep.

Along the shores and for a hundred or more feet out into the water is a luxurious growth of marsh grass, which is a feeding ground for numerous birds that are partial to frog's eggs and pollywogs, mosquitos and other insects. It is also a breeding ground for coots, grebes and some of the ducks. At the east end of the lake are extensive tule beds, in some places so thick that they are almost impossible to penetrate. In these tule thickets are found the main nesting colonies, and the abundance and variety of the breeding birds makes this locality one of the most interesting of its kind in southern California. The lake has been previously visited by several ornithologists, among them being A. M. Ingersoll and W. B. Judson, who visited it in June, 1897, and O. W. Howard and H. J. Lelande, who were there in the summer of 1910. From information furnished us by them we were well posted in advance as to what birds we might expect to find there. We were

also fortunate enough to find several species not noted by either of the above mentioned parties.

We arrived at the lake at about 3:00 P. M. on May 27 and secured permission from the foreman in charge of the adjacent ranch to camp on the shore and pursue our ornithological studies.

We immediately donned our wading apparel and started into the tule beds on our preliminary tour of investigation. By the time we were forced to desist on account of darkness, we had arrived at a general idea of the most favorable nesting localities, and after a hastily prepared supper we rolled up in our blankets to dream of the good things in store for us on the morrow. We arose at daylight on the 28th and occupied that entire day with camera and collecting boxes. By night-fall we had gone over the entire ground with a fair amount of thoroughness, and



Fig. 43. NEST AND EGGS OF LEAST BITTERN

after a good night's rest we packed our belongings and started on our return journey. We arrived at home in the afternoon well satisfied with the results of our trip. The list following comprises all the water birds seen, with notes on their abundance, nesting, etc. A few of the more interesting notes on land birds are also attached.

Colymbus nigricollis californicus. Eared Grebe. About fifty pairs of these birds were found nesting here by A. M. Ingersoll and W. B. Judson on June 8, 1897. We found the birds fairly common and in full summer plumage, but were unable to find any nests; in fact we judged from their actions that they had not yet begun to breed.

Podilymbus podiceps. Pied-billed Grebe. This species was very plentiful and many nests were found. In most cases the eggs had already hatched or were

hatching at the time. One young bird noted had just broken out of the shell and rolled over the edge of the nest into the water. On our approach he made frantic efforts to dive but was unable to get any more than his head under the water.

Hydrochelidon nigra surinamensis. Black Tern. Two birds were seen flying over the lake on the 28th. They gave no signs of breeding and were probably stragglers.

Querquedula cyanoptera. Cinnamon Teal. Very common in pairs feeding in the grass. No nests found.

Spatula clypeata. Shoveller. One or two pairs in breeding plumage were seen. This bird is frequently seen around southern California marshes in mid-summer, and probably breeds occasionally, although authentic nesting records are lacking at the present time.



Fig. 44. NEST AND YOUNG OF WHITE-FACED GLOSSY IBIS

Dafla acuta. Pintail. Fairly common and undoubtedly breeding. Although many of these birds were noted no nests were found, but on the 28th a female was seen with four small young.

Mareca americana. Red-head. Breeding very commonly. We were much interested in the large number of eggs in the sets noted. Four nests found contained, respectively, fifteen, seventeen, eighteen and twenty-seven eggs. This last set was undoubtedly the product of at least two females, as there were seventeen eggs of one type and ten of another. In fact the ten eggs may not be Red-head's at all, as they resemble very much the eggs of the Pin-tail.

Erismatura jamaicensis. Ruddy Duck. Breeding plentifully in the tules. Many nests containing eggs were noted.

Dendrocygna bicolor. Fulvous Tree-duck. Several pairs were seen, but were

apparently not yet nesting. This is one of the latest breeding ducks in this vicinity.

Plegadis guarauna. White-faced Glossy Ibis. In nearly every patch of tules was a nest or two of this species, and in the patch farthest west which covered about a half acre, there must have been at least two hundred nests. They were built on bent down tules, and were composed of tule stalks and lined with marsh grass. They were situated from two to six feet above the water, the average height being about four feet. About half the nests examined contained young and most of the others held badly incubated eggs. A very few fresh sets were found but the height of the nesting season was past. The sets almost invariably consisted of three or four eggs. In one or two instances sets of two incubated eggs were noted, and three nests contained five eggs each, two nests six eggs each, and one nest had seven. It is probable that sets numbering more than five eggs were deposited by



Fig. 45. TYPICAL NEST OF WHITE-FACED GLOSSY IBIS

more than one bird. In fact they invariably showed two different types of eggs. The color of the eggs evidently fades with incubation, as the heavily incubated eggs are a much lighter blue than the freshly laid ones. This is probably the largest breeding colony of these birds in southern California west of the mountains.

Botaurus lentiginosus. Bittern. Rather common but no nests were found. The pumping note of this bird was heard continually, both day and night.

Ixobrychus exilis. Least Bittern. Rather common. Seven nests were found. These contained three sets of five eggs each, one set of which was hatching, one set of four, badly incubated, one set of three, slightly incubated, and one fresh egg. The nests were flimsy affairs, built of small tule stalks and marsh grass, and were placed in the tules from three to four feet above the water. In one case the nest was built on top of an old blackbird's nest. In no case was the bird flushed from the immediate vicinity of the nest.

Herodias egretta. Egret. One bird was seen on a pond at the extreme west end of the lake on the morning of May 29.

Butorides virescens anthonyi. Anthony Green Heron. Two birds were seen flying over the marshes.

Nycticorax nycticorax naevius. Black-crowned Night Heron. Breeding in the tules in small numbers in company with the Ibis. Five nests were found on the 28th, all of which contained young except one, which contained three badly incubated eggs. In one case the young were nearly full grown. These nests were more substantially built than those of the Ibis, and were placed lower down in the tules, being from one to three feet above the water.

Rallus virginianus. Virginia Rail. One bird seen on the 28th.

Fulica americana. Coot. Nesting abundantly. Many young birds were noted and several nests containing fresh eggs were found. One thing that impressed us as being very strange was the fact that no nests of the Florida Gallinule (*Gallinula galeata*) were found nor were the birds seen. This bird, which breeds so commonly in many parts of southern California in company with the Coot, was, if not entirely absent, at least very rare.

Oxyechus vociferus. Killdeer. Common along the shores of the lake.

Aluco pratincola. Barn Owl. Fairly common in the more dense of the tule thickets.

Chordeiles acutipennis texensis. Texas Nighthawk. We both agreed that we had never seen this species so abundant as it was in this vicinity. In the evening they were noted in great numbers catching insects over the surface of the lake.

Cypseloides niger borealis. Black Swift. On the evening of May 28, a little before sunset, a flock of eight or ten of these birds circled over our camp for several minutes. They were close enough to allow us to positively establish their identity.

Yellow-headed, Tricolored and San Diego Red-wing Blackbirds were nesting abundantly in the tules. Fresh eggs were found and full grown young were noted.

FIELD NOTES FROM SOUTH-CENTRAL CALIFORNIA

By H. S. SWARTH

WITH ONE PHOTO

IN PURSUANCE of the investigation into the mammal fauna of the San Joaquin Valley which the Museum of Vertebrate Zoology of the University of California undertook during the past spring (see Grinnell, CONDOR XIII, 1911, p. 109), the writer of this spent in the field the time from May 5 to June 6. Though mammal collecting was the prime object of the expedition, a few birds were also preserved, while notes were kept on all the species encountered; and it seems worth while to place on record some of the scattered information acquired regarding the details of distribution of certain of the species met with in the region we traversed.

During this last month of the expedition collecting was carried on at four points: at Bakersfield and McKittrick, in Kern County, and at Simmler and Santa Margarita in San Luis Obispo County. At Bakersfield our camp was established in the hills about eight miles north of the town, at the western edge of the oil field. These hills, carrying a sparse growth of grass, are otherwise almost entirely devoid