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

N 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

of vegetation, but we found some small areas scantily covered with low brush. At this point I found the Sage Thrasher (*Oroscoptes montanus*), Leconte Thrasher (*Toxostoma lecontei*), California Sage Sparrow (*Amphispiza nevadensis canescens*), and Brewer Sparrow (*Spizella breweri*).

Two Leconte Thrashers were secured on May 7, an adult male and a juvenal male, the latter with wing and tail feathers not yet at their full length, and undoubtedly hatched somewhere in the immediate vicinity. These were all of the species that were met with. On May 13 two Sage Thrashers were seen in the same vicinity, and one of them, an adult male, was secured. The Sage Sparrow and Brewer Sparrow occurred wherever there was any brush, but, from the nature of the surroundings were not plentiful. Both species were remarkably shy and hard to approach, but could frequently be heard singing in the distance.

Two rather hurried visits to the willow-covered river bottom just outside the town of Bakersfield, on May 6 and 10, disclosed the presence, in large numbers, of such species of birds as are found in similar situations throughout southern California—Vireo pusillus, Guiraca caerulea salicarius*, Zamelodia melanocephala, Buteo lineatus elegans, Pipilo maculatus megalonyx, and others. Song Sparrows (Melospiza melodia heermanni) were exceedingly abundant, and specimens of both adults and young were taken. There were a number of Dwarf Cowbirds (Molothrus ater obscurus) flying around. The males were going through the usual courting antics, uttering their ridiculous squeaky "song", and strutting about with raised wings and spread tail, and there can be no doubt that they were breeding in the vicinity. Specimens were secured.

Our second station was at McKittrick, where we remained from May 17 to 22, all our collecting being done within two miles of the town. McKittrick is at the edge of the hills, on the extreme south-western border of the San Joaquin Valley. The surrounding country is much more densely covered with brush than at Bakersfield, but there is practically no water except such as is pumped from deep wells, and consequently no agriculture anywhere in the region. Several Leconte Thrashers were seen here, and two secured, a full grown juvenal on May 18, and an adult on May 21. Birds were few in numbers at this point, about the commonest species being the California Sage Sparrow (Amphispiza b. canescens), which was distributed in moderate numbers through the chaparral.

May 22 to 29 were spent at Simmler, on the "Carrizo Plains", a little valley some twenty miles west of McKittrick, and separated from the San Joaquin Valley by a range of hills rising to a height of about 4000 feet. It is an intensely uninteresting region ornithologically, for practically the only vegetation is the covering of "fox-tail" and "broncho grass" that extends uninterruptedly for miles, and consequently the only common bird is the Horned Lark (Otocoris a. actia), which finds peculiarly congenial surroundings here. Nearly all the other species observed were in the immediate vicinity of ranch houses, where tracts of cultivated ground, together with the planted shade trees and the buildings, gave shelter to various birds. At the Pimental Ranch, where we were staying, an Arkansas Kingbird (Tyrannus verticalis) had built its nest on a gate post, where it was revolved part way around several times a day, as the gate was opened and shut. Another of this species placed her nest in the yard, on one of the telephone poles peculiar to this A post is driven into the ground and two narrow strips of board nailed, one on each side, the upper ends of which, fastened together, support the wire. The nest was placed on the post, between the two sheltering strips, just such a structure as the shrike's nest described in the May Condor (page 111), from the neighboring San Joaquin Valley. This nest was only about three feet from the

^{*} See Grinnell, Proc. Biol. Soc. Wash., xxiv, June 16, 1911, pp. 163-164.

ground, and not more than ten feet from the bench by the house, where six or eight men washed three times daily, each time considering it their duty to see how the Kingbird's family duties were progressing. In spite of this scrutiny the eggs hatched before we left, and there was every prospect that the young would prosper.

I had occasion to visit the Painted Rock at the south end of the valley, on May 26 and 27, and found a surprising number of birds there, the more strikingly so after the long dreary drive over dusty roads, with but little to see except the everlasting Horned Larks flitting persistently along before the horses.

The rock rises abruptly from the surrounding plain to a height of about 100 feet, and is something of a local landmark, partly from its conspicuousness, and partly from the Indian paintings with which it is decorated. A colony of at least a hundred pairs of Cliff Swallows (*Petrochelidon lunifrons*) was the most conspicuous feature of the avian population of the rock, many times that number of nests being plastered thickly on its east face. With them were several pairs of White-throated Swifts (*Aeronautes melanoleucus*). A nest of Say Phoebe (*Sayornis sayus*) with four eggs, was found on a little sheltered shelf, and a second pair of the birds seen. Several pairs of House Finches (*Carpodacus mexicanus fron-*

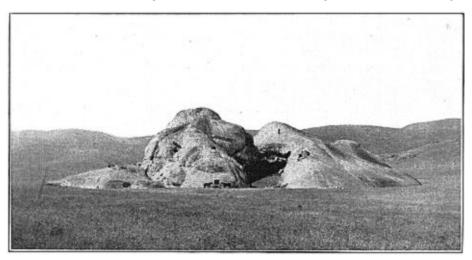


Fig. 46. PAINTED ROCK, CARRIZO PLAINS, SAN LUIS OBISPO COUNTY, CALIFORNIA

talis) flitted about, bunches of straw protruding from various cracks showing where their nests were. A Raven (Corvus corax sinuatus) flew croaking from her nest on a ledge near the top of the rock, but it was in too inaccessible a spot to be reached very easily. The only additional species observed was the Arkansas Kingbird, but I found unmistakable feathers of Barn Owl (Aluco pratincola), Prairie Falcon (Falco mexicanus), and a large hawk, probably Buteo swainsoni. At a ranch house about a mile from the rock a pair of Bullock Orioles (Icterus bullocki), and a number of English Sparrows (Passer domesticus) were seen.

A few water birds were seen about a small fresh water pond by the roadside—three Night Herons (Nycticorax n. naevius), an Avocet (Recurvirostra americana), several Killdeer (Oxyechus vociferus), and a flock of about thirty Northern Phalaropes (Lobipes lobatus). Two of the latter secured were in full breeding plumage, as the entire flock appeared to be. At a subsequent visit to the pond a few days later, the Avocet, Herons and Killdeer were still there, but the Phalaropes had nearly all departed, only about ten remaining, so they were probably still migrating, even at this late date.

In the belt of low brush surrounding the "soda lake" in the center of the valley there were a few California Sage Sparrows breeding, and also a few Brewer Sparrows. I found one nest of the former containing three newly hatched young on May 25. An adult and a full grown juvenal collected here, are unmistakably Amphispiza n. canescens.

Driving westward from Simmler to Santa Margarita we passed quickly into a well wooded and well watered region, with a correspondingly abundant and varied bird life. At the San Juan River we entered groves of large oak trees, harboring such species as the California Woodpecker (Melanerpes f. bairdi), California Jay (Aphelocoma californica) and Bluebird (Sialia mexicana occidentalis). Near Poso at the head of the Salinas River, a few Song Sparrows (Melospiza m. santae-crucis) appeared, seen thereafter in suitable places along the road, and, in some numbers, in the vicinity of Santa Margarita. The last Song Sparrow we had seen had been at Bakersfield, where heermanni was abundant. As seen from the car window, suitable country for the species extends westward from that point, with some interruptions, as far as Buttonwillow. From Buttonwillow to Poso is a gap of about fifty miles, where, from the almost total absence of water, no song sparrows exist.

At Santa Margarita we found more species of birds and a greater number of individuals by far than at any other point visited by the expedition. The varied nature of the surrounding country—willow-bordered stream, brush-covered hills, and the rolling valley, thickly dotted with live oaks—produces a correspondingly varied avifauna, and our list of species observed was a long one, considering the short time spent at this point, May 30 to June 6.

The Yellow-billed Magpie (*Pica nuttalli*) was abundant in the hills south of town, where adults and young were secured. In the San Joaquin Valley this species had been encountered at just one place during the three months of collecting: at a point some ten miles northeast of Los Banos, Merced County (the San Luis Ranch), where I saw four on March 21, and again on March 23. I was told that they were abundant in the immediate vicinity, but the country was flooded at the time, so as to be inaccessible.

Other species observed in the immediate vicinity of Santa Margarita, and at what would seem to be a low altitude (998 feet) for them during the breeding season, were the Blue-fronted Jay (Cyanocitta stelleri frontalis), Thurber Junco (Junco oreganus thurberi), and California Pigmy Owl (Glaucidium gnoma californicum), specimens of the two former being collected. Additional birds seen at this point were Western Martin (Progne subis hesperia), Cliff Swallow, Violetgreen Swallow (Tachycineta thalassina lepida), Slender-billed Nuthatch (Sitta carolinensis aculeata), Hutton Vireo (Vireo huttoni), Lutescent Warbler (Vermivora celata lutescens), Lawrence Goldfinch (Astragalinus lawrencei), California Woodpecker, Nuttall Woodpecker (Dryobates nuttalli), Willow Woodpecker (Dryobates pubescens turati), Red-shafted Flicker (Colaptes c. collaris), Western Bluebird, and Cooper Hawk (Accipiter cooperi).

Most of these were seen under such circumstances as indicated without a doubt that they were breeding; considering the time of year it is fair to assume that practically all were.