were identical with the normal species. The set measures 1.07 x .75, 1.06 x .75, .81 x .59, .75 x .59.

A trip was taken on June 11 to Deerington's, on the summit near Phillips' Station. It was late in the afternoon when I reached the lonely little cabin about which the ground still lay hidden beneath deep snow. On the following day a nest of the Western Robin (*Planesticus migratorius propinquus*) and a nest of the Sierra Junco (*Junco oreganus thurberi*) were found. That of the robin was noteworthy only in that it contained a runt egg. The set of three eggs measures 1.18 x .78, 1.16 x .81, .97 x .75. The nest of the Junco was placed under a a little overhanging shelf of earth made by a snow-brook and composed of weed stems and grass and lined with horse and other mammal hair. It held four slightly incubated eggs. So well concealed was it that it would have remained undiscovered had not the sitting bird fluttered off.

The following morning two more nests of the Western Robin were found, one with three fresh eggs, the other with the unusual complement of five, well along in incubation. The nests were placed in pine and fir trees and deep snow lay beneath them. Near the cabin I observed a Western Tanager (*Piranga ludoviciana*) engaged in building a nest forty feet up in a tall lodgepole pine. As the ornithological prospect, owing to the lateness of the season, did not appear favorable, however, I availed myself of an opportunity to ride back to Bijou, which I reached early in the afternoon.

On June 15 along the lake shore near Bijou, a nest of the Spotted Sandpiper (Actitis macularius) was found with three eggs well advanced in incubation. The nest was placed among wire grass, and was a slight depression lined with grasses and stems. Mr. Richard Duttke found another nest of this bird in a like situation during the first week of July, of which he secured a photograph.

Two nests of particular interest, being the first of this species I had found on the floor of the valley, were noted on June 19. These were of the Sierra Hermit Thrush (Hylocichla guttata sequoiensis), and both were placed in thickets of lodgepole pine saplings eleven feet up. One held four eggs about to hatch, the other four half grown young. These were the first nests of this bird I have found below 7000 feet altitude. On June 21 preparations were made for the trip to Washoe Lake, Nevada, which has already been described in a previous number of The Condor.

NOTES FROM BUENA VISTA LAKE AND FORT TEJON

By CHESTER LAMB and A. BRAZIER HOWELL

N JUNE 6, 1912, we left Los Angeles by automobile for a visit to Buena Vista Lake, situated in Kern County, and for old Fort Tejon, in the Tejon Mountains. Considerable interest is attached to the latter place, because it is the type locality of several of our birds, and because of the extensive work done there by Cooper, Xantus and others.

Shortly after noon on the 7th we arrived at the lake. The intervening time will not be itemized as it was filled in mostly with tire trouble, owing to our having failed to carry proper supplies of the appropriate kind. The lake, some thirty miles southwest of Bakersfield, we finally reached after having been misdirected half a dozen times. On the east side it is flanked by a high levee, and

it was not until we had reached this that we were aware that our journey was over for the time being. It is a shallow artificial lake eight or ten miles long by four wide. In the winter it and the extensive marshes and fields adjacent teem with ducks and geese. Here, as it is all free hunting ground, professional hunters get in their deadly work. They are there to kill, and easily find means to evade the law. One hunter who lives there told us of the great numbers of Western Grebes (Aechmophorus occidentalis) that had been taken, and he openly stated that he never missed a chance to take a grebe. During our stay not a single bird of this species was seen.

A short distance from the lake, tules are found growing in the roadside ditches and here occurred many Red-wings—hybrids between A. p. neutralis and A. p. californicus. There were also countless numbers of Arkansas Kingbirds (Tyrannus verticalis), and their nests were to be seen in about every fourth one of an unusual type of telegraph pole. About eight feet up where two boards came together was a shady notch, and here the nests were situated. It was surely extraordinary to see the number of these nests for miles along the roads. Western Blue Grosbeaks (Guiraca c. luzula) were very numerous also on the telephone wires, where the neighboring fields contained a rank growth of nettles, and specimens were obtained grading from the soberly dressed males of the first year to those in the brilliant blue of full maturity.

We located our camp in a deserted shack on top of the levee where we could get the benefit of the scant supply of wind, and where we could be com-

paratively free from the torments of mosquitoes.

While searching for a camping site, a pair of Long-billed Curlew (Numenus americanus) was flushed,—the only ones seen on the trip. In the immediate vicinity of the lake, hordes of Tri-colored Red-wings (Agelaius tricolor) had their abode, with an occasional hybrid Red-wing, but the latter seemed to prefer the country farther back from the lake.

The following morning we were up and away in two metal rowboats before daybreak, bound for Pelican Island some three miles away. This we were soon approaching, which in the distance with the sun shining on it, looked like an enormous sheet striped black and white. This effect we soon discovered was caused by the combination of White Pelicans (Pelecanus erythrorhynchos) and Farallon Cormorants (Phalacrocorax a. albociliatus),—the latter being nearest the shore while the former were farther up on the island. The Cormorants rose first in a body and began circling overhead, but it was not until we were within a hundred yards that the Pelicans awkwardly and uneasily flopped into the air, kicking frantically. They settled far and near on the lake in companies and battalions, while some would return every few minutes to wheel low above us and see what we were up to. Several flocks could be seen at their favorite pastime of floating as mere white specks high up in the heavens.

We found the lake to be exceedingly shallow at this time and one could wade in it almost anywhere in from six inches to two feet of water, though there were a few deeper places. The bottom is of adobe and it is the particular delight of the large carp that infest the lake, to lie in the shallows with their backs sticking out and wallow violently in the ooze. Pelican Island, however, is formed of fine gravel and bits of broken shell.

We estimated that there were six hundred occupied nests about equally divided between the Pelicans and Cormorants. The former had apparently preempted the middle and higher part of the island, while the latter were nesting closer to the water. The nests of the Cormorants were usually well constructed,

but those of the Pelicans ranged from carefully made nests of sticks and trash, and large mounds of gravel with a depression in the top, to mere hollows in the earth. Those of conical form are evidently formed by the old bird first squatting on the chosen spot, and drawing gravel up to her by means of her bill until she has collected a pile of it under and around her large enough to suit her fancy. In some cases eggs had not yet been deposited, and many nests held three eggs,—the greatest number found in any nest; but by far the larger proportion held two eggs. The loss in eggs must have been very great as there were a hundred or so scattered promiscuously around the ground. They were in all stages of incubation. We saw no young at this date, though in examining eggs we could frequently hear the young birds peep.

A charge of number eight shot easily stopped a bird, when with set wings he came down as if for a dive, but the shock of hitting the ground killed him instantly. Another was only winged and it was curious to see how light a tap on the head was enough to give him his coup de grace. Most of the queer horny protuberances on the bill which these birds wear during the nuptial season had been shed, though many still had an inch or so of it loosely attached. As everyone knows who has skinned a Pelican, there is a mass of air cells between the surface skin and the body nearly three quarters of an inch thick which can be inflated at will, and which no doubt accounts for the easy flight and wonderful soaring of this ungainly bird. Their method of securing fish is interesting and almost shows brain work. Just after dark and frequently during the night, loud splashings could be heard. This we found to be caused by the Pelicans forming in line out in the shallows and then starting shorewards with much flapping of wings on the water in order to drive the fish where the water was shoal enough for them to be easily caught by the birds. In fact this is the only method of fishing that they could employ, for the water is neither clear nor deep enough for them to follow such diving tactics as are adopted by P. californicus on our coasts.

On one end of the island not occupied by the above two species, several pairs of Avocets (Recurvirostra americana) had set up housekeeping, and they evinced much anxiety as we approached their nests. We did not see any young, but although we did find a few incomplete sets, most of the eggs seemed to be heavily incubated. Another find was a set of three peculiarly marked eggs of the Kildeer (Oxyechus vociferus); and although no nest was encountered, several Snowy Plovers (Aegialitis nivosa) in full breeding plumage were trotting about with a knowing air. A mile away on another mud bank were several more nests of Avocet, and here was congregated a flock of some thirty immature Bonaparte Gulls (Larus philadelphia). Near here we noted a few California Gulls (Larus californicus)—some adult, but most in the juvenile plumage.

Near the eastern end of the lake was a little mud islet, scarcely a dozen feet wide and well sheltered by tules, on which we estimated that there were fifteen nests of Avocets and forty of Black-necked Stilts (Himantopus mexicanus). These birds seemed to consider themselves one large family, as many nests contained five, six, seven or eight eggs—the product of more than one female of course, and we even found eggs of both Stilts and Avocets in the same nest. The lake had evidently risen a little, as several nests were awash. The majority of eggs seemed to be far advanced in incubation and no doubt a large number escaped the rise of water. Our visit aroused great consternation and the Avocets swooped down upon us in true tern fashion, uttering their cry which sounds very similar to that of the Western Gull when disturbed.

Black-crowned Night Herons (Nycticorax n. naevius) swarmed in the

tules, and their eggs or newly hatched young no doubt figured prominently on the menu of many very large repellant looking snakes, which at any time might be seen sunning themselves on the broken down tules.

Great Blue Herons (Ardea h. herodias) were very abundant and wary as usual. A single Anthony Green Heron (Butorides v. anthonyi) was seen, and on the 9th, three white birds were noted flying far overhead—evidently Egrets (Herodias egretta). The week before, a bird of this species was killed by a professional hunter.

There were several Caspian Terns (Sterna caspia) about, but they did not seem to be interested in any one locality, which was quite the opposite of what was expressed by a number of Forster Terns (Sterna forsteri); for the latter showed great uneasiness whenever we approached the spot where they chanced to be fishing. Black Terns (Hydrochelidon n. surinamensis) were numerous, monotonously flying back and forth over a certain stretch of marsh, but they did not act as if they were nesting.

Between Kern and Buena Vista lakes there are very extensive swamps, and this is evidently a paradise for water fowl, but on account of interrupted sloughs, tules, et cetera, it is very difficult to work, and it can only successfully be done with the aid of a light canoe. Months could interestingly, profitably and uncomfortably be spent here. A trip up the river to the marshes proved to be a full day's work, and what with frantically rowing against a swift current and wading half of the time up to our necks in mud and water, not much collecting was done. We found Fulvous Tree-ducks (Dendrocygna bicolor) and White-faced Glossy Ibis (Plegadis guarauna) in some numbers but they did not evince any interest in us except to keep well out of range. As far up the river as we went, every tree had its full share of Black-crowned Night Heron's nests, while the grove of water-killed trees in the mouth of the river was crowded with their nests and those of the Cormorants. Many Great Blue Herons were perched about; but as to their nesting we cannot say, as we had no desire to climb such unstable looking snags.

A fact which impressed us was the great scarcity of ducks other than Ruddies (*Erismatura jamaicensis*). With the exception of these and Fulvous Treeducks hardly a score of other individuals were seen at the lake. These were straggling Pintails, Shovellers (*Spatula clypeata*), and Green-winged Teal (*Nettion carolinense*.

On the 11th we started for Fort Tejon, arriving at our camping ground among the oaks and beside a pretty little waterfall in time for a full afternoon's work. We made good use of this waterfall in removing the alkali of Buena Vista.

Cassin and Western Warbling Vireos (Lanivireo s. cassini and Vireosylva g. swainsoni) and Lazuli Buntings (Passerina amoena) were especially numerous by the stream, and a number of nests of the latter were located within a small space among the weeds. A Black-chinned Hummingbird (Archilochus alexandri) had her nest right at our front door and seemed in no way disconcerted by our presence.

Between our camp and the ruins of the Fort was as magnificent a grove of giant white oaks as one could wish to see, with undergrowth strongly suggestive of an eastern woods. Below, the floor of the canyon is well watered and wooded, with oak-studded grassy flats at the sides. In such a favorable spot it is small wonder that we found birds to be unusually plentiful both as to species and individuals.

Families of Westen Bluebirds (Sialia m. occidentalis) were much in evidence. The Picidae, represented by Cabanis (Dryobates v. hyloscopus), Willow (Dryobates p. turati), Nuttall (Dryobates nuttalli), and California (Melanerpes f. bairdi) woodpeckers and Red-shafted Flickers (Colaptes c. collaris) were busy among the oaks and cottonwoods. In a grove of pines well up the side of the canyon, a pair of Golden Eagles (Aquila chrysaetos) were guarding a couple of great nests, one at the top of a tall pine, and the other half way up in the same tree. We did not ascertain which nest was occupied, as neither of us felt equal to climbing the tree. Other old friends were two pairs of Thurber Juncos (Junco o. thurberi), and many Slender-billed Nuthatches (Sitta c. aculcata), two full grown young of the latter being secured, and a nest full of youngsters located in a knot hole. Western House Wrens (Troglodytes a. parkmani) seemed to be as thick as bees, and it was but rarely that a likely looking stub could be passed without arousing keen interest in one of these diminutive songsters.

We saw but a single Long-tailed Chat (*Icteria v. longicauda*) and one Traill Flycatcher (*Empidonax t. trailli*).

Black-headed Grosbeaks (Zamelodia melanocephala) were singing in the canyons; and an occasional California Towee (Pipilo c. crissalis) was noted.

A cold wind arose during the night of the 12th, bringing rain, so, as there was no sign of the gale abating, we broke camp the next day. Four miles above Tejon, at about four thousand feet, we met a Lewis Woodpecker (Asyndesmus lewisi), and during an hour's stay at Lake Castac several more were seen. The lake was unusually high, and besides the ever present Coots (Fulica americana) and Ruddies, four Pintails and a number of Eared Grebes (Colymbus n. californicus) were observed. Northern Violet-green Swallows (Tachycineta t. lepida) were darting about the shores, and on a large dead oak were many Western Martins (Progne s. hesperia), no doubt nesting in the many holes in this tree. This was the only place where the above species was seen.

Our next breathing spell was in the yucca forest of Antelope Valley, where the bird life was very scarce as to species, for it consisted almost exclusively of Linnets (Carpodacus m. frontalis), an occasional Arkansas Kingbird and a few Western Lark Sparrows (Chondestes g. strigatus). Mr. Lamb here succeeded in obtaining two close views of a Scott Oriole (Icterus parisorum), which, however, he was unable to secure.

It might not be amiss to insert here a few mammal notes, or rather an observation on the Valley Coyote (Canis ochropus). While passing through a particularly level region, the wind blew off a sun-helmet which one of us was wearing, and took it bounding and rolling over the short grass at an amazing speed. Upon heading it off in the machine and then making a regular football tackle at it, it was secured. A Coyote was regarding this scene with, we imagine, rather amused contempt. Our sporting blood being aroused by the pursuit of the hat, we decided to give the animal a run also, and accordingly started in his direction. This move interested him but mildly until a charge of number eights at long range helped his decision. He made for a rise of ground, and because of the grade and rough going we were unable to do better than thirty miles an hour. At this speed he seemed unable to gain on us, and after reaching the crest of the hill we began drawing up on him. Due to the untimely interference of a barbed wire fence he managed to escape, but not without taking a few more leaden souvenirs with him.

We reached Elizabeth Lake about two o'clock and spent the rest of the day

in the lee of a strip of willow scrub, combating the wind and preparing specimens. We heard some Fulvous Tree-ducks while here, and saw half a dozen Farallon Cormorants, many Ruddies, a few Redheads (*Marila americana*) and quite a number of unidentified ducks.

An early start the next morning enabled us to reach Los Angeles before nine o'clock.

NOTES ON CERTAIN KANSAS BIRDS

By ALEX WETMORE

THE EFFECT of the severe winter of 1911-12 on bird life in eastern Kansas is shown by the great scarcity the past fall (1912) of Dryobates p. medianus, heretofore one of the most common birds. In the vicinity of Lawrence, from October 12 until November 10, only three of these birds were seen, while in previous years it was nothing unusual to see thirty, forty or even more during a day spent along the streams, and in the creek bottoms. After the tenth of November, at which time weather conditions became more severe in the north, the cold extending even to Kansas, these birds became fairly common again, migrants arriving from the north to spend the winter in the comparatively warm climate of this region.

From these observations we may deduce that, in the area under discussion, there are two groups or "races" in the subspecies *Dryobates p. medianus*: the one purely resident and local, and the other composed of migrants from the north, each being distinct, though inseparable apparently in terms of color or relative measurements. The local, or strictly resident, downy woodpeckers then were almost exterminated by the long-continued cold, protracted storms, when the trees were sheathed in an icy coat, and deep snows of the winter, while the northern birds found in this region merely as winter visitants—birds that of necessity must be considered stronger and more hardy—escaped with fewer mortalities, and were in the spring enabled to return northward and recoup their numbers.

It was interesting also to observe the change in relative abundance in the larger woodpeckers. Dryobates v. villosus, usually found in small numbers, was actually common, and Colaptes a. luteus likewise had greatly increased. Centurus carolinus on the other hand had decreased, being absent from many localities where it was formerly common. The latter is here a strictly resident species, there being no change in its relative abundance between winter and summer, while the other two species have their numbers considerably augmented by migrant birds from the north in the late fall. The larger Dryobates and Colaptes, then, seem better able to cope with the stringent conditions imposed upon them and even to increase, perhaps in the case of the Hairy Woodpecker, through being relieved of competition with the smaller species of the same genus.

Certain other species were affected noticeably also, for example *Thryothorus ludovicianus*. Since 1905, when observations were begun by the writer in the immediate vicinity of Lawrence, this species has been increasing in numbers, pushing back into the hills, following the brush-covered creek banks, and dry ravines, and steadily, year by year, encroaching upon new territory. During the