

7:15 P. M. Here the following morning, the weather clearing somewhat, we spent the forenoon in the field, recording some interesting notes on *Melospiza lincolni* and other birds. The trip ended at Bijou which was reached at dusk.

TABLE SUMMARIZING SEASON'S EXPERIENCE WITH THE CALIFORNIA PINE GROSBEAK

DATE	BIRDS	FOUND BY	LOCALITY COVERED	ELEV. COVER'D	MIL'GE for ALL
June 11	1	Ray	Deerington's	7000 to 7600	20
" 12	3	All	Phillips'	7250 to 6900	3
" 12	1	Littlejohn	Deerington's	6900 to 7250	7
" 13	2	Ray	Pyramid Peak Plateau	7000 to 7600	24
" 14	5	"	" " "	7250 to 8000	28
" 15	2	"	Slope of Pyramid Peak	7500 to 9250	45
" 16	1	"	Pyramid Peak Plateau	7000 to 7600	40
" 16	2	"	" " "	7250 to 7600	5
" 17	0	—	Plateau and Peak	7500 to 10,200	30
" 18	0	—	Pyramid Peak Plateau	7250 to 7600	20
" 19	0	—	" " "	7250 to 8500	45
" 20	1	Heinemann	Plateau and Peak	7000 to 8500	25
" 21	0	—	Phillips'	7000 to 7600	20
<i>Total Birds</i>					<i>Total Mileage</i>
18					312

Next morning a wild snow-storm broke over the whole region, lasting three days and draping valleys and mountains in a wintry mantle. Littlejohn and Heinemann fled away to lower altitudes while I, lounging before the pleasant log fire in the Bijou Post Office, whiled away the time reading Whittier's "Snow Bound", while the storm raged without. At times, when the clouds lifted, I could see Pyramid Peak far distant and snowy, and I thought, with no regret, of the dreary prospect doubtless now in view from the windows of the Forni cabins.

NOTES FROM TODOS SANTOS ISLANDS

By A. B. HOWELL .

TODOS SANTOS consists of two main islands a hundred yards apart. The southernmost one is the larger, being a mile and a quarter long, half a mile wide, and three hundred and thirteen feet high, while the one towards the north is but half a mile long, a quarter of a mile wide, and fifty-five feet high. They are surrounded by numerous small outlying rocks and beds of kelp, and are in general similar to the smaller islands off the southern California coast, being almost barren of vegetation. They are opposite Ensenada Bay, and although but three miles from Banda Point, a narrow rocky headland jutting out to sea, they are some ten miles from the general coastline. Because of their proximity to the mainland, one would not expect to find a large variety of unusual stragglers which have become lost in migration, as is the case on the Farallones for instance, and the avian visitors seem to consist of prosaic migrants that are to be found in abundance farther north.

My visit to the islands was from April 15 to 20, 1910, too short a time to be able to record a long list of species, but some few interesting things were noted.

As far as I could discover there were no cats or foxes on the islands, and the rats can increase and multiply almost indefinitely. The place is alive with them,

and still more so with fleas, making a stay in the locality a perfect nightmare. One has but to stand still for a moment and upon looking down, dozens of the little pests are to be seen crawling up one's legs.

A number of Cassin Auklets (*Ptychoramphus aleuticus*) and a specimen each of Xantus Murrelet (*Brachryamphus hypoleucus*) and Black Petrel (*Oceanodroma melania*) were seen on the way from Ensenada. I searched diligently for nests of the two former species, and was convinced at the time that no small sea-birds bred upon the islands because of the plague of rats, but on April 25, 1912, Mr. George Willett found several nests of Cassin Auklets, which proved that they do breed there in limited numbers.

Larus occidentalis. Western Gull. These had finished the construction of their nests in several small, well-defined colonies, and were jealously guarding them, either singly or in pairs, from the thievery of their neighbors, but no eggs had been laid when I left.

Larus heermanni. Heermann Gull. A few seen.

Sterna maxima. Royal Tern. Two noted.

Puffinus griseus. Sooty Shearwater. As we were steaming past the islands down the coast April 12, vast flocks of what I took to be this species were seen flying half a mile out to sea.

Phalacrocorax auritus albociliatus. Farallon Cormorant. Nests of this bird and the pelican were commingled in two colonies on the south island. Only a very few birds visited the rookery during the first two days of my stay, but by the last day flocks of them were coming in from the sea, and standing about the old nests; and an individual could occasionally be seen carrying seaweed.

Phalacrocorax penicillatus. Brandt Cormorant. Many old nests were located in the niches of the low cliff along the shore, and the birds were common on the surf-washed rocks, but they showed no signs of breeding yet. On a rock twenty miles farther south some of these birds had eggs.

Pelecanus californicus. California Brown Pelican. A few of these also were to be found inspecting the old nests, but here at least no eggs had been deposited. On the farther end of the north island, however, there was a very large colony, as could be seen by the birds in the air. The fishermen informed me that the pelicans had eggs there at this date. I wish to describe here the actions of a flock of these birds, evidently from Todos Santos, which I witnessed April 13 some fifteen miles down the coast. I saw the same thing several times during 1910, but to a less marked degree. Having done no work on any of the islands during the fall I am unable to state whether this is a form of nuptial or courtship flight, but should judge this to be the case. At four o'clock I noted a very large flock of pelicans feeding, and shortly afterwards the school of fish which they were pursuing left. Some of the birds settled down upon the water while others began circling in the air on motionless wings. A moderate breeze was blowing. Singly the ones in the water took wing and joined the circling throng until there must have been a hundred and fifty birds in the air, forming an irregular but clearly defined column or rather cylinder, some hundred yards in diameter. Gradually some birds mounted higher until they were specks in the sky, while others were but fifty yards above the water. More than an hour elapsed between the start and finish of this flight. The flock remained over almost the same spot, and at no time did a bird show indications of diving or looking for fish. Their soaring was very even, and I noticed no flapping at

all after a bird was fairly launched. Slowly, as darkness approached, the pelicans left towards the north, singly or in twos and threes.

Heteractitis incanus. Wandering Tattler. Lone birds were rather common.

Arenaria melanocephala. Black Turnstone. Present in small flocks.

Haematopus frazari. Frazar Oystercatcher. Rather common and found usually together with the following in small flocks of from two to six individuals.

Haematopus bachmani. Black Oystercatcher. Outnumbering the last about two to one. April 13 I met one of these birds flying north some six miles from the coast.

Haliaeetus leucocephalus. There was a nest of this species, as there has been for a great many years, part way up a cliff with very much of an overhang at the top. As far as I can ascertain no one has ever been able to see the inside of this nest. It probably contained eggs at this date, but I was told that a taxidermist who had visited the islands the week before had killed one bird and wounded the other.

Falco peregrinus anatum. Duck Hawk. The resident pair did not seem to hunt in the immediate vicinity, but when foraging for food one would start out over the sea towards the northeast and be away about an hour and a half before returning with what I took to be a Cassin Auklet. This fact is another indication that no small pelagic birds breed here, for if such had been the case, the falcons would have done more patient waiting on the commanding promontories, as I have seen them do in other localities where the auklets breed. I found the nest of this pair April 16, situated on a "sugar loaf" three hundred feet above the sea. The four eggs, incubated two thirds, were placed in a small hollow formed by the birds, in the soil of a deep ledge, with no protection from above. The ascent was not by any means easy but was negotiated without the aid of a rope. This was the most graceful and fearless pair of Duck Hawks that I have ever seen. They paid not the slightest attention to me, in plain view below the nest, but when I approached with evil intent began tactics that made me thankful for my hat. Although they actually only brushed my head with their wings, this was enough, as both hands and feet were occupied in climbing. I watched one bird return to the nest with food on several occasions, and each time its mate flew to meet it with a great outcry, turning belly upwards in mid-flight to receive the food, too lightly and gracefully for description. Twice she let the morsel drop, purposely, I am convinced, tumbling and diving after it to recover herself and her meal fifty feet above the water. Again I saw one go headlong into a slow-moving flock of gulls just for the fun of surprising them, only to flee, shrilly screaming in mock fright before a pursuing Larus.

Pandion haliaetus carolinensis. Osprey. But one pair of these birds were present, in possession of one of the five old nests. One of the birds was usually to be seen perched on the edge of the nest, but no eggs had as yet been deposited. Intermittently for several weeks preceding and succeeding this time, I was visiting points along the coast from twenty miles above to thirty miles below Ensenada. In all I stopped at fifteen different places, making four round trips, and, in our boat, skirting within a couple of hundred yards of the shore between points. Several dozen old nests were encountered within this territory but not a single bird of this species did I see, with the exception of the above pair. I cannot account for this in any way, for the old nests prove that they were abundant at no distant date, and they are now subject to no more persecution than

ten or even fifty years ago, as most of this stretch of coast is not only uninhabited but almost entirely unvisited.

Aluco pratincola. Barn Owl. April 16 I found a nest in a deep cleft of the rocks, twenty feet above the sea, which contained a single nestling two-thirds grown. This site was newly occupied, but on a ledge four feet above the floor of a cave on the higher ground was a nest that must have been used for generations. Beneath it was a pile of refuse and pellets two or three feet high.

Colaptes cafer collaris. Red-shafted Flicker. One of these birds was making himself very much at home on the hillsides. As there was no tree or bush higher than four feet upon this island, he seemed rather out of place. Either this bird or another one must have been here the year before, as there was a weather-worn feather in an Osprey's nest that showed no signs of having been repaired recently.

Phalaenoptilus nuttalli californicus. Dusky Poorwill. A single bird was flushed twice during the bright part of the day. Not seen or heard at dusk.

Aëronautes melanoleucus. White-throated Swift. Along the backbone of the island were a number darting to and fro.

Calypte anna. Anna Hummingbird. Several seen.

Selasphorus rufus. Rufous Hummingbird. A single Selasphorus permitted a close enough view for me to be fairly sure that it was this form.

Tyrannus verticalis. Arkansas Kingbird. Two pairs had staked off their claims and were standing guard to keep off intruders. They showed every indication of intending to remain and raise a family in some scrubby brush later on.

Sayornis nigricans. Black Phoebe. A pair was seen daily about a rocky strip near the shore.

Myiochanes richardsoni. Western Wood Pewee. One of these birds, looking very much out of place, was seen on the eighteenth.

Corvus corax sinuatus. Raven. Several of these kept vigilant watch over camp. Occasionally they could be seen surreptitiously sneaking into certain holes along the cliff.

Carpodacus mexicanus clementis. San Clemente House Finch. This species presented a rather interesting problem. On the northern end of the south island nesting was far advanced. Only a couple of nests were found containing eggs, these almost on the point of hatching, while perhaps a dozen were found with young in all stages, the oldest of which flew out of the nest when I became too familiar. On the southern end, fresh eggs and incomplete sets were the rule, no young at all being noted. The difference was most pronounced and exactly contrary to what one would be led to expect, for at the northern end the slope was northwest, facing the cold winds and getting the full sweep of the sea fogs, while the other end was sheltered and comparatively warm, facing toward the southeast. The majority of nests were in cholla cactuses, but a few pairs had set up housekeeping in suitable crannies among the rocks.

Passerculus rostratus. Large-billed Sparrow. One or two individuals seen. Evidently the rear guard of the general migration.

Zonotrichia leucophrys gambeli. Gambel Sparrow. Several birds present.

Melospiza melodia subsp. Song Sparrow. The only specimen secured was destroyed by the rats. Song sparrows seem never to have been noted on any of the islands south of Los Coronados. If this bird was a resident, as I believe was the case, it was probably *clementae*, but it may have been a visitor from the mainland.

Hirundo erythrogastra. Barn Swallow. Quite a colony seemed to be contemplating settling down for the season in one of the caves along the shore.

Vermivora celata sordida. Dusky Warbler. This was the commonest bird on the island but was remarkably wild; so much so that the only way I could get one was on the wing. Owing to the lack of suitable bushes and small trees, they seemed to confine their nesting operations to a vine resembling a clematis, that grows over vegetation a couple of feet high. From a nest in this growth I flushed a bird by almost stepping on it. The four fresh eggs were in a dainty cup built of a silvery lichen that grows on almost everything in sight. The structure was lined with finer pieces of the same sort of lichens, making one of the most beautiful nests I have ever seen. Although I spent many hours tramping all over the island, the birds failed to reveal even the approximate location of another nest.

Salpinctes obsoletus. Rock Wren. Two pairs of these birds had selected nesting sites, and were not only anxious to let the whole world know it, but were willing to show the exact spot to anyone interested.

Sialia mexicana occidentalis. Western Bluebird. A pair appeared near camp on the nineteenth but were not present afterwards.

SOME BIRDS OF THE SAW-TOOTH MOUNTAINS, IDAHO

By STANLEY G. JEWETT

DURING the fall of 1910 I was sent into the Saw-tooth Mountains of Idaho to do some zoological collecting. I arrived at Ketchum on October 24 and left the mountains on December 20, after working at Ketchum in the Wood River Valley, and at the Boston Mine near the source of Rook's Creek. Side trips were made to the sources of Warm Spring and Baker Creeks, up to 9000 feet elevation. Wood River Valley at Ketchum is bordered with groves of aspens and cottonwoods alternating with extended thickets of willow. A few miles above the town the valley closes up to a narrow canyon with steep slopes on either side clothed with a heavy forest of Douglas spruce and Murray pine. In the vicinity of the Boston Mine on Rook's Creek most of the southern slopes are bare of forest trees, but clothed with a thick carpet of grass and sage-brush (*Artemisia tridentata*), while the northern slopes and canyons are well covered by such forest trees as Douglas spruce, Murray pine and lodge pole pine. This entire region is in the Saw-tooth National Forest Reserve, and is used for sheep grazing from July until September. The summer climate is delightful but frosts occur irregularly throughout the year, so no attempt at farming is made. Wood River and all its tributaries are well stocked with trout, and deer, bear and goat are fairly plentiful a few miles back from Ketchum. At the time of my arrival, October 24, most of the summer migrants, both birds and sportsmen, had left for warmer climates so the following list includes only what I believe to be winter residents, with the exception of one Western Robin (*P. m. propinquus*) seen October 27 at Ketchum.

Anas platyrhynchos. First seen on November 30; then common during December. Along Wood River several warm springs keep the ice thawed out in small