

NOTES FROM SAN CLEMENTE ISLAND

By C. B. LINTON

SAN Clemente Island is twenty-two miles long by four miles wide. The greatest altitude is about 1500 feet. The northwest one-half is very barren, supporting only scrubby sage brush and cacti, with an occasional holly bush in the larger ravines. In this portion of the Island, about four miles from the westerly end, is situated Howland's Ranch, on Howland's Bay.

In the canyons of the northeast coast of the southeast half, is found an abundant growth of holly, sage, ironwood and wild cherry trees, the latter often reaching a height of twenty to thirty feet, and in many canyons forming dense miniature forests. Most of the canyons in the vicinity of Mosquito Harbor are deep and precipitous and in places well-nigh inaccessible.

It was in these larger canyons that most of the collecting was done, altho trips were often made to other points. Smugglers' Cove is situated almost directly opposite Mosquito Harbor, on the southwest coast. The coast and adjoining hills here are similar to the northwest portion of the island. Visits were made to Clemente in January, February, March, April and October, 1907.

I wish to tender my sincere gratitude to Prof. Joseph Grinnell for the time he has devoted to the identification of the various specimens submitted; also for his untiring patience in coaching and instructing a beginner. I am indeed deeply indebted to him for many favors extended and many suggestions offered during my several trips to the Santa Barbara Islands. Mr. Grinnell has carefully examined the specimens secured and pronounces the following identifications correct.

Colymbus californicus. American Eared Grebe. Large flocks were seen near the northwest end of the island. December to March inclusive, several specimens preserved.

Ptychoramphus aleuticus. Cassin Auklet. Frequently seen near shore; especially common near Ship Rock, west coast, and in the channel between Catalina and San Clemente Islands.

Larus californicus. California Gull. Fairly common in January and February.

Larus heermanni. Heerman Gull. Abundant everywhere. Those observed in October were in winter plumage, gray heads; while those noted during December, January and February were all in summer plumage, snowy white heads. Examination showed the crops of many specimens to be filled with shrimps, obtained from the kelp fields 50 to 300 yards off shore.

Sterna maxima. Royal Tern. Very common near northwest coast and Howland's Bay, during October, December and January; few seen after February 15.

Fulmarus glacialis glupischa. Pacific Fulmar. Often seen while crossing the channels; none observed near shore.

Oceanodroma melania. Black Petrel. A dark petrel, probably of this species, seen on several occasions while crossing the channel.

Phalacrocorax auritus albociliatus. Farallone Cormorant. Fairly common along the northeast coast. One flock of 200 or more seen near Howland's February 5. Several specimens preserved.

Phalacrocorax penicillatus. Brandt Cormorant. During January and February, immense flocks were seen daily, flying from their roosting places on the rocks of the northwest coast to their feeding "grounds" along the northeast shore. Both brownish young and adults were numerous. Specimens in full breeding

plumage, i. e. with white filaments along the sides of head, neck and back, were secured in February and March. Breeds in small numbers on the northwest coast.

Phalacrocorax pelagicus resplendens. Baird Cormorant. A few pairs were seen near Mosquito Harbor, during March. These were in breeding plumage (white flank patches). One specimen in winter plumage, taken in October.

Pelecanus californicus. California Brown Pelican. Frequently seen near northwest coast. Adults and immature specimens were secured. None were seen during late March.

Aythya affinis. Lesser Scaup Duck. Several ducks which I believe to be of this species, were seen during February. In October several thousand ducks, of several species, were reported off the northwest coast by fishermen.

Ardea herodias. Great Blue Heron. Several pairs are resident on the Island.

Heteractitis incanus. Wandering Tattler. During October and March, Tattlers were frequently observed feeding along the outlying rocks in the vicinity of Mosquito Harbor and Smugglers' Cove. In all, sixteen specimens were preserved.

Actitis macularia. Spotted Sandpiper. Fairly common on both coasts during fall and winter.

Ægialitis nivosa. Snowy Plover. Flock of fifteen or twenty seen on the sandy beach, Smugglers', October 15.

Arenaria melanocephala. Black Turnstone. Several seen near Smugglers' in October and April; twelve specimens were taken.

Zenaidura macroura. Mourning Dove. Not uncommon in the vicinity of Smugglers'. A few seen, in March, near Mosquito Harbor; very shy during that month but later becoming quite tame, feeding in the grass near camp. Seen in October. Breeds.

Buteo borealis calurus. Western Red-tail. Several pairs were nesting on the Island.

Haliaeetus leucocephalus. Bald Eagle. Found nesting in the larger canyons, one-fourth to one mile from the coast, during February, March and April. Several nests were visited and two fresh sets of two eggs each taken, February 15, and March 15. Scattered about the base of the cliffs in which the nests were situated, were numerous skeletons of sheep and young lambs.

Falco peregrinus anatum. Duck Hawk. One pair seen near the northwest coast and another near Mosquito Harbor. One pair, at least, bred on the Island this year.

Falco sparverius. Sparrow Hawk. These trim little falcons were occasionally seen hovering over the brushy mesas and cacti-covered hillsides of the northeast coast, and inland. Only one specimen, a male, was secured. This differs somewhat in general coloration from specimens taken in the coast district of the mainland, but the normal variation in the species is great.

Pandion haliaetus carolinensis. American Osprey. During January and February a number were seen. In March they were observed remodeling old nests along the northeast coast and two fresh sets were found: March 9, one of three; March 31, one of three. On April 2, I visited a colony of twelve or fourteen nests on the southeast coast. Here, incubation ranged from fresh to two-thirds advanced. One set of four eggs was secured, and another found; one egg of the latter set had been crowded out of the nest onto the rocks and broken. Nests varied in size from a few sticks and pieces of sea-weed to immense piles of sticks and kelp four to six feet in height by three to five feet in diameter, cavity of the largest being (diameter) twelve inches by (depth) four inches. The majority of nests were built on columns of rock standing directly in the surf.

Speotyto cunicularia hypogæa. Burrowing Owl. The small rocky ravines extending halfway up the hillsides from the shore of the northeast coast, seemed to be the favorite hiding places of the Burrowing Owls during the day. The specimens secured differ very slightly, or not at all, from those of the mainland coast district. Resident.

Ceryle alcyon. Belted Kingfisher. Several seen.

Sphyrapicus varius nuchalis. Red-naped Sapsucker. While hunting among the cherry and holly bushes in a narrow valley in the high mesa above Mosquito Harbor, October 11, we secured two immature sapsuckers of this species. No others were seen on the Island.

Colaptes cafer collaris. Red-shafted Flicker. Frequently seen and heard in the canyons near Mosquito Harbor. An adult ♂ and ♀ secured in October.

Aeronautes melanoleucus. White-throated Swifts. Seen on several occasions. March 7, observed entering crevices in the cliffs near Howland's Bay.

Selasphorus alleni. Allen Hummingbird. Fairly common in suitable localities. April 1, I found a nest containing two fresh eggs; April 7, another containing one fresh egg, and two unfinished nests. As I left the Island April 7, I only preserved the complete set and nest of April 1. These nests were composed of wool and spiderwebs, partially covered with lichens and placed on low-hanging twigs of holly and cherry bushes in the canyons.

Tyrannus verticalis. Arkansas Kingbird. One seen near the spring, Mosquito Harbor, April 3, and on the 5th I secured an adult ♀ in the same locality.

Sayornis saya. Say Phoebe. Fairly common over whole Island, excepting the Smugglers' Cove region.

Sayornis nigricans. Black Phoebe. Seen only along northeast coast. March 20, an unfinished nest was found fastened to the side of a cave just above high tide mark. One specimen preserved.

Empidonax difficilis. Western Flycatcher. The first pair was observed April 1, in a deep gorge near Mosquito Harbor. April 3 several were seen and secured. Only three or four noted during October.

Otocoris alpestris insularis. Island Horned Lark. Very common over the whole Island. Large series secured.

Corvus corax sinuatus. Mexican Raven. Abundant resident. Nesting in the cliffs, often on ledges directly over the water. A large series preserved. Among these were several specimens that would easily have passed for the much sought for "Clarion Island Raven." It is my opinion they are *Corvus corax sinuatus* birds-of-the-year. The size and general appearance coincide with the description of the Clarion Island Raven. Altho common at present the ravens are being rapidly exterminated thru the use of poisoned carcasses, by the sheep men who (rightfully) accuse them of killing many young lambs.

Sturnella neglecta. Western Meadow Lark. Common on the mesas of the coast, and inland.

Icterus bullocki. Bullock Oriole. One adult male secured March 31.

Carpodacus clementis. San Clemente Linnet. Abundant resident everywhere. Several nests containing incubated sets were found in the sheds at Howland's, March 1. Others were found near Mosquito Harbor, in the cacti and sage. March 9 to April 7 a large series of skins were preserved. The feathers about the base of the bills of several specimens were stained with the juice of the "cactus apple." This fruit forms the chief food of many island birds during certain seasons.

Zonotrichia querula. Harris Sparrow. While watching the House Finches, Song and Gambel Sparrows drink and bathe in the sheep troughs at the windmill,

Smugglers' Cove, October 15, I was surprised to see a Harris Sparrow appear among them. Not having my gun I waited until the sparrow had finished a bath and returned to the feeding grounds under the holly bushes nearby. I then secured my "aux" from my father and awaited the sparrow's return for another drink; this it did in about half an hour. This specimen differs slightly from two specimens (of the same month) in my collection, from Lawrence, Kansas.

Zonotrichia leucophrys gambeli. Intermediate Sparrow. Very common winter visitant.

Zonotrichia coronata. Golden-crowned Sparrow. Common winter visitant.

Junco hyemalis thurberi. Sierra Junco. One specimen, secured at White Rock Spring on the northeast coast, October 13, is probably *thurberi*.

Amphispiza belli. Bell Sparrow. Common resident on the brushy portions of the northwest half of the Island.

Melospiza clementæ. San Clemente Song Sparrow. Abundant resident. Common in the yards at Howland's, nesting in the scrub cacti and vines within a few yards of the hacienda. March 31, three nests were found in the corral near the stables; one contained four young one week old, the others having incomplete sets. These nests were built a few inches from the ground in the center of the cacti beds, which, being covered with a thick growth of vines, completely hid the nests. A large series of skins preserved.

Passerella iliaca insularis. Kadiak Fox Sparrow. Three specimens secured in the stable yards, Howland's, January 23 and February 7. October 5, February 8, and April 1 I secured other specimens near Mosquito Harbor.

Pipilo clementæ. San Clemente Towhee. None were seen within eight miles of the northwest coast, but they were very common near Mosquito Harbor. The "catbird" call of *P. m. megalonyx* of the mainland, said to be "unknown to this bird", I often heard; in fact it was the common note heard at this season. *P. clementæ* is a shy and silent bird during breeding season, which probably accounts for the statements of observers during that period, limiting his vocal attainments to the "towhee" call. During October the towhees were observed shaking the overripe cherries from the twigs of the low hanging branches, then flying to the ground and securing the well-earned delicacies. This curious operation I often watched them perform.

Piranga ludoviciana. Western Tanager. Several seen and two specimens secured near Mosquito Harbor.

Piranga rubra cooperi. Cooper Tanager. A ♀ specimen was secured by my father, October 11, in the holly brush in a narrow valley on the high mesa near Mosquito Harbor. Several Western Tanagers were observed here.

Lanius mearnsi. San Clemente Shrike. Fairly well distributed over the whole Island but extremely shy. March 7 I secured a ♀ with nest and five eggs, incubation two-thirds. This nest is typical of the species; composed of dry twigs and weed stems, thickly lined with rootlets and wool and well concealed in the thick branches of a holly bush in a ravine near the northwest coast. Another nest was found March 8 near the coast midway of the Island, containing one downy young and two infertile eggs. Near Mosquito Harbor, March 19, I secured a ♀ and five fresh eggs. The males were extremely shy, giving the alarm from their lookout perches and leaving the vicinity of the nests immediately upon sighting the intruder. The three nests measure in inches as follows:

Outside	{	depth, 4.50, 3.25, 3.
	}	diameter, 9, 7.80, 7.50.
Cavities	{	depth, 2.20, 2.10, 2.
	}	diameter, 3.25, 3.20, 3.50.

Helminthophila sordida. Dusky Warbler. Common from January until late September, in all the large canyons. Rare on the Island in October, but common on the mainland coast.

Dendroica auduboni. Audubon Warbler. Common, October to February inclusive.

Anthus pensilvanicus. American Pipit. One specimen secured, October 18, on the high mesa.

Mimus polyglottos leucopterus. Western Mockingbird. Fairly common. On the low cacti-covered mesas back of Smugglers' Cove, April 2, I found several unfinished nests in the cacti and holly bushes. The feathers of the foreheads and skins of several specimens were stained by the juice of the cactus apples. The Mockingbirds of the islands have been reported by some collectors as being somewhat different from *M. p. leucopterus*. This theory we have clearly disproved, the specimens taken being identical with mainland specimens, as far as discernible by us.

Salpinctes obsoletus pulverius. San Nicholas Rock Wren. Fairly common in suitable localities over whole Island. Thirteen specimens preserved during October. In coloration of the back feathers, specimens range from rich brown to very pale grayish-brown, some of the browner ones comparing very closely with the coast mainland specimens.

Thryomanes leucophrys. San Clemente Wren. Very common on all parts of the Island, especially so on the brush and cacti-covered hillsides of the northeast coast.

Hylocichla ustulata. Russet-backed Thrush. Common in the larger canyons in October.

Hylocichla guttata nana. Dwarf Hermit Thrush. Common over entire Island, October until April.

Ixoreus naevius. Varied Thrush. Near Howland's in January and February several specimens were taken. Several secured in the canyons near Mosquito Harbor, March and April. None seen during October.

Long Beach, California.

SOME HINTS ON THE PREPARATION OF AN OOLOGICAL COLLECTION

By ROBT. B. ROCKWELL

THE time has not long passed when egg-collecting as a fad was very popular in this country, and as a result a great many collections were formed in different parts of the country, many of them thru their vast size being veritable monuments to the rapacity of the "collecting mania." This unnecessary and in many instances wanton destruction called forth the just protests of a growing army