

A REPORT ON THE BIRDS OF SAN NICOLAS ISLAND

By EGMONT Z. RETT

Through the kindness of Rear Admiral A. D. Bernhard of the United States Navy, the writer together with Mr. Phil C. Orr of the Santa Barbara Museum of Natural History were permitted to work on San Nicolas Island in the spring and fall of 1945.

San Nicolas Island is the most distant of the Channel Islands of southern California. It is situated about 70 miles due south of Carpinteria, Santa Barbara County. The island is $8\frac{1}{2}$ miles long and about 4 miles wide. It is 907 feet high at the highest point and has somewhat the form of a plateau. It is in the belt of the westerly trade wind and consequently the wind blows hard most of the year.

Vegetation is sparse. The greater portion of the western half of San Nicolas is barren rock and shifting sand. The rather flat top of the eastern half and some of the less steep slopes are covered for the most part with foxtail grass (*Hordeum murinum*), bur clover (*Medicago hispida*), and filaree (*Erodium cicutarium*). There are scattered patches of bush lupine (*Lupinus albifrons*) and in the canyons, washes and other places, more or less protected from the wind, are found prickly pear cactus (*Opuntia*) and coyote brush (*Baccharis pilularis*).

We arrived on the island on March 7, 1945. We were furnished with a jeep for transportation some of the time, and in that way covered the island almost completely. We drove over ground that was covered with rocks and loose sand and which would have been impassable in any other wheeled conveyance. The west end was not visited during our stay in the spring.

Despite the terrific bombardment carried on by ships with heavy artillery and rockets and by aircraft with bombs and machine guns, animal life did not seem to be much affected. The California sea lions bore young. The Brown Pelicans, cormorants and gulls all nested on the west end and successfully raised young.

We worked from March 7 to 19, when we returned to the mainland. We returned to the island on March 26 and remained until April 12, the two visits totalling 28 days. The weather was poor most of the time, but only $1\frac{1}{2}$ days were lost through heavy rain and wind. In September, we went to San Nicolas again and spent 9 days there. Altogether $35\frac{1}{2}$ days were spent in the field.

It will be found from A. B. Howell's "Birds of the Islands off the Coast of Southern California" (Pac. Coast Avif. No. 12, 1917) that the island of San Nicolas has not often been visited by ornithologists. One of the most notable of the earlier workers was Joseph Grinnell who visited San Nicolas in the spring of 1897. C. B. Linton also spent considerable time on the island periodically. Howell lists 51 forms from San Nicolas and the present paper records 51, but of the latter, 23 forms have not been recorded previously, while many previously recorded species were not seen during our work on the island. Recent records were traced in Grinnell and Miller's "Distribution of the Birds of California" (Pac. Coast Avif. No. 27, 1944).

The map shown in figure 28 is a photograph of a relief map modeled by Mr. Orr, using the United States Coast and Geodetic Survey map no. 5113. The place names used are ones provided by navy men stationed on the island since the beginning of the war.

Pelecanus occidentalis. Brown Pelican. One seen flying off the north shore on March 31. This was the only individual of this species seen in the spring. On September 27, I saw perhaps 100 birds on

the west end of the Island and I found an area where they nested together with Brandt and Double-crested cormorants.

Phalacrocorax auritus. Double-crested Cormorant. There is a nesting colony at the west end, but I did not discover it while there in the spring. On September 27 this species was found to be numerous and many immature birds were noted on the west end of the island. Nests built the previous spring were found on a grassy flat, well back from the shore.

Phalacrocorax penicillatus. Brandt Cormorant. Eight were seen on the rock ledges one-fourth mile east of Thousand Springs on March 31. They were with about 200 gulls. In September they were with the Double-crested Cormorants and Brown Pelicans on the west end.

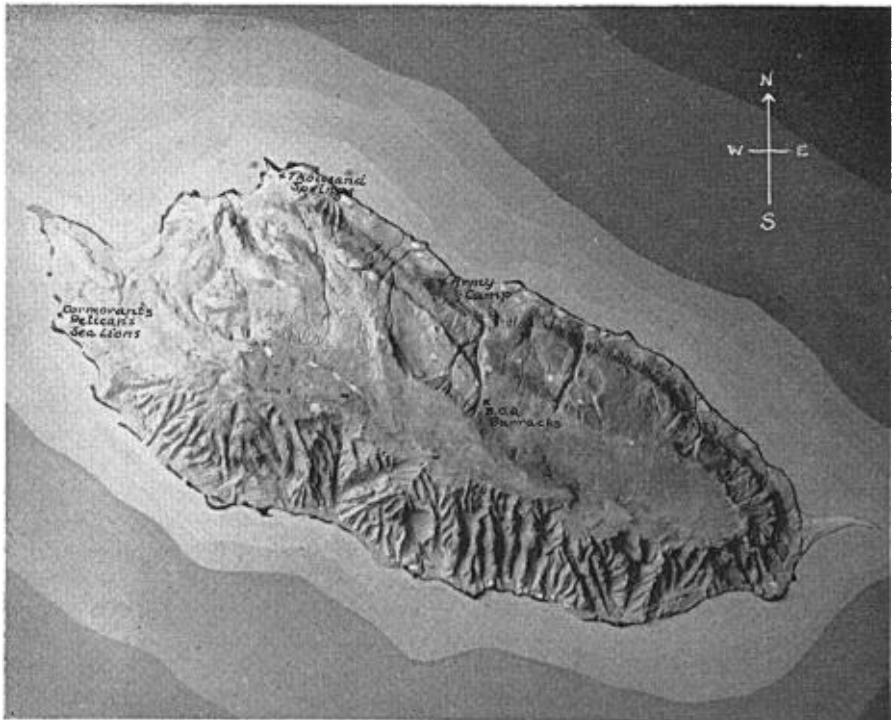


Fig. 28. Relief map of San Nicolas Island, California.

Ardea herodias. Great Blue Heron. Three were seen together on March 11. Two seen at Thousand Springs on March 31. Also noted on several different occasions near the east end and off shore on the kelp. They were still present when we left on April 12. On September 22, three were seen together from a distance. No evidence of nesting was found on the island.

Casmerodius albus. Common Egret. One was seen flying low east of the camp on September 22.

Haliaeetus leucocephalus. Bald Eagle. An adult was seen on March 14. On September 23 a nest was examined which was on an overhanging ledge above a deep canyon on the south side of the island. I found the hind leg of an island fox (*Urocyon littoralis dickeyi*) near-by. The man who located the nest in the summer said he had found in it the wing of a gull and some big black wings, probably of raven or cormorant.

Falco peregrinus. Duck Hawk. On March 14, two Duck Hawks flew over the north shore, heading southward.

Falco sparverius. Sparrow Hawk. A male was seen on March 14.

Charadrius nivosus. Snowy Plover. A flock of about 50 was seen on the north shore on September 25. In the spring this shore had been rocky, but during the summer a sandy beach averaging 25 yards in width had been built up, and it attracted numerous shore birds.

Oxyechus vociferus. Killdeer. One was heard on March 9, and one was seen on September 22. Both birds were observed in the interior near the highest part of the island.

Squatarola squatarola. Black-bellied Plover. I saw two on March 10, one off shore and one in the interior. On March 15 a flock of about 30 was noted flying over the island. About 25 were observed standing quietly on a grassy flat north of the air strip on March 26.

Arenaria melanocephala. Black Turnstone. Four were seen on the rocks on the south shore on March 8, and seven on the rocks on the north shore on March 13. This species was last noted on April 1. On September 26 several were observed on the rocks near Thousand Springs.

Numenius hudsonicus. Hudsonian Curlew. A group of five was seen on the east end of the island about one-half mile from shore on April 3.

Heteroscelus incanum. Wandering Tattler. One was seen on September 25 near the Army camp and one was observed on the same date standing quietly on the rocks near Thousand Springs.

Pisobia minutilla. Least Sandpiper. First seen on March 8. I always found them on the high windswept flats and not along the shore. They were last noted on April 5 when I flushed two from the grass.

Crocethia alba. Sanderling. On March 12 I saw a flock of perhaps 12 birds standing facing a strong wind. These birds were on a grassy slope in the interior. On September 25 they were numerous on the north shore beach together with Snowy Plovers.

Larus glaucescens. Glaucous-winged Gull. Several were seen in company with other gulls on the shore in March and April.

Larus occidentalis. Western Gull. These birds were common. In September I found nests used the previous spring. These were on the rocky ledges of the north shore near Thousand Springs. The nests had not been built until after we left.

Larus argentatus. Herring Gull. Seen in the spring together with other species of gulls.

Larus californicus. California Gull. Seen on the south shore on March 8 and again on the 11th in company with other gulls.

Larus heermanni. Heermann Gull. Several in a mixed flock of Western, Herring, and California gulls on March 8.

Rissa tridactyla. Black-legged Kittiwake. I found four that had been recently killed. These were found in March at different places near the shore and one at the bottom of a deep canyon in the interior. Duck Hawks were probably responsible for the deaths, as the Kittiwakes were all torn and eaten. Nothing remained but the wings and tail and, on one, portions of the head.

Zenaidura macroura. Mourning Dove. One seen on the northeast side on September 25. This was the only dove seen. The men stationed there told me that doves were plentiful in late fall.

Speotyto cunicularia hypugaea. Western Burrowing Owl. Seen on three or four occasions among the eroded gulches. One taken on the northeast side. Its stomach was filled with small grasshoppers and portions of a white-footed mouse (*Peromyscus*). The few that I saw were extremely wild.

Colaptes cafer. Red-shafted Flicker. On September 28 one flew directly over my head while I was in the bottom of the deep canyon east of the barracks.

Sayornis nigricans. Black Phoebe. Seen both in the spring and fall. Probably resident, but not common. I saw only two pairs.

Sayornis saya. Say Phoebe. Present in both the spring and fall, but not common. The same bird was seen repeatedly.

Empidonax difficilis difficilis. Western Flycatcher. I collected one on September 22 from a *Baccharis* shrub, the tallest one growing on the island.

Otocoris alpestris insularis. Horned Lark. This is the most abundant species on San Nicolas Island. It was nesting early in March. I saw a male carrying food on March 12, and a nest with three eggs was found on March 28. Bob-tailed young were seen on April 2. Horned Larks were still there in large numbers on October 1.

Corvus corax. Holarctic Raven. Ravens were very common in the spring. On March 13 I found an unfinished nest on a cliff facing the north shore. In the fall very few were noted; six in one flock was the greatest number seen, while in the spring flocks numbering 25 or more were seen daily. A male collected on March 14 weighed 2 pounds, 6 ounces.

Thryomanes bewickii. Bewick Wren. A wren of this species lived around our barracks. I saw it on several occasions.

Telmatorhynchus palustris plesius. Long-billed Marsh Wren. One was taken on September 28 in the big canyon east of the barracks, where water from a sewage disposal unit trickled down for perhaps 100 yards and attracted many birds.

Salpinctes obsoletus obsoletus. Rock Wren. Very common on San Nicolas Island and singing everywhere on our arrival on March 7. They were already nesting, as I saw one go into a hole in an eroded bank with food in its bill on March 12. Nearly all of the birds collected were breeding.

Mimus polyglottos. Mockingbird. One was seen on March 29. In September I saw one bird repeatedly around the outlet of some sewage tanks.

Hylocichla guttata. Hermit Thrush. I flushed one out of a *Baccharis* bush on the side of a canyon.

Lanius ludovicianus. Loggerhead Shrike. On March 16 I saw a shrike on a telephone line that ran along the north shore.

Vireo gilvus swainsoni. Warbling Vireo. I collected a male on September 24. It was in a *Baccharis* shrub, blossoms of which attracted many small insectivorous birds.

Vermivora celata lutescens. Orange-crowned Warbler. A male was collected outside the barracks on September 29. It was pulling apart down on the heads of sow thistle (*Sonchus*).

Sturnella neglecta. Western Meadowlark. I flushed several from the grassy fields near the barracks and heard them singing all during our stay in the spring. They are undoubtedly resident, for they were still there in September.

Euphagus cyanocephalus. Brewer Blackbird. I saw three on September 28.

Piranga ludoviciana. Western Tanager. On September 25 I saw a male twice in a canyon east of the sewage disposal plant.

Hedymeles melanocephalus. Black-headed Grosbeak. On the evening of September 24 I saw one at the outlet of a sewer. The next morning it was still there, and I collected it. It was very thin and acted as if it had been injured in some way.

Carpodacus mexicanus clementis. House Finch. With the exception of the Horned Lark, the finches are the most abundant bird on the island. I found nests nearly complete on March 7 on the camp buildings. On March 13, I found a nest containing 5 eggs in one of the buildings at the army camp. By April 6 they had started second broods in the same nests. In the spring the finches were more numerous around the various buildings than in other habitats. In the fall, large flocks were feeding on the ripe fruit of the prickly pear cactus (*Opuntia*).

Oberholseria chlorura. Green-tailed Towhee. One was captured inside our barracks on September 28. It had lost its tail and some other feathers. I photographed and released it. The next day I watched apparently the same individual feeding near a sewer outlet.

Passerculus sandwichensis alaudinus. Savannah Sparrow. These birds were fairly common in both spring and fall. Three were collected in September. They seemed to become more numerous toward the end of September.

Pooecetes gramineus. Vesper Sparrow. One was flushed from the grass north of the air strip on the evening of September 25.

Spizella passerina. Chipping Sparrow. Two were flushed from the grass near the barracks on March 18. They dropped on the road where I had a good chance to observe them.

Zonotrichia leucophrys gambelii. Gambel White-crowned Sparrow. Very numerous in the spring. I heard them singing near the camp on April 12 when we left the island. The specimens collected were all in prenuptial molt.

Zonotrichia leucophrys pugetensis. Puget Sound White-crowned Sparrow. On September 28 I collected a male adult. An immature White-crown was seen on September 24, the earliest fall date of observation.

Zonotrichia coronata. Golden-crowned Sparrow. Heard singing in the interior on March 9 and 10.

Passerella iliaca schistacea. Fox Sparrow. While I was watching the Green-tailed Towhee, I saw a Fox Sparrow and collected it. Racial identification of this specimen was provided by Dr. A. H. Miller of the Museum of Vertebrate Zoology. I saw another similar Fox Sparrow near the barracks on September 30.

Museum of Natural History, Santa Barbara, California, October 21, 1946.