the other to Taylor told him to take in slack while I pulled inward, until the nest began to tilt and we dared not draw it closer. Being compelled to hold on with one hand I was at some disadvantage but finally managed to reach the branch covering the nest, and carefully breaking it away saw for the first time how it really looked. A green bunch of delicate mosses clinging gracefully to the inner side of a small cluster of branches where in its cavity of silky fibers and downy feathers, lay like pearls five faintly spotted eggs almost as frail as bubbles, which I covered with a soft piece of cotton that made it safe to pull the limb towards me another foot, giving me an opportunity to use both hands. When the big limb flew back into place and I held the treasure intact, a mingled feeling of nervous joy and relief went out in a big sigh, and I looked back to the time when I tried to kill one of those Kinglets and understood why kind providence spoiled my aim.

The nest is a compact ball of mosses and lichens with a round deep cavity 1¾ inches deep by 1¼ in diameter; the lining consists of a few cow hairs, fine bark fibers and feathers woven in such a manner about the edge that there appears to be hardly any cavity at all. The eggs are white with a ring of faint brown spots on the large ends and here and there scattered over the surface.

San Anselmo, Cal.

NOTES FROM SANTA CRUZ ISLAND

By C. B. LINTON

T 11:30 p. m., November 19, 1907, my father (H. Linton), Mr. George Willett, and myself left San Pedro harbor in a dilapidated fishing smack and in company with a crawfisherman, one "Cold-foot" Jorgensen. We arrived off the south end of Santa Cruz Island at 10:30 the following day during a stiff nor'wester. For various reasons we were unable to make camp until the 22nd. It may not be amiss to state here that twice during the blow we were nearly wrecked: once while at anchor in Potatoe Harbor, a broken anchor allowing the boat to drift within the breaker line and nearly onto the rocks. In this instance the timely arrival of Willett and H. Linton in a small boat, saved the day, and incidentally the fishing smack. At another time (the engine having broken down) we were blown nearly onto the rocks of Ana Capa Island; but with father at the wheel and Willett and I on the "sheet" we managed to hold her off. I mention the foregoing, and the many sleepless nights spent on the rocky shores, "running" the surf several times each day (with attendant duckings), etc., merely as a warning to those who seem inclined to believe a field naturalist's life "strewn with roses". (It's generally strewn with cacti!) For instance, here is a fair sample day: November 20, a. m. rowed seven miles up coast; coming back were obliged to put ashore in rocky cove, thru heavy breakers, to keep from swamping during high wind; secured 12 specimens here; reached camp at 1:30 p. m.; made up specimens, 6 p. m.; broke camp, packed 100 green specimens, loaded tent and camp outfit in skiff, rowed four miles along dangerous coast after dark; 8:30 p. m. ran breakers and made camp on beach; 3:30 a. m. broke camp, ran breakers, rowed fourteen miles to Northwest Harbor, ran breakers, made camp, went after specimens; 5 p. m. to 10 p. m. made skins. 'It's a strenuous life''.

Santa Cruz Island is very mountainous, with wide valleys intervening. There

are perhaps 40,000 sheep on the island, a few cattle, immense barley fields and grape vineyards, several ranches, a large winery, and some 100 men employed during the harvesting season. It was with the kind permission of Mr. Fred M. Caire, owner of the island, that I was enabled to carry on the observations herein chronicled.

Our first camp was on the southern coast at Cochas Pietres (Hog Harbor?). The tiny streams in the wide canyons here were lined with an abundant growth of willows and wild blackberry vines. The hills, sloping gradually to the higher range, were covered with holly, manzanita, iron wood and wild cherry, with here and there an oak, and, of course, cacti in abundance. We remained here until November 30, Mr. Willett then leaving for Los Angeles, via boat to Santa Barbara.

Our second camp was made at Northwest Harbor. This is the desert portion of the island and is bordered by a rocky, precipitous coast. Ten days were spent here before we could round the north end of the island, owing to severe storms.

Our last camp was among the pines near Prisoners' Harbor, northeast coast. Here we found the Santa Cruz pines, oaks, holly, manzanita, ironwood, cherry, etc., in superabundance. The highest altitude is in this vicinity, about 2800 feet. Deep inaccessible gorges and impenetrable thickets were encountered. In the limited time at my disposal I could only commence work here and hope to return soon to continue the work planned.

Mr. Grinnell has kindly examined many of the specimens secured and identified many of the, to me, doubtful ones.

Colymbus californicus. American Eared Grebe. One specimen secured by Mr. Willett in November.

Gavia pacifica. Pacific Loon. Abundant in migration; several specimens taken.

Cerorhinca monocerata. Rhinoceros Auklet. Mr. Willett and I secured specimens along the southern coast in November. In December I secured several at Northwest and Prisoners' Harbors. Those observed were not especially shy and were easily approached by boat, tho of course diving often and sometimes leading us a merry chase. We were unable to flush one from the water. They were, however, sometimes seen on the wing, passing up and down the coast. One was seen in the bay at Santa Barbara, within a few feet of a fisherman at work. Craws examined contained freshly caught sardines, 3 to 4 inches long; stomach contents: meat and bones of small fish.

Ptychoramphus aleuticus. Cassin Auklet. Common about Anacapa Island, and in the channel between Anacapa and Santa Cruz. Several were taken along south coast, and noted at other points.

Synthliboramphus antiquus. Ancient Murrelet. I secured two specimens near shore at Prisoners', December 17 and 18. This, I believe, is the southernmost record for this species, Mr. Loomis having taken them at Monterey.

Brachyramphus hypoleucus. Xantus Murrelet. One taken by Mr. Willett about one mile out from Cochas Pietres.

Cepphus columba. Pigeon Guillemot. Reported breeding in Painted Cave, northwest coast, by a fisherman.

Larus occidentalis. Western Gull. Very common.

Larus heermanni. Heerman Gull. Very common. Principal food consisted of shrimps secured in the kelp fields near shore. November and December many birds were just changing from "winter" to "summer" plumage, the heads being mixed white and dark gravish.

Fulmarus glacialis glupischa. Pacific Fulmar. Mr. Willett and I secured several specimens of the dark phase. One light phase was taken near shore, November 25. Six specimens in my collection range from very dark slate-gray to nearly pure white. December 4 I secured two dark-phase specimens in the surf, with a spaniel retriever; these had died during a stormy night and drifted in.

Sterna maxima. Royal Tern. Common.

Puffinus opisthomelas. Black-vented Shearwater. Seen by Mr. Willett on several occasions.

Puffinus griseus. Dark-bodied Shearwater. One secured by Mr. Willett, November 20, but was washed overboard during a storm. Another was taken November 23 by Mr. Willett. Several were seen November 20 to December 1.

Oceanodroma melania. Black Petrel. A dark petrel, probably of this species, seen near Anacapa November 20.

Phalacrocorax dilophus albociliatus. Farallone Cormorant. Fairly common.

Phalacrocorax penicillatus. Brandt Cormorant. Abundant.

Phalacrocorax pelagicus resplendens. Baird Cormorant. Common.

Pelecanus californicus. California Brown Pelican. Fairly common on both coasts. Adults and birds of the year were noted.

Merganser serrator. Red-breasted Merganser. Frequently seen about Northwest Harbor, feeding in the tide pools. The craw of a \mathfrak{P} , obtained December 2, contained 9 rock bass and one spotted shark, each 2 to 4 inches long.

Oidemia deglandi. White-winged Scoter. Several seen by Mr. Willett.

Oidemia perspicillata. Surf Scoter. Adults and immature birds were common on both coasts.

Anser gambeli. American White-fronted Goose. Abundant on Santa Rosa Island.

Ardea herodias. Great Blue Heron. Several seen along both coasts. Usually standing "hip-deep" in the kelp beds 50 to 200 yards off shore.

Fulica americana. American Coot. One seen December 18, in the marsh at Prisoners' Harbor.

Crymophilus fulicarius. Red Phalarope. Abundant in the channel between Anacapa and Santa Cruz. Very common in the kelp fields along the southern coast until November 27; few seen after that date.

Tringa minutilla. Least Sandpiper. Seen only at Northwest Harbor.

Calidris arenaria. Sanderling. Seen at Northwest Harbor.

Heteractitis incanus. Wandering Tattler. Specimens secured at each camp. The two first primaries of one specimen secured December 17, were still in "breeding plumage" color, namely rich brownish, not having been "dropped" for the gray winter ones, tho the other primaries were new.

Actitis macularia. Spotted Sandpiper. Fairly common on both coasts.

Numenius hudsonicus. Hudsonian Curlew. One secured December 8 at Northwest Harbor.

Squatarola squatarola. Black-bellied Plover. Common at Northwest Harbor. Large flocks seen feeding on the mesas one-half to one mile inland, and roosting on the small rocky islands, near shore.

Ægialitis vocifera. Killdeer. Several seen on the beach and mesas, Northwest Harbor.

Ægialitis nivosa. Snowy Plover. Fairly common at Northwest Harbor.

Arenaria melanocephala. Black Turnstone. Several specimens secured by Mr. Willett at Cochas Pietres. Abundant at Northwest Harbor.

Hæmatopus bachmani. Black Oystercatcher. December 1 to 8 seven speci-

mens were seen and five secured, at Northwest Harbor. They were always observed on the outer rim of volcanic rocks standing in the surf, or on the rocky "islands", and were hard to secure. The feet and legs of specimens taken, are pale flesh color instead of red as in breeding season. On December 3 I shot an oystercatcher which fell in the heavy surf. Unable to secure it myself I had started tentward for my retriever when I was greatly chagrined to see a bald eagle swoop down, gather in my prize and carry it away.

Zenaidura macroura. Mourning Dove. Common inland.

Buteo borealis calurus. Western Red-tail. Several seen.

Haliæetus leucocephalus leucocephalus. Bald Eagle. Adults and birds of the year seen at each camp.

Falco peregrinus anatum. Duck Hawk. Fairly common along the southern and southwestern coasts, where they undoubtedly breed. Mr. Willett and H. Linton observed one pair capture a red phalarope that was feeding in the kelp near shore. First one falcon then the other giving chase until the phalarope was tired out and captured. Black turnstones were the favorite prey about Northwest Harbor.

Falco columbarius. Pigeon Hawk. I saw several in the canyons of both coasts. One alighted within 15 feet of my hiding place in the willows but darted away before I could turn my gun. December 18 I saw a pigeon hawk carrying a screaming bird in its talons.

Falco sparverius phalœna. Desert Sparrow Hawk. Occasionally seen. An adult δ and φ secured in December.

Pandion carolinensis. American Osprey. I saw one osprey near the southern coast November 25.

Strix pratincola. American Barn Owl. Mr. Willett secured one specimen, November 20.

Spectyto cunicularia hypogæa. Burrowing Owl. Fairly common in suitable localities. Specimens secured average slightly paler than those taken in the vicinity of Los Angeles. Measurements also differ slightly.

Ceryle alcyon. Belted Kingfisher. Seen on both coasts.

Colaptes cafer collaris. Red-shafted Flicker. Fairly common near Cochas Pietres and in the pine district. Two specimens preserved.

Aeronautes melanoleucus. White-throated Swift. Several seen December 18. Calypte anna. Anna Hummingbird. Fairly common; several preserved.

Selasphorus alleni. Allen Hummingbird. Several seen. An adult male was secured November 24.

Tyrannus vociferans. Cassin Kingbird. A kingbird seen near camp November 24, doubtless this species.

Sayornis saya. Say Phœbe. Fairly common.

Sayornis nigricans. Black Phœbe. Fairly common.

Contopus richardsoni richardsoni. Western Wood Pewee. I heard several among the pines in December but did not secure a specimen.

Empidonax difficilis. Western Flycatcher. Several seen and heard. November to December 15; none secured.

Otocoris insularis. Island Horned Lark. Common on the mesas inland.

Aphelocoma insularis. Santa Cruz Island Jay. Abundant except on north-western portion of island. Those seen in the vicinity of Cochas Pietres were nearly all females. In the higher pine region this order was reversed; only two or three females observed.

Corvus corax sinuatus. American Raven. Several specimens taken by Mr,

Willett and myself. Among these were specimens corresponding with the description of the supposed Clarion Island Raven. These are undoubtedly *Corvus corax sinuatus*.

Sturnella neglecta. Western Meadow Lark. Common inland.

Carpodacus purpureus californicus. California Purple Finch. One female specimen secured in the pines by H. Linton December 16, and several others seen.

Carpodacus clementis. San Clemente House Finch. Common over most of the island.

Astragalinus psaltria hesperophilus. Arkansas Goldfinch. Several seen at Cochas Pietres in November. One taken.

Ammodramus sandwichensis alaudinus. Western Savanna Sparrow. Several seen, Northwest Harbor.

Ammodramus sandwichensis bryanti. Bryant Marsh Sparrow. Two seen and one taken at Northwest Harbor in December.

Chondestes grammacus strigatus. Western Lark Sparrow. Several seen at Cochas Pietres in November. One was taken.

Zonotrichia leucophrys gambeli. Intermediate Sparrow. Common everywhere. Zonotrichia coronata. Golden-crowned Sparrow. Fairly common everywhere.

Junco hyemalis thurberi. Thurber Junco. I secured an adult male and female in the head of a canyon near Cochas Pietres November 28.

Aimophila ruficeps ruficeps. Rufous-crowned Sparrow. Mr. Willett and I each secured a specimen in the brushy canyon near the south coast. In the early evening of December 16 I observed a flock of 40 or 50 birds feeding on a grassy hillside near Prisoners', securing two specimens.

Melospiza graminea (?). Santa Barbara Song Sparrow. Fairly common.

Passerella iliaca insularis. Kadiak Fox Sparrow. Mr. Willett and I secured several specimens at Cochas Pietres in November. December 16 I secured another in the pines.

Passerella iliaca megarhyncha. Thick-billed Sparrow. November 24 I secured 2 specimens in a canyon of the southern coast.

Passerella iliaca stephensi. Stephens Fox Sparrow. One taken December 14, in the manzanita underbrush in the pines at an altitude of about 2800 feet.

Pipilo clementæ (?). San Clemente Towhee. Fairly common. Some specimens secured had not lost the brownish edgings to the feathers of the back, giving them a peculiar appearance.

Lanius anthonyi. Island Shrike. Fairly well distributed over the whole island. 16 specimens in all, preserved.

Vireo huttoni mailliardorum. Santa Cruz Island Vireo. Fairly common.

Helminthophila celata celata. Orange-crowned Warbler. One specimen taken November 29, but lost during storm at sea.

Helminthophila sordida. Dusky Warbler. Very common.

Dendroica townsendi. Townsend Warbler. I secured a single specimen in the oaks, Prisoners', December 13.

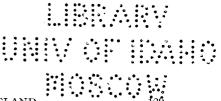
Anthus pensilvanicus. American Pipit. Several seen.

Mimus polyglottos leucopterus. Western Mockingbird. Fairly common.

Salpinctes obsoletus. Rock Wren. Fairly common in certain localities.

Catherpes mexicanus punctulatus. Dotted Canyon Wren. In a canyon near Prisoners', December 19, I secured an adult &.

Thryomanes nesophilus. Santa Cruz Island Wren. Fairly common. I can discern no difference between this wren and the specimens from vicinity of Los Angeles and Pasadena.



May, 1908 NOTES FROM SANTA CRUZ ISLAND

Psaltriparus minimus minimus. California Bush-tit. Several seen. One taken.

Regulus calendula. Ruby-crowned Kinglet. Common.

Polioptila cærulea obscura. Western Gnatcatcher. A gnatcatcher heard on several occasions in the brush. Probably of this species.

Hylocichla ustulata ustulata. Russet-backed Thrush. One secured.

Hylocichla guttata nana. Dwarf Hermit Thrush. Common.

Long Beach, California.

FROM FIELD AND STUDY

The Green-winged Teal (Nettion carolinensis) breeding in California.—While engaged in field work for the U. S. Biological Survey along the west shore of Tulare Lake, California, I secured a female Green-winged Teal and set of seven eggs, July 7, 1907. The brooding bird was shot as she flew from the nest. Several other ducks of the same species were seen within a few miles, and appeared to be part of a quite local colony.

This is apparently the first record of the nesting of Nettion carolinensis in the State.—E. A. GOLDMAN, Biological Survey, Washington, D. C.

Cooper Hawks Attacking Crows.—During the fall of 1907 a flock of crows, numbering perhaps a thousand, frequently came out from the San Francisco Bay shore to spend the day with us at San Geronimo, feeding about the fields and on the hillsides. It happened that about noon on October 27th the flock lit in some trees near our barns. As I came out of the house just after lunch there was quite a commotion in the flock, and it proved that two Cooper Hawks (Accipiter cooperi) were attacking the crows, doing some remarkably good team work in their endeavors to lay low one of their dusky enemies. The crows were, however, too alert for the hawks and no loss was inflicted beyond a few feathers. The excitement was so great that I was enabled to walk up on the flock and bag both hawks. One is accustomed to see crows attacking hawks, and it seems rather surprising that the opposite would take place. But in this instance there was no doubt in the world of the true state of the case. The crows were quietly perched on the dead tops of some alders that had been killed by the changing of the course of a small stream, and the hawks deliberately pitched into them, one attacking from above and the other from below. One hawk would perch on top of a tree above the crows while the other would go off a little way and then swoop down on the flock, repeating the operation-with variations. Whether this was all done in a spirit of bravado, or for the purpose of securing a meal, it is of course impossible to determine. My foreman and I watched the game for some time before killing the hawks; then seeing that no damage was being done and fearing to lose the opportunity of destroying such enemies to bird life as the Cooper Hawk has proved itself to be, I walked up to the flock and shot both the members of the attacking party.—JOSEPH MAILLIARD, San Francisco, California.

Salpinctes obsoletus pulverius restricted to San Nicholas Island.—After carefully examining specimens from San Clemente Island, Mr. Grinnell confirms my opinion that they are Salpinctes obsoletus and that the name S. o. pulverius should be restricted to the San Nicholas Island Rock Wren.—C. B. Linton, Long Beach, California.

Odds and Ends From Washington State.—What I call my "Old Curiosity Shop," a succession of weed grown fields bordered by alders, is situated in the heart of the Puyallup Valley in an abundantly watered region. It has done unusually well for me during the past fall and winter, having produced the following records which must be considered very unusual for this State.

The first surprise came on November 7, in the shape of a white-winged Dove (*Melopelia leu-coptera*), which proved to be an adult female. Even at this date the feathers were in a surprisingly good state of preservation, removing the very unlikely possibilities of its being a cagebird. This is the only record of this dove from Washington, and we can hardly surmise what could have driven it so far from its natural habitat.

December 16: I flushed two Golden-crowned Sparrows (Zonotrichia coronata) that were in