

There is nothing known as to the history of the type specimen, the Museum record giving simply the locality as above quoted.

I have for a long time hesitated to describe this bird as a new species, having an idea that it might perhaps prove an abnormal example of *A. collaris*, but that such is not the case I am now quite convinced, since I have had the opportunity to examine large series of the latter species, including specimens from Chili.

CATALOGUE OF A COLLECTION OF BIRDS MADE AT VARIOUS POINTS ALONG THE WESTERN COAST OF LOWER CALIFORNIA, NORTH OF CAPE ST. EUGENIO.

BY L. BELDING.

[Edited by R. RIDGWAY.]

[The most important result of Mr. Belding's explorations along the western coast of Lower California is the discovery of the fact that, as far south at least as Cerros Island and Sta. Rosalia Bay (or to latitude about 28° north) the bird-fauna presents no differences whatever from that of the southern coast of California, in the vicinity of San Diego. The coast between Sta. Rosalia Bay and Cape St. Lucas being entirely unexplored zoologically, it is of course unknown where the San Diego fauna merges into, or gives way to, that of the cape district. Since, however, we are accustomed to look to topographical indications as a probable solution of questions of this kind, it seems not unlikely that the promontory of Cape St. Eugenio, which, as a lateral offshoot from the main range extends quite to the sea-coast on the south side of the bay in question, may form the dividing line; but it is, of course, quite possible that the San Diego fauna may extend much farther toward the cape. This question, however and that of how far northward along the eastern side of the peninsula the peculiar fauna of the cape district extends, can only be decided by further investigation.—R. R.]

I. Coronados Islands, about 20 miles south and west of San Diego.

These islands are small and rocky, and situated about 10 miles off the coast of Lower California. The larger island is inhabited by several species of reptiles which are found also on the mainland, thus affording good evidence of former connection with the peninsula.

A few birds only were taken on and in the vicinity of these islands, May 16 and 17, the more important of which are the following:

1. *Hæmatopus palliatus* Temm.

[A single specimen, collected May 17, is the only example of this species in the National Museum from any locality on the Pacific coast of North America north of Mazatlan. Not mentioned in Mr. Belding's notes.—R. R.]

2. *Hæmatopus niger* Pall.

A few of these birds found here.

3. *Phalacrocorax penicillatus* (Brandt).

Very abundant here, at Cerros, and several intervening points.

2. *San Quentin Bay, west coast of Lower California, latitude about 30° 23'.*

I arrived at this place May 2, and remained until the 11th. Much of the bay is shallow, consequently at low-tide very extensive mud flats are exposed, making this a favorite resort for water birds, which upon our arrival were very abundant, but previous to May 11 most of them had taken their departure for their northern breeding grounds. So far as observed, the land birds of this locality are about the same as those found in the vicinity of San Diego.

1. *Harporhynchus redivivus* (Gamb.).

Rare; apparently the same as the San Diego bird. [No specimens.]

2. *Thryomanes bewicki spilurus* (Vig.).

Not common.

3. *Passerculus anthinus* (Ep.).

Very common in grassy meadows; probably resident here and at San Diego.

4. *Melospiza fasciata samuelis* Baird.

But one individual noticed. This was found in *tules* by a pond of fresh water.

5. *Pipilo fuscus crissalis* (Vig.).

Specimens shot but not preserved appeared to be identical with others shot at San Diego in April and May.

6. *Guiraca cærulea* (Linn.).

Rare; observed May 8, in an extensive willow thicket. [No specimens.]

7. *Calypte costæ* (Bourc.).

Common. [No specimens.]

8. *Lophortyx californica* (Shaw).

Moderately common.

9. *Squatarola helvetica* (Linn.).

Common as late as May 10.

10. *Ægialites semipalmatus* Bp..

Rare.

11. *Ægialites alexandrinus nivosus* (Cass.).

Rare, but mated, and probably breeding.

12. *Pelidna alpina americana* (Cass.).

Abundant May 2, but rare by the 10th of the month.

13. *Ereunetes pusillus occidentalis* (Lawr.).

The same remarks apply to this as to the last.

14. *Limosa fœda* (Linn.).

Abundant early in May; perhaps a few breed here, as single birds were several times flushed from the meadows, and their actions led me to believe they had nests in the vicinity.

15. *Rallus obsoletus* Ridgw..

Although only two of these birds were seen here, considering their habits this would not determine the question of rarity or abundance; for marshes, such as birds of this family delight in, are here numerous, extensive, and difficult of exploration. One of the birds was flushed from her nest, which was well concealed in and beneath rank marsh grass on the bank of a slough, the eggs were eight to ten in number (some of them being crushed by the foot of a companion), and contained large embryos.

16. *Bernicla nigricans* (Lawr.).

Several small flocks were apparently much at home in the bay until May 9 or 10, when they disappeared. One of the specimens shot was astonishingly fat, and had been feeding on eel-grass, their usual food at this locality. The species was also seen at San Diego in April.

17. *Dytes nigricollis californicus* (Heerm.).

Very common May 16.

3. *Santa Rosalia Bay, west coast of Lower California, latitude 28° 28.'*

Crossing from Cerros Island to this locality, after waiting a day for the surf to subside, a landing was effected April 28.

In a brisk walk of five hours five species of land birds were observed. At the end of this time a fresh, increasing breeze made a hurried departure from this barren, arid region necessary.

I have been informed by persons who appeared to be acquainted with the coast that there is no fresh water between Magdalena Bay and some point not far from Sacramento Reef, and on this coast a collector's greatest danger is that he may perish from thirst.

1. *Poliptila californica* Brewst.

Common.

[NOTE.—In the absence of specimens it would be quite hazardous to conjecture whether the above-named species or *P. plumbea*, Baird, was the one seen. The latter, only, occurs in the vicinity of Cap. St. Lucas, but it may be that on the Pacific side of the peninsula it is replaced by *P. californica*.—R. R.]

2. *Amphispiza bilineata* (Cass.).

Moderately common; not seen at San Quentin Bay nor San Diego.

3. *Amphispiza belli* (Cass.).
Common.
4. *Otocorys alpestris chrysolæma* (Wagl.).
One small flock seen.
5. *Calypte costæ* (Bourc.).
Common.
6. *Ægialites alexandrinus nivosus* (Cass.).
Paired.
7. *Larus heermanni* (Cass.).
Very common.

4. *Cerros Island, west coast of Lower California (latitude just north of the parallel of 28°.)*

Arriving at this island April 14, twelve days were spent in exploring it.

The total length of Cerros Island is about 20 miles, its greatest width about 8 miles. The highest peak reaches an altitude of about 4,000 feet, while much of the land is more than 1,500 feet above sea level. Like the western side of the peninsula, it is mostly rocky or sandy, and sparsely covered with, or in places entirely destitute of, vegetation. On the western side, from the crest-line downward, between 1,500 and 2,000 feet altitude, there is a considerable forest of pines (*Pinus muricata*). This forest, from which much was expected, proved to be a very poor collecting ground, although a few beetles, spiders, and ants, not noticed elsewhere on the island, were procured here. Wild goats (descendants of domestic animals) were the only quadrupeds seen; but deer, no doubt, inhabit the island, since two pairs of discarded antlers were found. There were also indications of the presence of a rodent, probably a species of *Neotomys* (Cave Rat).

Sixteen species of land-birds were noted, five of them being represented, so far as my observation is concerned, by a single specimen each; some of them may have been stragglers from the main land, as they were seen during the period of migration.

A "horned toad" (*Phrynosoma*), three or four species of lizards, a tree-frog (*Hyla*), a few insects, and a land snail (*Helix*), comprised, apparently, with the other creatures herein enumerated, all there is of animal life on the island.

The plants of Cerros Island are partly Californian and partly Lower Californian, some of the species of the southern part of the peninsula growing there. The California Holly (*Heteromeles arbutifolia*) and *Juniperus californicus* were found, as well as the above-mentioned pine, the former growing in the pine forest. Fishermen go from all points of the compass to get the water from the spring on Cerros Island, designated on the charts "Watering place." This water is not good, but

will do in the absence of better. It trickles out of a rock a few feet above sea level, and is marked by a bunch or two of bulrushes. There are also other bunches of bulrushes on the east side of the island, but this, I believe, is the southernmost of them all.

1. *Thryomanes bewicki spilurus* (Vig.).
Common.
2. *Troglodytes aëdon parkmanni* (Aud.).
Rare.
3. *Carpodacus frontalis rhodocolpus* (Cab.).
Three examples seen.
4. *Astragalinus psaltria* (Say).
Rare.
5. *Zonotrichia leucophrys* (Forst.)
Only one specimen seen.
6. *Amphispiza bilineata* (Cass.).
Common.
7. *Zamelodia melanocephala* (Sw.).
Only one seen.
8. *Sturnella neglecta* (Aud.).
One or two observed only.
9. *Corvus corax carnivorus* (Bartr.).
Common.
10. *Tyrannus vociferans* (Sw.).
Three or four seen on the edge on the pine forest; altitude about 2,000 feet.
11. *Sayornis sayi* (Bp.).
Common in cliffs near the beach; paired.
12. *Empidonax difficilis* Baird.
Only one seen. A bird of this species came aboard the sloop one foggy morning during the trip, when ten miles from the peninsula. It was secured, seemingly uninjured, but died soon afterwards.
13. *Calypte annæ* (Less.).
But one example was seen. This was shot at an altitude of about 2,000 feet.
14. *Calypte costæ* (Bourc.).
Common. A nest found April 19, contained recently hatched young.
15. *Pandion haliaëtus carolinensis* (Gm.).
Very common, nesting on the cliffs.
16. *Cathartes aura* (Linn.).
Very common.

17. *Heteroscelus incanus* (Gm.)

Seen on several occasions.

18. *Phalacrocorax dilophus cincinnatus* (Brandt).

A colony of about one hundred of these cormorants were breeding on almost inaccessible cliffs which rose perpendicularly from the water. Seven nests, examined from above, contained either three or four eggs each. Thousands of this species were observed at Elida and St. Martin's Islands, and San Quentin Bay.

[NOTE.—The specimens obtained are in full breeding plumage, and, so far as the skins indicate, can only be distinguished from the eastern forms, *dilophus* proper and *floridanus*, by the entirely white superciliary tufts, these being wholly black or but slightly mixed with white in the above-named races.—R. R.]

19. *Larus heermanni* Cass.

Common.

20. *Thalasseus regius* Gamb.

Common in April, rare in May.

CATALOGUE OF A COLLECTION OF BIRDS MADE NEAR THE SOUTHERN EXTREMITY OF THE PENINSULA OF LOWER CALIFORNIA.

BY L. BELDING.

[Edited by R. RIDGWAY.]

This paper is merely intended to give what are supposed to be the most interesting results of a winter's work in Lower California. Sickness in May, occasioned by exposure to the hot sun, prevented a contemplated visit to one or more high mountains near the village of Miraflores, and also prevented the securing of specimens of some well-known birds at San José—consequently the list is not as complete as it might otherwise have been.

Some of the species found by Xantus do not appear in the list. Perhaps the most important of these is the rare Cape Robin (*Merula confinis*), which, with *Columba erythrina*, is probably a bird of the mountains.

Most of the Cape species are, as in 1859, abundant and tame.

It appears quite likely Mr. Xantus neglected to report some very common, well-known residents, since these do not appear in his list.*

*The only papers relating specially to the birds of the vicinity of Cape Saint Lucas are the following:

(1.) XANTUS, JOHN.—Descriptions of supposed new species of birds from Cape Saint Lucas, Lower California. <Proc. Philad. Acad. Sci., Nov., 1859, pp. 297-299. (New species: *Picus lucasanus*, p. 298; *Campylorhynchus affinis*, p. 298; *Harporhynchus cinereus*, p. 298; and *Brachyrhamphus hypoleucus*, p. 299.)

(2.) BAIRD, S. F.—Notes on a collection of birds made by Mr. John Xantus, at Cape Saint Lucas, Lower California, and now in the Museum of the Smithsonian Institu-