

THE EVIDENCE AS TO THE FORMER BREEDING OF THE
RHINOCEROS AUKLET IN CALIFORNIA

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ANOTHER title new to my bibliography of California ornithology has come to light, this time contained in a rather short-lived Hungarian periodical printed for the most part in the German language. This publication, *Zeitschrift für die gesammte Ornithologie*, must be rare in American libraries, since enquiry for it in several directions failed of results. The copy now before me was forwarded for examination, through the inter-library loan system, from the Library of Congress, Washington. The editor of the journal in question was Dr. Julius von Madarász, of Budapest, who was evidently in touch with several American correspondents, most especially Dr. Leonhard Stejneger. The title of interest in connection with Californian ornithology is as follows.

1884. Gruber, F. Die Seevögel der Farallone-Inseln. *Zeitschr. f. d. gesammte Orn.*, 1, Heft 2, 1884, pp. 167-172.

This item I have never seen listed in any American bibliography, though I find it duly entered in the *Zoological Record* for 1884 (1885). It is rather important for California in that it gives some early information concerning the bird-life of the Farallon Islands. Furthermore, it gives just about the best testimony we have as to the former breeding of the Rhinoceros Auklet on those islands or anywhere along our sea-coast. But before discussing this question I will give a free translation of such parts of Gruber's article as I consider of interest in this and certain other ornithological connections. Following a number of paragraphs dealing with generalities he says:

After three years, on my second visit, from the 6th to the 30th of June, 1862, and also at later repeated visits, the multitude of sea-birds did not seem to have been reduced appreciably, although an organized "Farallone Egg Company" (which, however, exists now [1884] only in name) for many years collected, from May to June or the beginning of July, from twenty to twenty-five thousand dozen Murre eggs which at first sold at 50 cents per dozen and later at 30 and 25 cents in the market at San Francisco.

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Of hundreds, yes of thousands, of such eggs [Murre's], hardly two may be found which resemble each other in color, pattern, and frequently also in shape.

There are still now [1884] exhibited Murre's eggs of 27 up to 95 millimeters length in Gruber's private collection in Woodward's Museum in San Francisco, and also some very small examples of the gray, blackish-spotted eggs of the gulls.

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"Lunde, Larventaucher", or sea-parrots as they are called (*Lunda cirrhata*), guillemots (*Uria columba*) and the Horn-billed Puffin (*Ceratorhina monocerata*) breed in deep holes and build nests of dry grasses. Each of the first and last named birds lays only one egg per breeding season. Their eggs are of white color and that of the Horn-billed Puffin is only a little the smaller.

The nest of the last named bird is hard to find, for it belongs to a shy bird, and the rarest one on the Island. Only late in the evening does it emerge from its caves, 5 to 6 feet deep, wherein it conceals its egg, in order to seek its food in the nearby ocean, whereupon it returns again at the beginning of darkness. The Murre is its implacable enemy [in what manner is not explained].

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Mr. Nerva N. Wines, as first lighthouse keeper, stationed for many years in company with his brother on the Island, prepared upon my request [specimens of] almost all the species of land and sea birds occurring there, of which some may here be

mentioned: [Here are listed the scientific names of, in modern vernacular, Long-eared Owl, Duck Hawk, Osprey, Bald Eagle, Raven, California Jay, Brewer Blackbird, Bi-colored Red-winged Blackbird, and Meadowlark.]

Even small migratory birds, such as thrushes, tits, and various warblers, hummingbirds, etc., also herons, pelicans, divers, rails, wild geese, ducks and terns were forwarded to me at different times by my kind friend Wines.

After many visits I succeeded in bringing back with me extensive collections of natural history materials from the Farallon Islands, but the greatest worth lies in making exact observations so as to get authentic knowledge of this bird world.

San Francisco, Cal., May 19, 1884.

With regard to the verity of the above rather circumstantial statements concerning the breeding of the Rhinoceros Auklet (*Cerorhinca monocerata*) on the Farallones, which species no one has since reported as breeding either on the Farallones or anywhere else along the Pacific Coast south of Washington, what may be said? In the first place, I must acknowledge that Gruber is very probably in error in a part of his statements in this same article. For example, in paragraphs not included in the above translation, he intimates that the California and Heermann gulls breed on the Farallones, in addition to the abundant Western Gull. He doubtless saw individuals of these species close about the islands at times when the nesting of the Western Gull was under way; and it would be easy, in absence of any of the information we have today in regard to the true breeding homes of those species, to make the misinference concerning them which it seems to me he obviously did. Also, I think his statement that both the White and Brown pelicans were seen about the Farallones (though, as he distinctly says, not breeding) is questionable, in that the "white" pelicans seen were likely immatures of the Brown. Incidentally, he includes Tulare Lake as among the breeding places of the pelicans, doubtless the true White Pelican in this case.

But even counting these probable lapses, the paper as a whole rings true, especially when we consider that Gruber likely wrote it largely or altogether from memory rather than from note-book entries, made on the spot, as is the modern method in writing articles.

Now, as to the "Horn-billed Puffin" again: in this article, it will be noted that Gruber mentions the Tufted Puffin and Pigeon Guillemot, and, in a paragraph I have not quoted, the Cassin Auklet, giving facts about the nesting of the latter as well as the other "Taucher" (divers). Thus, there is eliminated the likelihood that he confused any of these species.

Of corroborative value is another report emanating from Gruber and published many years previously. This account, in Hutchings' California Magazine (vol. 5, October, 1860, p. 173) under the title "The Birds of the Farallones Islands", begins: "In a late paper [thus still another title remains to be dug up, bibliographically!] on the subject of the Farallones Islands, Mr. Gruber speaks as follows, in regard to their ornithology. We translate from his German account:"

The part in the succeeding two columns of text which relates importantly to the Rhinoceros Auklet is as follows. "The murre lays one egg, and if that is taken a second one; the sea-gull, whose eggs are gray with black markings, lays generally three; the cormorant from two to six; the horned murre one or two; the sea pigeon three, and the sea parrot two or three. The egg of the horn-billed guillemot, [*uria occidentalis*.] is the most difficult to be procured, because this bird broods from three to five feet deep in the clefts. Most of the other birds lay their eggs on the bare exposed rocks; but the cormorants, gulls and horned murre build a kind of nest with dried grass."

Now it was not my intent to try to establish Gruber as the *sole* authority in regard to the breeding of the Rhinoceros Auklet on the Farallones: he is not; and, indeed, his discovery was antedated some ten years by that of another.

The bird in question was first ascribed to California, but without designation of definite locality, by Cassin (in Baird, Pac. R. R. Rep., ix, 1858, p. 905); a specimen is listed as obtained by Dr. A. L. Heermann. Heermann was doubtless the first person to find the "Horn-billed Auk" in California, but his own published record of the fact came out a year later than Cassin's. He says (Pac. R. R. Rep., x, part IV, no. 2, 1859, p. 75): "In the month of June [1851, as elsewhere indicated by him with fair certainty] on the Farrallones, while watching under the lee of a rock to shoot the sea lion . . . I first saw this singular bird pass by me with a small fish in its mouth and plunge suddenly as if into the ground. This aroused my attention as all other birds had retired to rest, save here and there a restless gull. On examining the ground next morning I found burrows leading under the rocks in which they lie concealed during the day, having never met them in my rambles which extended in all directions over the island and at all hours. By watching, however, several nights, I procured a few specimens. In these holes they had young, a single one being in each nest."

A "nestling, about 5½ inches long", from the "Farralone Isles" and contained in "Mus. Acad. Phila.", is described by Coues (Proc. Acad. Nat. Sci. Phila., 1868, p. 30). Upon enquiry of Dr. Witmer Stone, I find that there are at the present time in the Philadelphia Academy two specimens of *Cerorhinca monocerata* obtained by Heermann on the Farallon Islands. One of these (no. 4636) is the young bird referred to by Coues; the other (no. 4637) is an adult male.

Suckley (in Cooper, Pac. R. R. Rep., xii, 1860, Zool., p. 284) states: "Dr. Ayres, of San Francisco, had in his cabinet a specimen of this species obtained by him from the Farralone islands." This may also have been one of those taken by Heermann.

Baird, Brewer and Ridgway (Water Birds N. Am., ii, 1884, p. 522) state that "an egg of this species—obtained on the Farallones by Mr. Gruber for Dr. Cooper in May, 1862—measures 2.60 inches in length by 1.80 in breadth, is of a dirty white color, and in shape resembles the egg of the common Hen." This description, especially as to size, applies to *Cerorhinca* rather than to *Lunda* (see Bent, U. S. Nat. Mus. Bull., 107, 1919, p. 106). It is further said by these authors that Dr. Heermann thought the Horn-billed Auk might "also burrow on Santa Barbara Island"; but there has never been anything to support this conjecture (see A. B. Howell, Pac. Coast Avif., no. 12, 1917, p. 19).

In the United States National Museum are two specimens of the Rhinoceros Auklet from the Farallon Islands; and by courtesy of Dr. Alexander Wetmore, Assistant Secretary of the Smithsonian Institution, they are before me for examination. One (no. 76776) is an adult, obtained, presumably, by Heermann; but it lacks any original tag, and no further information appears to be available concerning it. In comparison with northern-taken summer specimens, for example a male (no. 31425, Mus. Vert. Zool.) taken by me near Sitka, Alaska, July 21, 1896, I can see no significant differences in either measurements or coloration, save in the more faded, slightly browner tone of the Farallon bird. The latter is "taken down" from mounted condition, so had likely been exposed to the light, on exhibition, for many years. Its wing measures 180 millimeters, culmen 33.5, tarsus 28.5, middle toe without claw 38 (see Ridgway, Bds. N. and Mid. Amer., viii, 1919, p. 780). The claws are short, though evidently from excessive wear; chord of right middle claw, 9.

The other specimen (no. 21439) is of greater interest. It is a young one, and was about two-thirds grown I should say, but doubtless yet unable to fly; for the wing quills are only partially grown out, the chord of the closed wing measuring only 128 millimeters. There are three tags: (1) a newly made out, regular National Museum label; (2) an old Smithsonian Institution label bearing on its face the written inscription "21439 *Cerorhina suckleyi?* | Farallones F. Gruber." and on the other side "'young hornbill' | *Sagmatorrhina Suckleyi* (Cass.) Cs." [in pencil, evidently by Coues]; (3) "13. Young Horn Bill Guillemot | Collected by Amos Cleft." [this in ink, in J. G. Cooper's hand-writing and on the blue ruled-paper label he so often used]. It seems evident that this young bird was taken on the Farallones by some one ("Cleft" may have been one of the eggers) for Gruber, that it was prepared in the latter's shop (its "make" corresponds with that of other Gruber-taken bird-skins at hand), and that it passed through Dr. J. G. Cooper's hands some time or another, finally reaching the Smithsonian where it was handled by Coues when writing his Monograph of the Alcidae.

From the foregoing it can be accepted as thoroughly established that, previous to about 1865, the Rhinoceros Auklet bred regularly on the Farallon Islands. Indeed, young birds taken from the nesting burrows by or for Heermann and Gruber are preserved in the museums in Philadelphia and Washington. Both collectors evidently distributed specimens rather widely, and it is quite likely that other Farallon-taken specimens exist, even of eggs taken by or for Gruber. Both writers committed to published statement a good many facts relative to the nesting of the species on the Farallon Islands, which are quite in accord with our present very full knowledge derived from field studies on the coasts of Washington and southeastern Alaska.

It would seem, then, that the rather indefinite phrase, implying doubt, "Said to have formerly bred on the Farallones" (Grinnell, *Pac. Coast Avif.* no. 11, 1915, p. 18; Bent, *U. S. Nat. Mus. Bull.*, 107, 1909, p. 109) ought to be supplanted by a positive statement. The status of *Cerorhinca monocerata* in California in the light of all the facts available may now be given as follows:

Common winter visitant on the open ocean, at least from off San Francisco south to off San Diego. The many recent records date, seasonally, from September 27, off Monterey (Beck, *Proc. Calif. Acad. Sci.*, 4th ser., III, 1910, p. 59) to May 2, near Santa Cruz Island (Howell, *Pac. Coast Avif.*, no. 12, 1917, p. 20), and "middle of May", off Monterey (Beck, *loc. cit.*). Formerly, previous to about 1865, remained through the summer around the Farallon Islands and nested on them (Heermann, *Pac. R. R. Rep.*, x, part IV, no. 2, 1859, p. 75; Gruber, *Zeitschr. f. d. gesammte Orn.*, I, Heft 2, 1884, p. 169).

Museum of Vertebrate Zoology, Berkeley, California, August 8, 1925.