

The next morning (December 5), fortunately clear and calm, Little and I sallied forth to again search the beach, which we did for about two miles, covering a little more ground than he had gone over the previous day, with the idea in view of identifying all the birds we could find that had been washed ashore after the storm. Little said that the surface of the beach had been considerably changed since he had been there, and that some of the bodies he had noted had disappeared, while others had either been uncovered again by the waves at high tide or had been blown ashore since his visit.

Some of the birds were lying out in plain sight on the beach, while in other cases perhaps only a feather or two showed above the sand. Many gave evidence of having been sadly buffeted by wind and waves and none were in a condition to allow of preservation except three Sanderlings, which seemed quite fresh and probably were killed only the night before. Only the birds that were fresh enough to be without doubt the victims of this storm were given consideration, but there were a few older carcasses here and there, of other species than those enumerated herein.

The numbers and species of these recent victims were as follows: 1 Tufted Puffin (*Lunda cirrhata*), 4 California Murres (*Uria troille californica*), 1 Pacific Kittiwake (*Rissa tridactyla pollicaris*), 1 (immature) Glaucous-winged Gull (*Larus glaucescens*), 1 Western Gull (*Larus occidentalis*), 1 Herring Gull (*Larus argentatus*), 1 Ring-billed Gull (*Larus delawarensis*), 1 Short-billed Gull (*Larus brachyrhynchus*), one gull so soaked with oil as to be unidentifiable, 1 Pacific Fulmar (*Fulmarus glacialis glupischa*), 1 Sooty Shearwater (*Puffinus griseus*), 1 California Brown Pelican (*Pelecanus californicus*), 1 Brandt Cormorant (*Phalacrocorax penicillatus*), 1 White-winged Scoter (*Oidemia deglandi*), and 3 Sanderlings (*Calidris leucophaea*). About two miles of shore were covered on these two mornings, the total number of birds found dead being 32. Doubtless there were some others buried in the sand, and as it is hardly reasonable to suppose that all those killed off-shore in these two miles of latitude had been washed up on the beach, the actual toll of this storm must have been greater therein than the count of the victims on the beach would show.

The species above enumerated were almost all, if not entirely, of those that inhabit the waters adjacent to the coast or near-by islands, and on this coast their winter habitat is a narrow belt of comparatively few miles in width for a long distance north and south of San Francisco Bay. If the storm raged as furiously over a large part of this habitat, the mortality must have been great, judging by the results of our two miles search.

It was most discouraging to find the beach strewn with cakes of solidified crude oil, the sizes of these cakes varying from only a few drops stuck together to as large as a big frying pan, showing that ships are still dumping the oil refuse from their tanks in our waters. Some of the birds found were either partly or entirely incapacitated by coming in contact with it, a couple being absolutely saturated with the oil.—JOSEPH MAILLIARD, *San Francisco, December 9, 1919.*

Clarke Nutcracker at Carmel.—I am indebted to Mrs. Edward A. Kluegel for the following notes on the Clarke Nutcracker (*Nucifraga columbiana*) as occurring in Carmel, Monterey County, California. The first one observed was on November 7, 1919, in a tall pine. On November 9 one was watched hopping about on the ground, appearing quite tame and unafraid. Since then, varying numbers have been observed, until on November 30, twenty-seven were counted in one company.—JANE L. SCHLESINGER, *Oakland, California, December 6, 1919.*

Habits of *Oceanodroma leucorhoa beali* versus *O. socorroensis*.—Following directions kindly furnished me by Mr. C. I. Clay, I visited on July 16, 1919, an island of about six acres extent which lies one mile southwest of Crescent City, Del Norte County, California, and spent the day investigating its bird life. I estimated that there were close to ten thousand pairs of petrels nesting there, and one may well imagine that the day proved to be one of the most enjoyable of my life. Every foot of soft ground was not only occupied, but the tunnels were two and three layers deep, and freely intercommunicated. Indeed, it was impossible to dig more than an inch or two

without encountering a burrow, and there were often five or six nests to the square foot.

The vast majority were *Oceanodroma leucorhoa beali*, and the rule at this date was eggs on the point of hatching, although there were many young in all stages up to two-thirds grown. I noted one nest with the bird incubating two piped eggs, and there was no other nest nearby from which an egg might have rolled. One *Oceanodroma furcata* was discovered on a fresh egg, and three young of this species, ranging from half to fully grown, were found. The adult was in a separate pocket of the same burrow with a brooding *beali*. The latter form prefers the softest ground, while the former seemed to select the edges of banks where small stones are mixed with the dirt, or the interstices in a pile of loose stones. As I am rather familiar with *Oceanodroma socorroensis* during the nesting season, it may be of interest to compare some of its habits with those of *beali*.

The Socorro Petrel begins laying on the Coronados Islands during the middle of June or a trifle later, while *beali* must start not later than the first week of that month, and probably before. The climate of Crescent City, even in mid-summer, is very cold and foggy, while that of the Coronados is warm and bright. Hence, I would expect at least three weeks difference in nesting dates, but in the opposite order, and for lack of a more plausible explanation, we may attribute the actual state of affairs to food conditions.

Each species occupies only burrows which the birds themselves construct. Those of the Socorros are about two feet long, while the average length of the Beals is seventeen inches—a difference which may be blamed upon the crowded quarters of the latter. This form employs about twice the amount of weed stems for nest building as does *socorroensis*, and this is possibly due to the difference in climate. *Beali* is much more prone to eject oil than is the southern species, but none of the *furcata* which I secured showed any tendency to indulge in such tactics. In flight, the wing beats of *beali* are quicker; and I think that one who is familiar with both forms would have no trouble in distinguishing them apart while on the wing, if they be seen together. The main item of food of the Socorros is supposed to be larval rock lobsters, and this probably accounts for the fact that the deposit of fat on them is a pronounced red, almost the color of a brick, while *beali* feeds on other fare, and its fat is of the usual shade.

In both colonies, almost every foot of suitable ground is occupied, but on the small island of the Coronados group where the Socorros are found, this is of very limited extent, and the colony is crowded with but a few hundred pairs, while the northern island is almost ideal. There are no other birds, except a few guillemots, nesting upon this island to entice eggers; it is not far enough from the mainland to attract parties of all-day picknickers; and, for the same reason, cats are not likely to be introduced by campers. In fact, the only damaging influence seems to be a Barn Owl, which probably flies over from the mainland and raids the petrels every night, to which hundreds of wings scattered beneath the rocky points bear mute witness.—A. B. HOWELL, Pasadena, California, November 10, 1919.

Further Colorado Notes.—In the last number of *Bird-Lore*, Dr. Bergtold mentions the recent extension of the summer range of the Lewis Woodpecker (*Asyndesmus lewisii*) eastward onto the plains in Colorado. It has formerly been considered a mountain bird in the summer time in this state, but we now hear of it frequently in the breeding season far from the foothills. On June 28, 1917, I saw a pair with a nest in a telephone pole at Boone, far out on the plains, a long distance east of Pueblo. The same author also mentions the decrease in the number of English Sparrows in Denver. Their scarcity in portions of Boulder this year has been noted by people who do not ordinarily notice the birds very much. Whether it is only a temporary condition due to the exceptionally dry, hot summer, or to some other cause, I cannot hazard an opinion. Possibly the decrease has been going on for several years but has just attracted attention. We do not regret it.

Dr. Bergtold also mentions the disappearance of Bullock Orioles from Denver early in August and their reappearance later in the month for a few days before their final disappearance for the winter. He suggests that perhaps the summer birds leave early