JUNE WITH THE BIRDS OF THE WASHINGTON COAST.

BY LYNDS JONES.

DHUOYUATZACHTAL.

Strong notherly winds during Monday, June 17th, held us prisoners at LaPush, but they did not prevent two of the Indians from breaking away from the restraints of the Post and



CARROLL ISLET, WASHINGTON.

You spring from the canoe, which is riding a wave crest, and land on these barnacle-covered rocks—or in the icy-cold sea.

Agent for the purpose of beating us to Carroll Islet to sack that and adjoining islands, in accordance with their ancient custom. They entertained the mistaken notion that our purpose included the collection of all eggs and young birds, and they proposed to secure their share for a general tribal feast. Fortunately for our purposes the seas prevented a landing on Carroll Islet, but the adjoining island of Wishaloolth was as nearly cleaned of eggs as it was possible for them to clean it. The agent confiscated the eggs, upon the return of the renegades, and threatened them with the state law, which provides a severe penalty for such breaches. There were 256 eggs taken, mostly from nests of the Glaucus-winged Gull, but a few from nests of California Murre and Tufted Puffin. Few of them were fresh, since these Indians prefer the flavor of well incubated eggs! Loud murmurings of protest and black looks did not shake the agent from the performance of his duty. While it may seem somewhat hard to deprive these Indians of the privilege of gathering for themselves this supply of food, which is to them one of the provisions of Nature and apparently their right, I am sure that no one who has personal acquaintance with the facts will dissent from this deliberate attitude of the Government officials. It is entirely clear that none of these Indians really needs this supply of food.

At 8 o'clock on Monday evening our Indians took us over to Dhuoyuatzachtal, which lies under the lea of the point on which LaPush is situated, leaving us there for some night work. From the top of this island the sun was just sinking into the foam crested waves. Our blankets were spread upon a spot the least likely to harbor nests of either Kæding's Petrel or Cassin's Auklet, but in spite of our precautions in this respect subsequent events proved that we were holding some dozen birds prisoners in their nest burrows. If the birds without seemed to be saying 'I'm here, I'm here, let me in, let me in,' surely those within were more eagerly calling 'I'm here, I'm here, let me out, let me out.'

The highest point of this island, a rock ridge, faces northward, this side of the island being almost precipitous. South-

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erly to this ridge there is an area of tall coarse grass, fringed by bushes on its east edge, and still more southerly and lower down on the slope grows a fine curly grass some four inches high, the roots forming a tough, thick turf over a bed of stone chips. The burrows of Kæding's Petrel honey-combed this turf, and even extended into the tall grassy area. In this tall grassy area and among the roots of the bushes were numerous nests of Cassin's Auklet, while the Tufted Puffins burrowed among the rocks which fringed the vegetation covered area. There were no gull's nests on this rock.



Carrol Islet Camp, beneath a spreading Sitka spruce monarch.

The object of this night excursion was to catch the Petrels and Auklets in their characteristic nocturnal activities by flashlight. While the birds were numerous enough, and flew close enough during our periods of quiet, they were so disturbed by the operations of the camera that no pictures were secured.

After we had settled down for the night one Petrel whose nest may have been beneath our bed perched upon my head and refused to be shaken loose. Its only damage being the introduction of sundry sharp points into my scalp for a securer hold, I lay quiet until it was willing to depart peacefully, after which two thickness of blanket formed an effectual shield to further visitations. The din of noises which surrounded the island all night long beggars description.

Many nests of both Kæding's Petrel and Cassin's Auklet were uncovered by overturning the sod as the burrows were followed. While the burrows of the Auklet were usually a lit-



A Dhuoyuatzachtal Kæding's Petrel at home.

tle further from the surface and a little longer, the plan was the same. The mouth of the burrow extended almost vertically down six inches or more, until stones were encountered, then the burrow turned and ran paralled to the surface of the sod.

Very few burrows were straight for any distance, but usually angled here and there apparently to avoid obstructions. Several feet from the nest end of the burrow there was always a side burrow branching off at a sharp angle, ending in an unused enlarged space. Nothing was ever found in this false burrow. The nest burrow of the Auklets contained a bed of dry grass, but that of the Petrel often contained nothing but fish bones. Very few of the Auklets were at home on this island, possibly because there were no young in the nests, but at Alexander Island most of the burrows contained young birds and one parent. Unoccupied nests were few. In every Petrel burrow there was at least one bird. If there was an egg the male bird was with it, but if there was no egg both birds occupied the nest burrow. We were unable to determine whether the office of incubation is assumed wholly by the male or whether it is shared by the Only males were found in the burrows with eggs. When either of these species was taken from the burrow and tossed into the air they took the shortest course to the water, usually vacillating somewhat as if confused by the sudden daylight. It seemed to us significant that the presence of these two species anywhere in this region would not be suspected away from their nesting burrows. None at all were seen during daylight on any part of the trip.

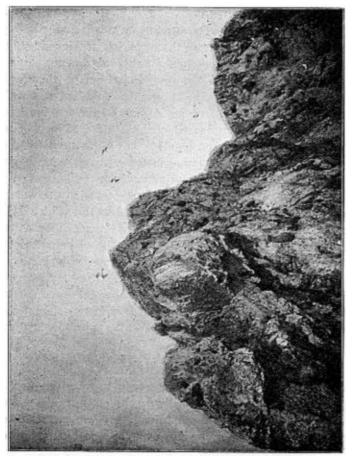
Dhuoyuatzachtal is made the study place of these two birds, but both were found nesting on Carroll Islet in small numbers. Other matters occupied our attention during our stay at Carroll.

CARROLL ISLET.

In the face of a brisk northerly breeze and against high running waves, our Indians were finally persuaded to try the seven mile passage to Carroll. All our belongings were entrusted to the canoe, but we two took the land route to a position opposite the island, skirting the shore, in order to lighten the canoe for easier battle with wind and waves. We were plainly told that none but fools ventured out on the ocean in such a sea. It was therefore with some misgivings that we watched the canoe alternately ride clear on the crest of a huge wave and then com-

pletely disappear in an equally deep trough, as we kept abreast of it.

In the quiet lea of a bold rock which formed the seaward end of a spur running out into the ocean toward Carroll, we embarked. By keeping in the lea of Wishaloolth, about two miles



Glaucus-winged Gulls over the summit of Wishaloolth Island

landward of Carroll, a smooth passage was effected to this island, which was visited the day previous by the two Indians. An hour's inspection here afforded rest to the tired Indians, and enabled us to estimate the damage inflicted by the visitors. On



CARROLL ISLET, WASHINGTON.

Glaucus-winged Gulls (Larus glaucescens). There are nests among the vegetation.

A Baird's Cormorant (Phalacrocorax pelagicus resplendens) sitting on her nest.

every hand there were rifled nests, and we found the birds greatly excited, so much so that almost no pictures could be secured. We indulged in a good deal of speculation as to the probability of a landing by the Indian eggers on Carroll, and its probable results. Fortunately for us they had not dared to make the passage which we were to essay within the next half hour.

Without going into the details of the two mile row against heavy seas and the equally rough landing on a southerly spur of Carroll, nor speaking of the tedious carry from the high tide mark to the top of the island, let us pass at once to the work in hand.

Seaward Carroll Islet presents a rock precipice some 200 feet in hight. A stone dropped from the top, within two rods of our camp, would fall clear into the ocean below. Landward the island slopes at first gently, but finally at an angle of nearly 70° to within thirty feet of the water, ending in another precipice there. It was only along the landward side that ascent was possible, and even there one must clamber up vertically for ten or more feet, finding foothold in the weathered rock. Two sharp rock ridges jut out, one at the north-east corner the other landward easterly. The gentler slope of the top is covered with Sitka spruce trees, two of them old monarchs, with a few deciduous trees, growths of elder bushes, a sort of a red raspberry bush, and the ever-present salal bushes. Bordering the woods on the steeper slopes there is a growth of grass clinging to masses of soil which has lodged in the interstices between rock chips. In some places this grass is seen clinging to shelves on the face of precipices. Exposed rock faces are pitted and hollowed by the elements into nesting places for cormorants and gulls. Other rock masses, a good deal worn down, project from the other angles of the island. The waves have worn a hole completely through the island parallel to the landward side and about a hundred feet from it.

Studies of the breeding birds may very well be made by species separately. A description of the White-crested Cormorant colonies has already been given. The most abundant

bird on the island, and therefore the one naturally treated first, was the

GLAUCUS-WINGED GULL (Larus glaucescens).

Practically the entire island was covered by the nests of this species except the area covered by the taller trees, and also except a relatively small area on the steep slope of the northeastward side. By covered is meant that there were nests in all



Glaucus-winged Gull (Larus glaucescens). Nest and eggs on Carroll Islet. A typical nest placed amid vegetation on a sharp slope.

sorts of situations and within reasonable distances of each other, but never within striking distance of the birds occupying adjoining nests. A number of nests were found beneath the dense fringe of salal bushes, and many of the larger grottoes of the perpendicular rock faces contained a nest. Ledges which were broad enough to afford us secure footing were also occupied by nests. Often nests could be seen on small niches in the rocks. There was one nest on the Murre ledge fully exposed on the

bare rock. Many of the more exposed nests showed unmistakable signs of having been pilfered by the crows.

The eggs examined ranged from freshly laid to nearly half incubated. Nowhere did we find young birds, nor even pipped eggs. Evidently this was the laying period for this species.

The nests were for the most part well constructed affairs of grass which had been gathered in the immediate vicinity of the nest. The depression in the center varied from nearly level to at least four inches. In short, the many nests examined did not differ materially in construction from nests of the Laughing Gull, which I am familiar with, nor from descriptions of the nests of other large gulls.

The full nest complement of these gulls is three eggs. It is likely that nests containing one or two eggs had been pilfered by the crows. Nothing of a positive nature was learned about the order of deposition of the eggs, but there was some evidence for thinking that an interval of one day occurs. The color and markings of the eggs vary a good deal, both between different sets of eggs as well as within the same set, but the markings and shape are typically gull-like.

At no time of day or night were the gulls quiet. Some individuals could be seen or heard flying about the island at any time, and the air was always full of their calls. The ordinary cackling calls were various, some bearing a close resemblance to the characteristic 'laughing' of the Laughing Gull, others being shared by no other species known to me. There were longdrawn calls which reminded one of certain calls of the Herring Gull. At no time were we able to observe these birds in an undisturbed frame of mind much to our regret. The tent was inconspicous and well hidden, but the birds seemed to continuously remember our presence. Although we remained quiet and hidden for long periods there was scarcely a lull in the frantic screamings, and the slightest stir was the signal for a storm of vituperation from the nearest sentinel. Instantly every perched bird stood at attention or vaulted off into space, while every flying bird responded with voice and wing. The birds, startled from their perches all about the island, wove a webb of white

across the blue of sky and sea. One could not glance in any direction without a sense of dizziness from the rapidly changing figures of the webb.

There were perhaps 500 nesting pairs on the island, making a thousand birds; but this is a mere estimate. An occasional Western Gull seen among the lighter colored Glaucus-winged, led us to estimate their numbers at fifty or thereabouts.

THE YEAR 1908 IN SOUTHEASTERN MICHIGAN.

BY P. A. TAVERNER, HIGHLAND PARK, MICH.

The year of 1908, in the neighborhood of Detroit, Mich., was an abnormal, and in some ways a rather interesting, one. The spring was much delayed and remained cold long beyond its usual custom. The previous winter was relatively birdless and uninteresting. The weather was about normally cold, but February 5 a heavy sleet storm came, with a temperature for a day ranging from 9 to 37 degrees. There was at the time a foot of snow on the ground, and the result can be readily imagined. The snow was heavily crusted and the Bob-whites. that up to that time had wintered well, suffered severely. The winter of 1903-04 had practically wiped the species out in this section, and under a protective game law, enacted for this purpose, the birds had just begun to regain their normal numbers. This last blow completely undid the good work of the past three years, locally at least, and, as a result, during the past spring, summer and fall the quail I have seen could be counted on the fingers of one hand.

March was not far from normal in temperature, as also was early April, though during the latter part it steadily refused to warm up as expected. This backwardness extended well into May and all the migrations were delayed in consequence. It was not until May 10 that any real spring weather arrived, and up to that time we had to keep the furnace going continuously. Normal years I regard May 4 as marking about the