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Notes On Birds Observed During A Brief  
Visit to the Aleutian Islands and  
Bering Sea in 1911

BY

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NOTES ON BIRDS OBSERVED DURING A BRIEF VISIT  
TO THE ALEUTIAN ISLANDS AND  
BERING SEA IN 1911

By A. C. BENT

I. INTRODUCTION

At the suggestion of Dr. Leonard C. Sanford, of New Haven, Conn., and with his financial assistance, I undertook to organize and conduct an expedition to the Aleutian Islands during the season of 1911. It was our intention to charter a suitable vessel and spend the entire summer in making a thorough biological survey of the whole Aleutian chain, exploring all of the larger and more important islands as thoroughly as the time and the facilities at our disposal would permit. But since the Biological Survey of the Department of Agriculture desired to cooperate with us and to send a man to collect for them, and as the Smithsonian Institution was interested in helping me secure material for additional volumes of the publication on Life Histories of North American Birds, it seemed best to make it a government expedition and accept the courtesy of the Treasury Department in offering transportation on a revenue cutter. We therefore abandoned our plans for a private expedition and the revenue cutter *Tahoma* was detailed to care for our party, which consisted of Rollo H. Beck, of San Jose, Cal., Alexander Wetmore, of Lawrence, Kan., Fred B. McKechnie, of Boston, Mass., and the writer.

We sailed from Seattle on May 19, and took the inside passage north to Ketchikan, where we remained a few days to take on some spar buoys, and from there we sailed out through Dixon Entrance and nearly west across the Pacific Ocean to Unimak Pass. We entered the Pass on June 4, anchored for one night at Akun Island and reached Unalaska on June 5. After discharging our cargo and coaling, we started on the western trip among the Aleutian Islands on June 10, with orders for the *Tahoma* to return to Unalaska on July 1. This gave us less than three weeks in which to explore over 800 miles of difficult islands, an undertaking for which three months would have been hardly time enough. We cruised the whole length

of the chain, however, and landed on Atka, Kiska, Attu, Tanaga, and Adak islands, besides visiting the western end of Unalaska Island, landing at Chernofski. The whole time at our disposal was so short that we could devote but a very few days to each of these islands and our explorations were limited to such small portions of them as we could reach on foot, which meant a small area within one day's walking distance of the most frequented or best harbor, where we were obliged to anchor. Long trips into the interior, which would involve camping, were not attempted; our time was too limited to waste any of it in making and breaking camp; we were not familiar enough with the region to know where to go and we had no facilities for transporting our camp outfit, supplies, and provisions over the endless succession of barren mountains surrounding every harbor, as there were neither navigable streams nor trails.

Our reconnaissance of the Aleutian chain was necessarily so superficial and hurried that it seems best to make at this time merely a brief report of the results and not to attempt to fully describe the topography, the flora, and the fauna of these interesting and little known islands until a more complete biological survey can be made by some subsequent expedition.

In spite of the short time at our disposal, the four members of our party used the excellent facilities at our command to the best advantage, and by constant hard work accomplished very satisfactory results. Much credit is due to the officers of the *Tahoma*, who gave us most valuable assistance and did everything in their power to further the objects of the expedition. Special thanks are due Chief Engineer John I. Bryan, Lieutenant John T. Carr, Lieutenant Herbert N. Perham, and Doctor Louis Schwartz, for much valuable assistance in securing specimens.

Good series of all the land birds were collected on nearly all of the islands visited; particularly fine series of the various subspecies of ptarmigan were taken, about forty from each of the important islands, among which a new subspecies was discovered inhabiting Tanaga Island, *Lagopus rupestris sanfordi*;<sup>1</sup> two species, hitherto unrecorded from North America, were collected, namely, *Calliope calliope* and *Hypocentor rustica*.

Some other interesting facts were learned regarding the distribution and habits of the birds of this region, but so much important work in this line still remains to be done that further and more thorough explorations would well be worth while.

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<sup>1</sup> Described in Smithsonian Misc. Coll., Vol. 56, No. 30, December, 1911.

## II. BIRDS NOTED IN THE ALEUTIAN ISLANDS IN JUNE, 1911

**GAVIA IMMER**

Loon

Loons were noted at various islands, generally flying high in the air and too far off to identify. One, positively identified as this species, was seen flying across the bay at Adak Island on June 26, and one at Attu Island on June 23.

**GAVIA PACIFICA**

Pacific Loon

**GAVIA STELLATA**

Red-throated Loon

Small loons were seen flying in the distance on several of the islands where both of these species are found, though the Red-throated Loon is probably the more common one. I do not seem to have any positive records of any of these being definitely identified and none were shot. One or both of these species were undoubtedly breeding on nearly all of the larger islands where there were suitable ponds.

**LUNDA CIRRHATA**

Tufted Puffin

Immense numbers of this Puffin and a few of the following species were seen in the water as we were entering Unimak Pass, where they were scattered about over a large area, mostly singly, or in pairs or small groups. There were thousands of them dotting the water in all directions as far as we could see. We saw a few Tufted Puffins about nearly all the islands among which they were generally distributed, but we found only one breeding colony of any size, on a small rocky islet in Nazan Bay, Atka Island. A cloud of these Puffins and a few Horned Puffins were seen flying about the islet, but they all flew off when we landed. We had seen them entering and leaving some inaccessible crevices in the steep rocky cliffs where they were probably nesting. They also had burrows in the soil on the top of the rock, but they had not laid in the holes we dug out. This was on June 15, but evidently most of them had not yet laid.

**FRATERCULA CORNICULATA**

Horned Puffin

This species was not so abundant as the preceding, but was seen quite regularly in small numbers at nearly all of the islands and was breeding throughout its range. At Atka Island, on June 15, we found a small breeding colony on one of the rocky islands in Nazan Bay

where we saw them flying into and out of inaccessible crevices in a precipitous rocky cliff. In habits and general appearance they closely resemble the common Puffins of the Atlantic coast. We had no time to devote to their study and did not make any efforts to secure their eggs, being too busy with other more desirable things.

#### **ÆTHIA CRISTATELLA**

Crested Auklet

We did not find this species so abundant as we expected among the islands, probably because we did not spend enough time at the proper places. We saw a few among the Puffins at the entrance to Unimak Pass and several flocks among the rafts of Least Auklets in the harbor at Kiska Island. The Crested Auklets flew in large compact flocks, often containing forty or fifty birds, and could be easily recognized by their larger size and wholly gray appearance.

Their manner of flight, size, color and crests have suggested the local name of "sea quail" from a fancied resemblance to the California Quail. They were apparently breeding among the masses of large loose rocks and boulders at the base of some high cliffs near the entrance to Kiska Harbor; we saw birds flying out and saw droppings and feathers in the remote crevices under the rocks, but their eggs were too well hidden to see and were entirely inaccessible under the large rocks.

#### **ÆTHIA PUSILLA**

Least Auklet

These interesting little birds, the smallest of the Alcidae, were first seen at the entrance to Unimak Pass among the Puffins and other sea birds, which gave us our first impressions of Aleutian bird life. There were a number of small flocks constantly in sight, rising readily in front of the ship or diving like a flash if we came too near. But it was not until we reached Kiska Harbor that we saw them in real abundance. One smooth foggy afternoon Mr. Beck and I took the skiff and went out towards the entrance of the harbor to collect sea birds. In the outer harbor we found Least Auklets congregating in immense flocks on what was probably their feeding ground. There were thousands and thousands of them swinging about us in great clouds like swarms of bees, or mosquitoes, and great rafts of them sitting in the water. Their diminutive size, short chunky bodies and the rapid motion of their little wings suggested bumble bees rather than birds as they bounced along over the little waves in their haste to get away. They kept up a constant twittering which from such a

vast multitude of birds created quite a volume of sound. They dove like lightning, disappearing so quickly that I could not see how it was done; but I saw them swimming under water using their wings and progressing rapidly. They are sociable little fellows and if one was wounded one or two others would usually return and hover about it, or settle on the water near it. I think they were also nesting under the rocks at the base of the cliffs with the Crested Auklets.

#### **SYNTHLIBORAMPHUS ANTIQUUS**

Ancient Murrelet

These pretty little birds were more or less common in all of the harbors where we anchored, usually well in shore, in small flocks of from four to six birds, swimming rapidly in compact flocks, but usually so lined out that not more than one could be killed at a shot. When hard pressed they dive by plunging quickly forward, sometimes, when greatly alarmed, jumping clear out of the water and diving head first. They do not remain under long and suddenly appear on the surface without causing a ripple. They have a shrill, faint whistling note.

We did not find their breeding places but the natives at Nazan Bay, Atka Island, had eggs which they had taken from holes in the cliffs at no great distance.

#### **CEPPHUS COLUMBA**

Pigeon Guillemot

This western counterpart of our eastern "sea pigeon" was seen in all suitable localities among the various islands, called by the same name and similar in habits to our eastern bird. The black markings in the white wing patches were quite conspicuous as field marks.

Wherever there were loose rocks piled up on the beaches around the harbors, we saw these Guillemots flying out from the shores and circling about us close to the water or sitting in little groups on the rocks, under which their nests were too well hidden for us to find, or too inaccessible to reach without the help of several men with crowbars. They were particularly numerous about the rocky shores of Kiska Harbor on Kiska Island, where the Least and Crested Auklets and Pacific Eiders were breeding. The breeding birds were in full summer plumage but we saw many in the mottled changing plumage and shot one in practically full winter plumage as late as June 15. On June 18 one female was taken containing an egg ready for laying.

**URIA TROILE CALIFORNICA**

## California Murre

Numerous Murres were seen in Unimak Pass and at various places among the Aleutian Islands, but probably most of them were of the following species, though some of them were undoubtedly of this species. Among the vast hordes of Pallas's Murres breeding on Bogoslof Island we recognized a few scattering pairs of this species, which could be easily identified by the lighter brown color of the heads and necks which were also more slender with longer bills. On the flat top of the high, rounded cliff at the west end of Bogoslof, the sides of which were covered with breeding colonies of Pallas's Murres, we found several small compact colonies of California Murres sitting on their eggs in close bunches of fifteen or twenty pairs.

No breeding colonies were found elsewhere among the Aleutian Islands, although they undoubtedly existed there.

**URIA LOMVIA ARRA**

## Pallas's Murre

As the Brunnich's Murre differs from the common Murre of the Atlantic coast, so may the Pallas's Murre be distinguished from the California.

Pallas's Murre in flight looks shorter, thicker and darker and at close range the white on the cutting edges of the mandibles is conspicuous. It is the commonest Murre in Bering Sea and was seen at various points among the Aleutian Islands where it breeds. It was particularly abundant in the waters north of Unalaska Island, where large or small flocks were almost constantly in sight flying up to the ship and swerving off across the bow or around the stern within easy gunshot. They were flying to or from their great breeding grounds on Bogoslof Island, which can often be located in the prevailing fogs by noting the direction in which the Murres or "crow bills," as they are called, are flying. Our visit to Bogoslof Island was made on July 4, and it proved to be a most glorious celebration of the day, though not a gun was fired.

It was certainly one of the most wonderful bird colonies I had ever seen. Castle rock at the eastern end towered upward from two hundred to three hundred feet with steep, sloping sides and sharp pointed peaks of volcanic rock and loose debris, over which we could readily climb. The peaks, the steep cliffs, and even the gravelly and sandy slopes were literally covered with nesting Murres, countless thousands of them, probably several hundred thousand, perhaps a



million; their numbers were beyond our power to even estimate. As we approached near enough to disturb them, they came sweeping down the slopes in great clouds so thickly that it seemed as if we would be swept off our feet by the rushing tide of birds; in their haste to escape as they scrambled off their nests they sent a shower of eggs rolling down the slopes to be smashed against the first rock they struck; and many of the birds bounded helplessly along over the rocks and stones in their frantic efforts to rise; it was an easy matter to knock them over with sticks or even catch them in our hands. When once well a-wing they would circle about the rocks in bewildering clouds, a steady stream of swiftly flying birds; and off at sea great rafts of them could be seen sitting on the water. Practically all of the birds in this colony were Pallas's Murres. Their eggs were thickly scattered all over the rocks in close rows along the ledges, in every available hollow, nook or crevice big enough to hold an egg and in dense masses, as close as the birds could sit, on the flat spaces and on the sandy slopes. Even at this late date most of the eggs were fresh or nearly so and no young birds were seen.

Toward night, from about 5 p. m. until sunset, the population of the already overcrowded island was still further increased by flocks of Murres constantly coming in from the sea, sometimes in small compact flocks of regular formation but more often in loose straggling parties. Without any apparent cause a cloud of birds would occasionally sweep down from the cliffs, circle about the rocks a few times and then settle down.

#### **STERCORARIUS PARASITICUS**

Parasitic Jaeger

Only a few of these birds were seen about the harbors, particularly at Kiska where they were feeding among the gulls. They were in the dark phase of plumage, plain slate gray. On the inland tundra on Kiska Island I saw one of these Jaegers flying about some small ponds where they are fond of alighting and standing for some time on some prominent little hummock, from which a good outlook is obtainable; at such times they are shy and difficult to approach.

#### **RISSA TRIDACTYLA POLLICARIS**

Pacific Kittiwake

We saw quite a number of Kittiwakes between Unimak Pass and Unalaska, but as they were all in the distance it was impossible to say whether they were of this or the following species. Elsewhere among the Aleutian Islands they seemed to be very rare or entirely absent.

**RISSA BREVIROSTRIS**

Red-legged Kittiwake

As we passed Akutan Island we saw a large number of Kittiwakes hovering about the rocky cliffs, which were probably this species, though we could not stop and did not go near enough to identify them. They are listed as breeding on this island. We did not have time to visit their other known breeding grounds.

**LARUS HYPERBOREUS**

Glaucous Gull

Among the large numbers of Glaucous-winged Gulls seen everywhere, there were undoubtedly a few of this species, perhaps many of them. It was almost impossible to distinguish the slight difference in the wing markings in life and we shot very few gulls for lack of time to prepare them. A few were seen and one was taken at Unalaska.

**LARUS GLAUCESCENS**

Glaucous-winged Gull

This was the common gull seen on or about all of the islands we visited. They were particularly abundant in the harbor at Unalaska and Dutch Harbor, where they were constantly flocking about the ships to feed on garbage thrown overboard. They were common all the way up the coast from Seattle and in the passes, but seldom seen out of sight of land. I saw a large number of them on the high upland tundra above the cliffs on Kiska Island, where they acted as if they were breeding, but I did not find any nests there. The only breeding colony we found was on Bogoslof Island where there were between one and two hundred nests widely scattered over the flat sandy portions of the island. The nests were well made of kelp and seaweed, decorated with feathers and fish bones. At the time of our visit on July 4, most of the young had hatched and were running about, some nests still contained young or pipped eggs and several held sets of two or three blowable eggs. Wherever these gulls were seen we found numerous shells of sea urchins, far from the water, where the gulls had dropped and broken them to feed on them.

**LARUS BRACHYRHYNCHUS**

Short-billed Gull

Young birds of this species were common about Ketchikan where we collected a small series. We saw a few adults in Kiska Harbor but did not find their breeding grounds.

**DIOMEDEA NIGRIPES**

Black-footed Albatross

On the northern Pacific Ocean from Dixon Entrance to Unimak Pass, when two hundred miles or more off shore, a few of these Albatrosses, sometimes as many as six, were almost constantly following the ship, but nearer shore they were seldom seen. We saw a few off the Aleutian Islands both in Bering Sea and the Pacific.

The Short-tailed Albatross, which has been recorded from this region, was not seen.

**FULMARUS GLACIALIS GLUPISCHA**

Pacific Fulmar

Fulmars were common in the northern Pacific Ocean and Bering Sea, being seen almost constantly about the ship when out of sight of land and frequently closer in. Their graceful movements on the wing were interesting to watch, as they sailed about with their long wings stretched out straight to their fullest extent or flapping rapidly for a few strokes at intervals. Various phases of plumage were noted, light, dark and all grades of intermediates. They breed among the western Aleutian Islands but we did not see their breeding grounds.

**FULMARUS RODGERSI**

Rodgers's Fulmar

The Fulmars of the northern islands in Bering Sea are supposed to be of this species, but there seems to be some doubt as to the validity of the species and we saw plenty of Fulmars in the Pacific Ocean and about the Aleutian Islands which seemed to be the same as those seen farther north.

**PUFFINUS GRISEUS**

Sooty Shearwater

**PUFFINUS TENUIROSTRIS**

Slender-billed Shearwater

Among the vast flocks of dark colored Shearwaters seen in and about Unimak Pass, it was impossible to separate these two species at any great distance. Certainly both species were present, for we identified both at close range, though none were shot as we could not pick them up. I never saw anything approaching their abundance in Unimak Pass when we went through there on June 4; small black whales were numerous and the Shearwaters were following them about to feed on the remnants of food left on the surface by the

whales; on account of this habit they were called "whale birds." The water was literally black with birds all around us as we sailed through acres and acres of them, wildly scrambling to get out of our way or rising in great clouds to sweep away over the smooth water. For several hours we were almost constantly seeing or passing through these great rafts of Shearwaters and I should not dare to hazard a guess as to how many hundred thousand we saw.

The Slender-billed Shearwater is supposed to breed in some of the western Aleutian Islands, but we did not have a chance to investigate.

#### AESTRELATA FISHERI

Fisher's Petrel

A species of *Aestrelata*, apparently fitting the description of this species, was fairly common in the Pacific Ocean from one hundred to two hundred miles off shore, south of the Alaska Peninsula and the Aleutian Islands, but we were not allowed to lower a boat to secure any. We saw a few also about the Aleutian Islands and secured one specimen at the entrance to Kiska Harbor on June 17. This bird does not exactly fit the description of *fisheri*, and there seems to be some doubt as to whether there is any such species; the three species of *Aestralata* known as *scalaris*, *gularis* and *fisheri* seem to intergrade more or less and it may yet be proven that all three of these are based on individual variations in a single species and should not be recognized as three different species.

#### OCEANODROMA FURCATA

Forked-tailed Petrel

This pretty little Petrel was common in the north Pacific Ocean and seen frequently about the Aleutian Islands, breeding on several of them. The only breeding place we found was on Tanaga Island, when they were just beginning to breed on June 25.

Their nests were in burrows in the soft soil at the base of a steep grassy hillside, a mile or so inland. Several burrows were dug out by Mr. Beck, but only one fresh egg was found and only one bird taken.

#### OCEANODROMA LEUCORHOA

Leach's Petrel

We saw a few in the north Pacific Ocean and a few about the harbor at Kiska where one was shot.

**PHALACROCORAX PELAGICUS PELAGICUS**

Pelagic Cormorant

This was the common Cormorant of general distribution among the islands. We saw them at every island we visited, but found them nowhere abundant and saw no breeding colonies. They were commonest in Kiska Harbor where we saw them sitting on the rocks in small groups or flying out around our boat; they were probably prompted by curiosity for they usually circled about the boat several times before flying away and were not much alarmed by our shooting. Only a few of them had the nuptial plumage fully developed with conspicuous white flank patches; some had slight traces of white only and many were in the brown immature plumage, probably one year old birds. A Cormorant collected by Mr. Wetmore, at Unalaska on June 8, seems referable to *robustus*.

**MERGUS SERRATOR**

Red-breasted Merganser

We saw these Mergansers on nearly all of the islands we visited. They were generally distributed throughout the chain, breeding on all suitable islands. We did not find any nests but saw a female with a brood of nine young on Adak Island on June 26.

**ANAS PLATYRHYNCHOS**

Mallard

Mallards were not common anywhere but we saw a few on Kiska and on Tanaga Islands. On the former a female was seen with a brood of young on June 19. Probably this species breeds sparingly throughout the Aleutian Chain.

**NETTION CRECCA**

European Teal

**NETTION CAROLINENSE**

Green-winged Teal

The European bird is supposed to occur only rarely, or as a straggler, in the Aleutian Islands and the American bird is recorded by nearly all of the writers on Aleutian ornithology as the common breeding Teal of the region. Teal of one of these species were common on all of the islands; we saw them frequently and found them breeding in nearly all suitable places along the small water courses and about small ponds. Mr. Wetmore found a nest contain-

ing ten fresh eggs on June 7, near Unalaska and shot the female; unfortunately the male was not secured. We naturally assumed that these were American Green-winged Teal and therefore made no special effort to shoot males on any of the eastern islands, but I now sorely regret that we did not collect at least a few males as the females of the two species are nearly indistinguishable. Among the western and central islands we collected quite a series of both sexes and every male taken proved to be an European Teal; not a single male Green-winged Teal was collected or identified anywhere. On my return to Washington I looked through the National Museum collection for specimens from the Aleutian Islands and found only two males, No. 85615, collected by Lucien M. Turner on Atka Island, June 28, 1879, and No. 192391, collected by Dr. J. Hobart Egbert on Kiska Island, July 14, 1904; both of these proved to be typical European Teal. Therefore, failing to find any positive evidence to prove that the Green-winged Teal breeds on the Aleutian Islands, we must assume for the present, on the strength of what evidence we have, that the European Teal is the common breeding species of this region, where it is fairly abundant, and that the Green-winged Teal, which is so abundant on the main land of Alaska, occurs on the islands rarely, if at all.

#### MARILA MARILA

Scaup Duck

I saw a flock of five of these ducks in a small pond on Atka Island on June 14. They did not seem to be breeding there or at any other point visited by us.

#### HARELDA HYEMALIS

Old-squaw

A few were seen on June 11 in Chernofski Harbor on Unalaska Island and at Kiska Island on June 17, but they were not in summer plumage and did not seem to be breeding.

#### HISTRIONICUS HISTRIONICUS

Harlequin Duck

This is undoubtedly the commonest and one of the most widely distributed of the ducks of the Aleutian Islands. They were seen in large or small flocks at all of the islands where they could find the rocky shores that they love to frequent. They were breeding about the shores of Kiska Harbor on June 17 and probably at other places

we visited, but we did not happen to find any nests. They were frequently seen feeding in pairs about the kelp covered rocks at low tide, among which they were surprisingly inconspicuous and were easily approached.

They were hard to kill however, and would dive readily when shot at or wounded. The unmated pairs were often congregated into large flocks, the adult males generally in flocks by themselves but the flocks of young males or females were usually led by two or three adult males.

#### **SOMATERIA V-NIGRA**

Pacific Eider

Eiders were seen about the inner harbors on all of the islands west of Unalaska and in Kiska Harbor they were fairly abundant in small flocks and mated pairs. They frequented the rocky beaches at the bases of the cliffs where they would sit in the loose rocks, feed in the kelp beds about them and build their nests among the large boulders above high water mark. We found two nests here, one with four and one with five fresh eggs, one in a hollow behind the rocks and partially concealed in the long grass, and one in the long grass at the top of a steep grassy slope.

#### **OIDEMIA AMERICANA**

Scoter

Flocks of Scoters of both this and the following species were seen on the various islands visited, principally in the harbors, and some of this species were shot at Atka Island on June 14. We saw no evidence of their breeding anywhere and none were seen in any of the inland ponds.

#### **OIDEMIA DEGLANDI**

White-Winged Scoter

The same remarks apply to this species, which were easily recognized, but none were shot. They were evidently flocks of non-breeding birds wandering about. I find no record of any Surf Scoters being positively identified among the Aleutian Islands, though we may have seen some.

#### **BRANTA CANADENSIS MINIMA**

Cackling Goose

Although we saw a few geese, either this or Hutchins's on Kiska, Adak, Atka and Attu islands, the only one positively identified was one of this subspecies taken by Mr. Beck as she flew from her nest of

four eggs on Attu Island on June 23. If we had had time to thoroughly explore the inland ponds on some of the western islands, where they are said to be common, we should probably have found plenty of geese breeding. The status of these two geese was one of the points we particularly wanted to settle and we were much disappointed at not being able to do so.

#### **LOBIPES LOBATUS**

Northern Phalarope

We saw a few Phalaropes on Atka Island where several nests were found with fresh or incomplete sets of eggs on June 18. On Kiska Island they were really abundant and breeding about the small grassy ponds and sloughs, where a set of three fresh eggs was taken on June 21. A small flock of apparently unmated birds of both sexes, in which I counted seventeen birds at one time, frequented the beach almost constantly, swimming about the piers of an old dock or feeding in the surf where they floated buoyantly over the little waves and fluttered over the crests of the small breakers. They were swimming about in little circles, picking up some minute objects from the surface. They were very tame everywhere and, about the ponds where they were breeding, very solicitous and noisy. Their nests were made in little tussocks in the wet meadows around the edges of the ponds or near the banks of streams. They were common on all the other islands where there were suitable breeding grounds.

#### **ARQUATELLA MARITIMA COUESI**

Aleutian Sandpiper

The first specimen of this local species was taken on the beach at Akun Island on June 4, and after that we saw them on every one of the islands we visited, but they were not common among the eastern islands. At Tanaga Island they were fairly abundant and breeding on the inland tundra.

Only one nest was found with eggs, on Kiska Island on June 14. While climbing over a high hill a bird fluttered off directly under my feet, on a bare moss covered space where there was only a scanty growth of grass. The four large eggs lay well concealed in a deep little hollow lined with dead leaves and bits of straw. The eggs were only slightly incubated. On Attu Island on June 23, I shot a pair of these birds which were very solicitous and evidently had a nest; after a short search I found it on a little moss covered hummock well up on the hillside; in a hollow similar to the first nest were three beauti-



fully colored downy young, not yet old enough to run. Mr. Wetmore also found a brood of downy young on Adak Island on June 27. We found these sandpipers always very tame and unsuspecting and, except on their breeding grounds, remarkably silent and inactive. They move about very little while feeding and pay no attention to passers-by even at short distances; it was often necessary to back off before shooting one.

On their breeding grounds, on the high dry tundra or mossy hillsides, they were much more active and noisy, indulging in their hovering flight songs thirty or forty feet up in the air, a series of delightful twittering notes as they fluttered downward, or giving their loud musical flute-like whistling notes, suggestive of the melodious calls of the Upland Plover, while flying about or standing on the top of some prominent hummock.

Among a series of eleven birds collected on Attu Island on June 23 are two birds which closely resemble *ptilocnemis* in color, but in size are typical of *couesi*. At least one of them was a breeding bird, the parent of a brood of downy young, and doubtless both of them were summer resident birds. At this point so far west of their normal range and entirely outside of their known migration route, they could hardly be regarded as straggling or belated migrants, which might be expected in the eastern Aleutian Islands. They can, therefore, be regarded only as aberrant specimens of *couesi* or variants towards *ptilocnemis*. In our series of *couesi* from the Aleutian Islands are a number of other specimens which are somewhat intermediate between the two forms but are undoubtedly referable to *couesi*.

#### LIMOSA LAPPONICA BAUERI

Pacific Godwit

While walking around the shores of a pond on Atka Island on June 13, I flushed two Godwits which I am quite sure were of this species, although I was unable to secure them. They were probably late migrants.

#### HAEMATOPUS BACHMANI

Black Oyster-catcher

Oyster-catchers were fairly common about Kiska Harbor where we saw them sitting on the rocks or flying about and uttering their loud and penetrating cries. They were remarkably inconspicuous on the rocks and not at all shy. At Adak Island we saw a flock of eight or ten birds several times flying about the harbor or standing on a rocky islet. They may have been breeding at one of these

places but we saw no evidence of it and no, apparently, breeding pairs. They were also noted on Tanaga Island and at Chernofski on Unalaska Island.

#### **LAGOPUS RUPESTRIS NELSONI**

Nelson's Ptarmigan

The best known of the Aleutian Ptarmigan inhabits Unalaska Island and Amaknak Island, which are separated only by a narrow channel. About Iliuliuk Village on Unalaska Ptarmigan are scarce and wild, having been persistently hunted by the inhabitants, but across the channel on Amaknak, where most of our birds were taken, we found them common and tame on the steep sloping sides of a mountain locally known as "Ballyhoo." At the time of our visit, June 5 and 9 inclusive, the Ptarmigan were apparently just mating and were scattered all over the sides of the mountain. We found no nests and judging from our experience elsewhere we inferred that they would come down to lower levels to nest in the grassy hollows. A pair of birds could often be located by seeing the song flight of the male, his white wings being quite conspicuous at a great distance as he flies thirty or forty feet upwards and floats or flutters downwards, sometimes scaling on decurrent wings, uttering all the time his loud clucking, rattling call. The male may often be seen sitting on his favorite perch on some prominent hummock where he has a good outlook, but where he is equally conspicuous; he apparently uses the same hummock regularly for it is usually well decorated with dung and feathers. The female is very inconspicuous and moves about very deliberately where she matches her surroundings perfectly.

#### **LAGOPUS RUPESTRIS ATKHENSIS**

Turner's Ptarmigan

On Atka Island we found this form of Ptarmigan very abundant; there seemed to be more Ptarmigan here than on any island we visited. There were comparatively few of them on the hillsides, but in the grassy hollows and among the low rolling hills of the valleys we were constantly flushing them. They were apparently mated and breeding on June 13, the day of our arrival, but we failed to find any nests during the next two or three days. The male usually flushed first with loud clucking notes and the female was sure to follow soon after him. They were very tame and we had plenty of opportunities to observe and study their movements, as they conducted

their courtship in the air or strutted about on the ground. The male is a strong flyer and delights in making long scaling flights, particularly against a strong wind when he rises and falls at will on firmly set wings or poises like a falcon over his admiring mate.

#### **LAGOPUS RUPESTRIS TOWNSENDI**

Townsend's Ptarmigan

At Kiska Island on June 17, the Ptarmigan of this form were still in the uplands, were much wilder than the Atka birds and not nearly so abundant, but during the few days that we were here we succeeded in collecting a good series. No nests were found; probably we were too early for complete sets.

#### **LAGOPUS RUPESTRIS CHAMBERLAINI**

Adak Ptarmigan

The Adak Ptarmigan frequented the high dry tundra and low hillsides where reindeer moss was plentiful as well as the grassy hollows and valleys. They were common but not abundant and we obtained all we needed. Two nests were found, each containing seven nearly fresh eggs. All of these Ptarmigan were feeding entirely on green food, principally the young, green leaves and buds of the dwarf willows, the tops of ground evergreens and mosses and the flower buds and blossoms of herbaceous plants.

#### **LAGOPUS RUPESTRIS SANFORDI**

Tanaga Ptarmigan

On Tanaga Island we collected a good series of this bird which proved to be a new subspecies, as elsewhere described.<sup>1</sup> The birds were abundant and tame on the rolling grassy hillocks or sand dunes back of the beach and on the little grassy hills on the tundra. Three sets of eggs were collected and other nests were seen by members of the ships crew, who went hunting on June 25, only a half day being spent on the island. One nest containing nine fresh eggs was in a hollow among some large tufts of grass in the steep bank of a stream. The other nests were in grassy hollows among the hillocks and contained eight fresh eggs each.

#### **LAGOPUS EVERMANNI**

Evermann's Ptarmigan

This, the darkest of all the forms, inhabits Attu Island, the western extremity of the chain where it is found on the moss covered and bare, rocky sides of the mountains. It enjoys the rank of a distinct

<sup>1</sup> Smithsonian Misc. Coll., Vol. 56, No. 30.

species, but I doubt if it is correctly so ranked for our material seems to show intergrading with *nelsoni*. We learned less about this than any of the others for our collecting time on this important island was cut down to one cold, rainy, stormy day, when effective collecting was difficult. We collected only one female and seven males. No nests were found, though the female was evidently incubating. What few birds we saw were very tame.

There is much yet to be learned about the relationships of the Aleutian Ptarmigan and their connection with the mainland birds of both continents, but before the subject can be satisfactorily studied, more material must become available from the unexplored islands and the Asiatic mainland. I shall, therefore, have to leave this important matter for future investigation.

#### HALIÆTUS LEUCOCEPHALUS ALASCANUS

Northern Bald Eagle

Large Bald Eagles were common on all the islands we visited, particularly about Unalaska and Dutch Harbor, where one or more were almost constantly in sight. They were not at all shy, frequently flying within easy gunshot; they were especially bold about their nesting places or near their favorite lookout points on the hilltops, where feathers and droppings indicated that they habitually used the same spot for a perch; at one such spot on the crest of a steep rocky hill, I surprised a large White Headed Eagle which sailed back and forth several times, within a few feet of my head, squealing vigorously all the time as if I were intruding on its home. It undoubtedly breeds on all the islands. Nests with young about half grown or more were found on Atka, Adak, Kiska and Tanaga islands; they were placed on rocky cliffs and some were easily accessible.

Among the numerous dark colored Eagles seen, some were probably Golden Eagles, as the species is recorded as common among these islands. We saw several which we thought might be Gray Sea Eagles, but they did not come near enough to be positively identified.

#### FALCO PEREGRINUS PEALEI

Peale's Falcon

This species is said to be commoner among the western islands than elsewhere, but we saw large Falcons, undoubtedly this species, on Atka, Kiska, Tanaga and Adak. At Kiska Harbor on Jun 19, I watched a pair of these birds flying about the high rocky cliffs; they were apparently building a nest, as I saw one of them fly up

with a stick in its claws. I also saw a pair mating at Atka Island on June 13. These facts would seem to indicate that they are late breeders. We did not secure any specimens or find any nests.

#### **ASIO FLAMMEUS**

Short-eared Owl

A single individual of this species was seen on Amaknak Island, near Dutch Harbor, on June 7, where it was flushed from the top of a small spruce tree, in one of the only two clumps of trees in the Aleutian Islands.

#### **CORVUS CORAX PRINCIPALIS**

Northern Raven

Ravens were common throughout the whole Aleutian chain. About Iluliuk Village, Unalaska, they were particularly abundant and absurdly tame. They habitually frequented a steep grassy hillside, across a small creek from the town, whence they made frequent visits to the village. Along the beach and about the houses they were as tame as hens, hopping away a few feet from us or sitting on the fences or on the roofs of the houses like tame Crows. They are useful as scavengers and probably make a good living. Their aerial evolutions are strikingly interesting, showing wonderful command of their flight powers. The young were fully grown and on the wing at the time of our arrival, the first week in June.

#### **HYPOCENTOR RUSTICA**

Rustic Bunting

Two specimens of this bird, at that time unknown to us, were picked up dead and partially dried on Kiska Island. On June 19, at the same place, Mr. Wetmore saw and collected a living specimen. I saw two or three birds on Adak Island, which I thought were this species but they were exceedingly shy and I did not collect any. This species occurs regularly in Japan and on the Asiatic mainland from Kamchatka to China, and as a rare straggler only in the Commander Islands.

#### **LEUCOSTICTE GRISEONUCHA**

Aleutian Rosy Finch

This characteristic Aleutian species was uniformly distributed in all suitable localities over all of the islands. Its favorite haunts are the rocky mountain sides and summits, its breeding grounds the rocky ravines and inaccessible cliffs and its feeding grounds about

the edges of snow banks on the hillsides and gulches. They are restless, roving birds, sweeping over the mountain tops in long swinging curves, or gathering in small parties on the edges of a melting snow bank to feed on the small insects to be found there, where they are often too shy to approach. About the rocky cliffs and summits, where their nests are well concealed in inaccessible crevices, they are tamest; if one stands still they will come and perch on some near by rock, chirping loudly in protest, or fly about from point to point with their swinging billowy flight, twittering all the time. Mr. Wetmore found a nest on Kiska Island on June 18, containing two fully fledged young; it was in a crevice in the rocks in an almost inaccessible place on the face of a cliff. This was the only nest found.

Rosy Finches were occasionally seen on the rocky beaches, but apparently were only feeding there.

#### **ACANTHIS LINARIA LINARIA**

Redpoll

A Redpoll alighted on a spruce tree near Dutch Harbor, on June 7, while I was sitting under it eating my supper, but it flew away before I could grab my gun and I never saw it again. No others were seen.

#### **PLECTROPHENAX NIVALIS TOWNSENDI**

Pribilof Snow Bunting

The first Snow Buntings were seen before we had been ashore an hour on Akun Island, and from that time on they were found regularly on all the islands visited, but were nowhere abundant or even common. Though occasionally seen on the beaches or low levels, they were confined almost entirely to the mountain tops and rocky ravines, where they were breeding. They were generally rather shy if we attempted to stalk them in the open but were easily approached among the rocks. The males had a pretty little song and a variety of twittering notes. They were not as active as the Rosy Finches and were generally confined to restricted localities which suited their needs. No nests were found, for we had very little time to devote to small land birds. No young were seen on the wing during June.

#### **CALCARIUS LAPPONICUS ALASCENSIS**

Alaska Longspur

Just as the Chestnut-colored Longspur adds a charm to a drive across the inland prairies, so does this beautiful little bird cheer the wanderer over the cold and fog bound tundra of this inhospitable

region by his delightful song and cheerful manner, as standing on the top of some little hummock he whistles in joyful greeting or, flying up into the air, he charms his mate with his melodious flight song. Fortunately these pretty little Longspurs are exceedingly abundant all over the low grassy hills, plains and tundra of all the islands, where they are almost constantly seen and heard; they undoubtedly outnumber all other land birds. They were mating and breeding all through the month of June; nests with fresh eggs were found as early as June 7, and as late as June 27. The nests were placed on the ground, either in or under the tufts of grass or wild rye, usually in grassy hollows in the lowlands, but sometimes on the hillsides or on the tundra. No young birds were seen on the wing during June, but several nests were found with fledged young.

#### **PASSERCULUS SANDWICHENSIS SANDWICHENSIS**

Aleutian Savannah Sparrow

This Sparrow was very abundant on Unalaska Island, even as far west as Chernofski, and on the other islands to the eastward of it, but it was not found on any of the islands to the westward of Unalaska. Its favorite haunts were the low, flat, grassy meadows near the beaches and about the ponds and streams, but it was also found more sparingly on the high tundra and low hillsides. In habits and song it closely resembles the eastern Savannah Sparrow. Only one nest was found, by Mr. Wetmore on June 9, containing four fresh eggs.

#### **MELOSPIZA MELODIA SANAKA**

Aleutian Song Sparrow

One of the birds peculiar to this region and the most widely variant form of a plastic species is this strikingly large Song Sparrow. Although so widely different from any of the mainland subspecies, it seems to vary very little among the 800 miles of islands forming the Aleutian Chain. Only a few Song Sparrows were seen about the vicinity of Dutch Harbor, but they were very abundant at the western end of Unalaska Island near Chernofski. They were fairly common locally on all of the other islands but nowhere abundant. They were strictly littoral in their habits and were confined almost wholly to the steep grassy banks above the beaches or the rocky and grassy valleys near the shore. In such localities we almost always found at least a few of them breeding. Only one nest was found, at Chernofski on June 10, containing four fresh eggs. It was concealed behind a tuft of grass on a steep grassy bank above the beach. Being a

heavily bodied, small winged bird, this Song Sparrow's flight is slow and direct, not at all like the buoyant flight of the eastern bird. But its song, though it has many variations, is quite similar to that of its well known relative. One that I shot had a bill full of small angle worms.

#### **HIRUNDO ERYTHROGASTRA**

Barn Swallow

One was seen at Dutch Harbor on June 5, but none were seen elsewhere. I believe it does not occur west of Unalaska.

#### **ANTHUS RUBESCENS**

Pipit

We saw a few Pipits on the mountains about Dutch Harbor and Unalaska where they were mating and breeding early in June, though no nests were found. We did not see them elsewhere among the islands.

#### **NANNUS MELIGER**

Aleutian Wren

These delightful little songsters were seen on the islands we visited, wherever suitable conditions were found. They frequented the rocky ravines inland, particularly along the beds of cool mountain streams and some grassy valleys where there were a few loose scattered rocks. We also found them on the rocky beaches among the loose boulders under the cliffs. It was surprising to see such a delicate little woodland bird braving the rigors of such a rugged coast, dodging in and out among the surf swept rocks or pouring out his delightful warbling song among the cries of hardy seabirds. He must have a brave and cheerful little heart under his tiny coat of thick feathers.

#### **CINCLUS MEXICANUS UNICOLOR**

Dipper

I saw a pair of Dippers on an inland mountain stream near a little waterfall at Unalaska, but did not see any elsewhere.

#### **CALLIOPE CALLIOPE**

Ruby-throated Nightingale

Mr. McKechnie shot one of these rare birds at Kiska Harbor on June 17 and saw two others at the same time. Mr. Wetmore also saw one two days later. They were near the beach about some old buildings.



This species is abundant in Kamchatka, where it is one of the most attractive birds and an exquisite songster.

Dr. Stejneger records the capture of a single straggler on Bering Island, January 29, 1883; it is therefore a rarity even in the Commander Islands. The capture of our specimen, which is now in the National Museum collection, extends its known range several hundred miles eastward.

### III. BIRDS NOTED IN BERING SEA IN JULY, 1911

On our return to Unalaska on July 1, we were informed by the Commander of the Bering Sea fleet that the Revenue Cutter Service could do nothing more for us, as they needed the *Tahoma* on the seal island patrol. We therefore made other arrangements for transportation during the remainder of the season. We left Mr. Wetmore at Unalaska to work in that vicinity for a while and to secure passage homeward along the south side of the Alaska peninsula. The results of his work belong to the Biological Survey. The remainder of our party secured passage to Nome on the gasolene schooner *Polar Bear*, owned and commanded by Mr. Louis L. Lane, of Seattle. We sailed from Unalaska on July 3 and reached Nome July 11, having spent one day on Bogoslof volcano, half a day on St. Paul Island, half a day on Walrus and a day at St. Matthew and Hall islands.

No thorough work could be done on such a hurried trip, but we obtained a fairly good impression of the avifauna of these interesting islands and took a large series of photographs. The following notes on the species observed may be worth recording, though I realize that they contain very little new matter.

#### LUNDA CIRRHATA

##### Tufted Puffin

A few Tufted Puffins were breeding on Bogoslof Island, making their burrows in the sandy bluffs above the beaches or in the sand and gravel slopes about Castle Rock among the Murres. Their burrows were rather shallow and were generally profusely lined with feathers and straws.

The soft soil on the bare top of Walrus Island was so honeycombed with the burrows of this Puffin that it was difficult to walk without breaking into them; very few Puffins were seen, however, until they were dug out of their burrows when they would go scrambling off towards the water in a frantic effort to fly. They were nesting here also under the loose rocks on the stony beach among the Auklets.

**FRATERCULA CORNICULATA**

Horned Puffin

A few pairs were seen breeding on the rocky cliffs at St. Paul Island and they were common at St. Matthew Island on the high cliffs among the Fulmars. No nests of this species were examined.

**PHALERIS PSITTACULA**

Paroquet Auklet

We first saw this large White Breasted Auklet when we approached the shores of St. Paul Island in a dense fog, the direction in which this and other birds were flying helping to locate it. They were nesting in inaccessible crevices in the low rocky cliffs about this island where we saw them sitting in little groups on the rocks or flying out to circle around us. On Walrus Island we found them breeding abundantly, on June 7, where their nests were well hidden under the piles of loose rocks on the beach-like center of the island, in company with the Tufted Puffins, Crested and Least Auklets. The rocks were mostly small so that we did not have much difficulty in moving enough of them to discover the bright white eyes and curious upturned red bills of these Auklets as they sat quietly on their single eggs. The eggs were laid on the bare rocks or soil or on a bed of loose pebbles. They were silent and very gentle as they sat quietly on their nests, quite different in this respect from the other Auklets. On St. Matthew Island we saw a few Paroquet Auklets, apparently breeding, about the tops of the high rocky cliffs, two hundred feet above the sea.

**ÆTHIA CRISTATELLA**

Crested Auklet

This species was not so abundant as the foregoing, but was breeding commonly on Walrus Island. While hunting for nests among the loose rocks we frequently heard the loud weird cries of this strange bird coming from the innermost recesses of the rocks below us. By moving the rocks we could sometimes see them sitting on their nests. The eggs are similar to those of the Paroquet Auklet, but usually a little smaller and more pointed.

**ÆTHIA PUSILLA**

Least Auklet

Great clouds of these little birds greeted us on our arrival at St. Paul Island, where they rose from the stony beaches in swarms, and were probably breeding among the loose rocks. Their faint

twittering notes sounded like an immense flock of Peep in full cry or like the distant peeping of countless Hylas.

#### **CEPPHUS COLUMBA**

Pigeon Guillemot

A few were seen at St. Paul and Walrus islands, and a few about the high cliffs of St. Matthew Island. They were probably breeding at all of these places, but we spent no time in hunting for their nests.

#### **URIA TROILLE CALIFORNICA**

California Murre

Although the Murre colonies at Bogoslof Island were the most extensive I had ever seen and probably included the greatest number of birds, they were totally eclipsed in density by the wonderful colonies on Walrus Island. This is a most remarkable little island, an ornithological wonderland, where ten species of seabirds breed in countless multitudes, far surpassing anything I have ever seen. The California Murres rank first in numbers, literally covering the low cliffs and rocky shores all around the island, as well as large spaces on top of it, with dense masses of birds sitting remarkably closely. They were exceedingly tame or stupid and would allow a near approach, but if hard pressed they would rise on their toes and waddle off, flapping their wings rapidly; the clatter of many hundred pairs of wings increasing to a deafening roar, they would pour off in streams, stumbling over each other as they scrambled down to the water, pattering over its surface to join the distant rafts of Murres on the water or diving straight downward and flying away rapidly below the surface. Plenty of Murres, mostly of this species, were breeding on the perpendicular cliffs of St. Matthew Island.

#### **URIA LOMVIA ARRA**

Pallas's Murre

Among the vast hosts of California Murres on Walrus Island were a few of this species. On the cliffs of St. Paul Island this species was breeding among the Puffins and Kittiwakes. At St. Matthew Island a few Pallas's Murres were seen, although they were far outnumbered by the foregoing species. All through Bering Sea Pallas's Murres were frequently seen flying about, even out of sight of land, in small flocks or singly.

**RISSA TRIDACTYLA POLLICARIS**

Pacific Kittiwake

This seems to be the commonest gull in Bering Sea. We saw a few breeding on the cliffs at St. Paul Island; they were quite common on Walrus Island and a few were nesting on the high cliffs on St. Matthew Island. At Walrus Island, where there are no high cliffs, we had an unusually good opportunity to examine their nests, which were placed on little shelves on the faces of perpendicular rocks in little groups of from four to six pairs each, often close to the Murres or Red-faced Cormorants. The nests were neatly made of soft green grasses, securely plastered onto the rocks, and contained one or two eggs.

**RISSA BREVIROSTRIS**

Red-legged Kittiwake

Only one specimen of this beautiful species was taken, between Bogoslof and the Pribilof islands. Several were seen about the latter and could be distinguished by their darker mantles, short bills, less black on their wing tips and by their bright red feet. We did not see their breeding grounds.

**LARUS HYPERBOREUS**

Glaucous Gull

In the large breeding colony of Gulls on Walrus Island there were certainly a number of Glaucous Gulls, but just what the proportions were of this and the following species we were unable to determine as we were not allowed to do any shooting here. Only a few nests still contained eggs, as most of the young Gulls were running about and hiding under the tufts of grass which covered the highest part of the island.

**LARUS GLAUCESCENS**

Glaucous-winged Gull

I assumed that the majority of the Gulls breeding on Walrus Island were of this species, but I have no reason for the assumption except that this seems to be the commoner species. It is to be regretted that we were unable to shoot any, although photography gave us plenty to do during the half day spent on this fascinating little island.

**STERNA PARADISÆA**

Arctic Tern

A few Terns were seen in the northeastern part of Bering Sea, undoubtedly of this species, which was the bird found at Nome.

**FULMARS RODGERSI**

## Rodgers's Fulmar

The Fulmars of the northern islands of Bering Sea are supposed to be of this species while those about the Aleutian Islands are supposed to be the Pacific Fulmar. There is so much individual variation in Fulmars that the careful study of a very large series is necessary to determine satisfactorily the validity of this species and I doubt whether the characters of *rodgersi* would prove sufficiently constant to warrant its recognition as a distinct species. I saw Fulmars on the Pacific Ocean which certainly looked like *rodgersi* and about the high cliffs of St. Matthew Island, where Rodgers's Fulmars were breeding in large numbers, I could see from an advantageous point on the top of the cliff, where I could look down upon their backs, a great variety of color patterns on the birds circling below me. It would be well worth while to collect a large series of them here and thus determine the constancy of the specific characters. This was the only breeding colony of Fulmars that we saw; they were breeding in large numbers all over the faces of several high, precipitous, rocky cliffs where the eggs were laid on narrow ledges entirely inaccessible so far as we could see; but an hour or two on shore with a camera was hardly time enough for thorough exploration. The Fulmars were not shy and were constantly flying in and out or conducting their courtships on the narrow ledges below me.

**PHALACROCORAX URILE**

## Red-faced Cormorant

Among all the birds breeding in the large colonies of Walrus Island, these beautiful and rare Cormorants interested me most, for I had never seen the species alive before and there are very few places where it can be seen, as it is restricted to Bering Sea, where it is constantly resident. There was not a large number of them, perhaps fifty or one hundred pairs, scattered over the island in small groups, nesting on the broader level ledges on the outer and higher rocks. The nests were rather prettily made of various kinds of seaweeds, kelp, sea mosses and green grass, not very large and rather clean for Cormorants' nests. Most of the nests contained three or four young of various ages, naked and blind at first, but afterwards covered with soft gray down mixed with white on the belly. The birds were exceedingly tame as they stood beside the nests brooding over their young, allowing us to walk up and photograph them within a few feet. The beautiful metallic colors of their plumage, purple, blue, green and

bronze, their bright scarlet faces and gular pouches of rich smalt blue, made a strikingly handsome combination, as they stood craning their necks at us in ignorant stupidity as if they had never seen a man before. They were generally silent, but occasionally uttered a loud, rolling guttural croak, when alarmed. A few of the nests still contained, on July 7, three or four eggs. One nest contained two eggs of the Cormorant and a Murre's egg, which may have rolled into it from the rocks above.

#### HARELDA HYEMALIS

Old-squaw

Two pairs of Old-squaws in summer plumage were seen in a small pond near the village on St. Paul Island, where they were probably breeding.

#### PHALAROPUS FULICARIUS

Red Phalarope

A few flocks of large light-colored Phalaropes were seen flying over the northern parts of Bering Sea and one, a beautiful adult bird, came near enough to be identified.

#### ARQUATELLA MARITIMA PTILOCNEMIS

Pribilof Sandpiper

These Sandpipers were common on the low tundra at the south end of St. Matthew Island, in the interior at the north end and on Hall Island. Several specimens were taken by Mr. Kleinschmidt.

#### HETERACTITIS INCANUS

Wandering Tattler

A single bird of this species was heard on the rocky beach of St. Paul Island, near the fur-seal rookeries, on July 6.

#### LEUCOSTICTE GRISEONUCHA

Aleutian Rosy Finch

A few were seen on St. Paul Island about the rocky places near the killing grounds.

#### PLECTROPHENAX HYPERBOREUS

McKay's Snow Bunting

The name *hyperboreus* well fits this snow white bit of Arctic bird life which we saw sweeping down in long, curving flights from the rocky hills of St. Matthew Island to feed around the edges of the

snow glaciers in the valley. The male is almost wholly white and is a strikingly conspicuous bird as it flits about the rocks of its summer home. A pair were taken on this island and several on Hall Island. One nest was found containing young nearly fledged in an almost inaccessible crevice in the face of a rocky cliff, on July 9.

**CALCARIUS LAPPONICUS ALASCENSIS**

Alaska Longspur

They were fairly common on St. Paul Island on the grassy plains about the killing grounds.