

NOTES ON THE BIRDS OF SOUTHEASTERN
ALASKA.

BY ALFRED M. BAILEY.

*(Continued from p. 23.)**(Plates VIII-IX.)***Mergus americanus.** Merganser.—

Mergus serrator. RED-BREASTED MERGANSER.—These two species occur in the same range and are so often noted together that it seems advisable to discuss them under the same heading. They are both residents, being more or less common throughout the year among the northern islands, at least. They are especially fond of tide water streams, and it is the usual sight to see a string of one species or the other working through the narrow passes on the change of tide, flying low over the water with great speed. Their flight is direct, and unless greatly alarmed, they do not swerve from their chosen course, as is so characteristic of fresh water ducks. Both species were abundant at the mouth of the Stikine in April, where they worked back and forth along the channels through the extensive delta. It would be difficult, except during the breeding season, to go afield without seeing either, or both species. They were common in Glacier Bay in June; a flock of a dozen male Mergansers was noted on one of the little fiords of Willoughby Island, and both forms were seen in Bartlett Cove. August 9 I saw an old Red-breasted Merganser with her brood of nine three-fourths grown young far up the creek which drains into Bartlett Cove. They were not wild, although they started pattering over the water when they first sighted me; on the following day, in a little stream coming in at the right of Berg Bay, I saw another female with a flock of youngsters about the same size. I was following along a bear trail skirting the creek, well concealed in dense alders, when I heard a sudden commotion in the water below. I worked to an advantageous place and enjoyed watching the old bird feeding her young. They were almost as large as the mother, and as she would dive for trout, all the young would start flapping over the water after her, so when she came up, the whole band was there, each mouth open, and every bird begging with throaty hisses and flapping wings. I saw her throw a trout at least six inches long down one gaping maw, and immediately dive; when she came up, all the babies were awaiting her, and so eager were they, that the old bird climbed on to the bank as though to escape their flapping wings, and to look them over before feeding.

Lophodytes cucullatus. HOODED MERGANSER.—I have not observed this species in the field, but wish to record an adult male taken near Eagle River in March, 1919, which was left with the local taxidermist, Breeze,

to be mounted. It was a beautiful, high plumaged bird. Mr. J. S. Young, who was usually my companion afield saw three birds, two males and a female, in the entrance to Tracy Arm, near Sumdum April 20. As Young is familiar with the birds of the region, as well as with the species in question, I have no hesitancy in recording the birds.

Anas platyrhynchos. MALLARD.—An abundant species, especially during migration and the winter months, and they breed locally throughout the region, all the extensive flats with fresh water streams are favorite haunts of the Mallard, and when the chill winds of winter come, and the flats are frozen over, the flocks congregate along these little streams for food and protection. The species was very common in Big John Bay, Keku Strait, November, 1919, and in March the following year. A flock of over one hundred birds hung about Salmon Creek near Juneau, all of January and February, where they picked a living among the mussel and barnacle beds. The old barnacle-eating Mallard of Alaska is a far different bird from the rice fed ones of the Gulf Coast, and compare about as favorably as a Scoter and a celery-fed Canvas-back, so far as eating goes. The Mallards breed on the small fresh water ponds all along the coast. I ran across an old male near Mendenhall Glacier June 4, and feel sure his mate was near, from his antics. Five young, scarcely able to fly, were seen in Berg Bay, Glacier Bay, August 9, as they fed among the grasses at high tide. Kootznahoo Inlet is one of the best "duck grounds" along the coast; this great shallow inlet is ideal for the many species of water birds, and Mallards were extremely numerous there the latter part of October.

Chaulelasmus streperus. GADWALL.—A pair was noted at Bartlett Cove, Glacier Bay, August 9. It was fairly early in the morning, with the light at my back, so I could not have mistaken them, as they were close enough to collect had I other than the rifle. I felt sure I saw a small band at Holkham Bay September 25, but the light was not good enough to make the identification positive.

Mareca americana. BALDFATE.—These birds were fairly numerous in the large flocks of Mallards in Big John Bay, Keku Strait, November 18-24, 1919; they were next noted in Hooniah Sound, May 7-24, when a few were occasionally seen, usually in company with Mallards or Pintails. One male was seen on the Mendenhall Bar, June 3. None were seen during the summer months, and the first were recorded in the fall at Holkham Bay near Sumdum, September 26. They were fairly common, some with other ducks, and there were a few small flocks composed entirely of Widgeon. They were also quite plentiful in Seymour Canal, September 28-30, and a good many were seen in Bartlett Cove, October 10; many were noted in Kootznahoo Inlet, October 27.

Nettion carolinense. GREEN-WINGED TEAL.—This is not an abundant species; in Keku Strait, November 18-24, 1919, they were fairly numerous, and a few birds were seen on practically every trip to Salmon

Creek, near Juneau, during the month of January. A dozen birds were seen near Douglas Island shore January 22. Several flocks were observed in Hooniah Sound, May 7-8, with a few individuals during the following week. The first were recorded in the fall at Tracy Arm and Holkham Bay September 26, when a few were seen, and a small band was noted in Seymour Canal September 29. They were rather common in Bartlett Cove, October 10, and a few were seen in Kootznahoo Inlet October 26-27.

Dafila acuta tzitzihoa. PINTAIL.—Fairly numerous during migration, and a few winter, but they can not be considered common. They were first noted in Big John Bay, Keku Strait, November 17, 1919 (five birds); one was seen at Juneau on the Salmon Creek bar in company with Mallards January 2. I believe any birds wintering among the northern islands are stragglers, for I think the majority move far south. They were next seen in Hooniah Sound May 7-24, at which time they were abundant, for the first few days at least; several large flocks of fifty or more passed over our camp, a few of which were composed entirely of females. Small bunches of a dozen or so loitered at the head of Patterson's Bay, where they fed in the fresh water mountain streams, and rested upon the sand bars. The last for the spring were in Mendenhall River, June 5, a small flock upon the tide flat. Several flocks were noted in Bartlett Cove, Glacier Bay, August 9; they were common in Holkham Bay, September 26-28, in Seymour Canal, September 28-30, in Bartlett Cove, October 10, and a few birds were seen in Kootznahoo Inlet the latter part of October.

Marila marila. SCAUP DUCK.

Marila affinis. LESSER SCAUP DUCK.—These birds are abundant during the winter and early spring. Because of the similarity of the two species, it is next to impossible to make field identification positive, and consequently few definite records for *marila* have been made. During January, there were a good many in the large flocks of *affinis* in Gastineau Channel; two males were taken January 30, and a few more were seen in Oliver Inlet, February 3-9, and at Juneau up to March 20. One specimen was taken in Glacier Bay, October 10. The Lesser Scaup Duck is very abundant in winter, and several hundred worked Gastineau Channel within the limits of Juneau, during January; their favorite feeding place seemed to be along the edges of a great mud bar, which is used by the city as a dumping ground. The blue-bills became very tame, and would come in on the high tide to pick barnacles from the piling. They were accustomed to boats and often swam within gun range of the large passenger steamers at the dock. They were equally numerous in the vicinity of Wrangell and Petersberg. At Hooniah Sound, in May, only a few were noted, and these in company with the great hordes of Scoters. They return rather late in the fall, the first being seen in Holkham Bay, September 25, when a pair was noted; one hundred or more were in one flock in Seymour Canal, September 28, and several big bands were noted in Stephens Passage near Douglas Island, October 7, and again the 24th. They were fairly common in Kootznahoo Inlet October 26-27.

Marila collaris. RING-NECKED DUCK.—In one of the broad arms of Kootznahoo Inlet, on October 27, I saw a flock of 25 birds which I was positive belonged to this species. They were resting upon the water, out of gun range, but with the glasses I could see the white tips on the bills of the males. Both sexes were represented in the flock. I should hesitate to include this record, except I am familiar with the bird of the Mississippi Valley.

Clangula americana. GOLDEN-EYE.—Fairly abundant during winter, and may be noted daily among the northern islands, along all the salt water streams, especially where the channels are narrow and the tides run swiftly. They are very conspicuous in flight, and the musical whistle of their wings is one of the pleasing features of winter work along Alaskan waters; they are rather shy, seldom flying low over the points, and usually feed well in the center of the channels. The young resemble the White-winged Scoters in their winter dress, or the young birds, and when at some distance, it is almost impossible to tell them apart. Golden-eyes were noted daily in Keku Strait, November 18–24, 1919, and specimens were collected; they were seen daily in Gastineau Channel in January. They often fed over the big bar within the city limits of Juneau, and I could watch them from my window when the tides were high. They were abundant in Oliver Inlet, February 3–9, and were seen daily in Keku Strait, March 3–5, and at Craig and Klawack March 10; they were noted daily at Juneau from March 20 to April 10, although only a few in comparison to those seen during the winter. A few were at Wrangell April 11–18 and in Wrangell Narrows April 26. Others were seen in Hooniah Sound, May 9–24. The first fall records were at Seymour Canal September 28, when a flock of a dozen birds was noted; a few bunches were in Young's Bay, October 7–9, and they were rather abundant in Bartlett Cove, October 10. Several small flocks were seen in Kootznahoo Inlet, October 26–27. This species is not as common as the Barrow's Golden-eye.

Clangula islandica. BARROW'S GOLDEN-EYE.—This species proved fairly common in the vicinity of Juneau during the winter; young birds were especially noticeable, as they were quite tame and fed about the wharves on the high tides. The habits of the two Golden-eyes seem to be similar, in so far as I am able to judge; both have the musical whistle of their wings when in rapid flight, they are both excellent divers, and are wonderfully beautiful birds, either upon the wing or upon the water. They were to be noted daily along Gastineau Channel during January. Adult birds were shy, but the young, as noted above, were very tame. The high plumage of the males seems to be present the whole winter. They were common in Oliver Inlet, February 3–9, and seemed to follow the tides in the swift flowing channels as they worked the rocky shores for food; only a few were noted in Keku Strait, March 3–5, and at Craig and Klawack, March 10. Willett told me full plumaged males were

scarce in that vicinity, so it seems they prefer the northern islands. At Hooniah Sound, May 7-24, they were abundant, much more so than the former species; a whole flock of them would settle in a little pocket along some bar, and there seemed content to rest sheltered from the blowing winds. They were first recorded in the fall in Glacier Bay, October 10, when several dozen were seen, and they were observed commonly the next three days. They were plentiful at Wrangell, December 30, and were noted near Juneau regularly during January and February, 1921.

Charitonetta albeola. BUFFLE-HEAD.—These birds are very common during the winter and early spring, and are to be noted on all favorable waters; they are especially fond of inland bays, where sheltered from the wind, they secure an abundance of food. To give records for the species during the winter would be repetition for they were common throughout the islands until May, when only a few were noted in Hooniah Sound. The last of the spring was a male observed at Mendenhall River, June 3. The first were seen in the fall at Young's Bay, October 7, when several dozen took shelter in the harbor from the blowing southeaster. Several were noted daily in Glacier Bay, October 11-24, and they were abundant in Stephens Passage and Chatham Straits, October 24, and were observed commonly again throughout their range after that date.

Harelda hyemalis. OLD-SQUAW.—Old-squaws are abundant in winter along all the inland channels, and are sometimes to be seen in large flocks. They are usually shy, taking wing readily, but they are easily identified when one once becomes familiar with them; they are exceedingly swift fliers, and excellent divers, so a wing-tipped bird is almost sure to elude the hunter. They rarely feed along the shores, but are usually heard far out in the channels, so far they can not be seen, yet their clear, characteristic note carries readily. I found the birds very common until the first of April, and after that but few were seen; a small flock was noted at Wrangell, April 15, and another in Wrangell Narrows, April 16. Eight were seen in Stephens Passage, June 10, and two males and a female, in very worn plumage, were taken. Several hundred birds were seen in Holkham Bay, September 25, and a dozen in Stephens Passage 7 and 9, and others in Icy Strait October 10. They proved abundant in Glacier Bay the following day, and from that time on during the following winter, they were very common throughout their range.

Histrionicus histrionicus pacificus. WESTERN HARLEQUIN DUCK.—This is a common bird throughout the year. I have noted them on practically every trip, and found that their favorite feeding places are along rugged, reef-lined shores where the tides flow swiftly. They were first observed in Oliver Inlet, February 3; flocks of them were working slowly along the reef cluttered shores, or resting upon the rocks. They were quite tame and allowed us to approach closely. A few were seen in Excursion Inlet, and a breeding pair taken, the female containing well

developed eggs, one of which was nearly ready to lay. A half dozen moulting males were taken on Glass Peninsula, Admiralty Island, September 1, and several full plumaged birds in Kootznahoo Inlet, October 26. These little fellows are extremely swift upon the wing, and seem to be very small bodied, flying with fast beats of the wings, and with head and neck tilted at a slight upward angle. When shot at, they usually prefer diving to flying; fortunately, this is not a good food bird, and consequently it is little persecuted.

Somateria v-nigra. PACIFIC EIDER.—Noted only in Glacier Bay. Two females were seen June 16 near Beardslee Island; these birds passed over the bow of the boat, within fifteen feet of me, so I had a good look at them. On June 19, when returning from Muir Glacier, a pair passed us. The handsome colored male was very noticeable, and there can be no doubt of its identity. Dr. Borland, of Hooniah, sent me a male killed by a native in Glacier Bay in June, and I noted a pair of birds twice in October, once near the mouth of the bay, October 10, and on the following day on the outer Beardslee Island. This pair was in company with a flock of Golden-eye, back in a little pot-hole formed by the high tide. The male stood out conspicuously, even when with the light-colored Golden-eyes.

Oidemia americana. SCOTER.—This is a rather uncommon bird. I first noted them in Taku Harbor, November 15, 1919, when a few were seen; two were observed at Wrangell February 28, one at Klawack, March 10, four in Hooniah Sound, May 19, and they were fairly abundant near Beardslee Island in Glacier Bay in June, and also August 11. During the fall they were more common, a dozen being seen at Midway Island in Stephens Passage, September 25, and several in Holkham Bay the following day; a dozen or more were noted daily in Seymour Canal the latter part of September, a small flock in Icy Strait October 10, and they proved fairly numerous during the next few days in Glacier Bay.

Oidemia deglandi. WHITE-WINGED SCOTER.—

Oidemia perspicillata. SURF SCOTER.—These are the most abundant of the water birds among southeastern Alaskan islands, and are to be noted in great flocks except during the nesting season, and even then, there are enormous numbers of non-breeders congregated in favorable places. It would be useless to give dates and localities where records were made. Many young birds in their inconspicuous grey plumage were seen in November (of both species). Non-breeding birds were in large flocks in Canoe Pass, June 10, and Glacier Bay, June 12-29, and moulting birds were in hundreds in Glacier Bay, August 8-15, at which time they had lost the power of flight.

Chen hyperboreus hyperboreus. SNOW GOOSE.—But few of this species were seen. I spent from April 18-22, in Sergief Island at the mouth of the Stikine River, and two flocks of Snow Geese (about 45 in all) were seen the first day, as they worked back and forth across the slough

ground; a flock of twenty passed over April 19, without making a pretense of landing. No other Snow Geese were seen.

Anser albifrons gambeli. WHITE-FRONTED GOOSE.—Noted only in Hooniah Sound during the spring migration in May. On the evening of May 8, I jumped one from a tide-water slough; a few were seen the next day on the bar at the head of Patterson's Bay, feeding in company with "ring-necked" geese, six were noted May 11, and nine the 17th. The latter were also at the head of Patterson's Bay, upon a sand bar. When first seen, they seemed so small I mistook them for Mallards, but on my approach, instead of standing awhile, and then flushing as Mallards usually do, these fellows took to the water and swam away. Through the glasses I identified them, and in their company was a Cackling Goose, as was evident from its small size. The White-fronted Geese were not common at any time.

Branta canadensis subspecies.—Migrant Geese were common in Hooniah Sound, May 7-8, when a dozen large flocks were seen enroute northward, or resting upon the big gravel bar by our camp. Those noted the first few days were flying directly up the sound, as though in a hurry, while the Geese seen later were content to loiter about the bars, taking gravel, and when flushed, they merely moved to a distant bar; they were wild, however, and it was with difficulty that I secured two specimens with the rifle. One was a large bird which I took to be *canadensis*; the other was much smaller, and would undoubtedly be considered as *hutchinsi*.

Branta canadensis occidentalis. WHITE-CHEEKED GOOSE.—This subspecies has been considered as a non-migratory bird, and local to southeastern Alaska. It would be difficult to prove this contention without years of careful observation, for who can say the birds wintering do not move northward in May, and others from the southward take their place as the local breeding form. It would be extremely difficult with migrants passing, or dropping upon the bars, for one to keep track of even bands of birds, and say they remain throughout the year. And then, this species would be the strange exception if it was strictly local, for our North American Geese usually winter a considerable distance from their nesting ground; I do not believe we are justified in considering it a non-migratory bird without more data on the subject. It is not an uncommon thing to have a species present in a given locality the year around—but we know the individuals are not present throughout the twelve months. The breeding birds move southward, and northern nesting forms take their place for the winter. On the other hand, my friend George Willett, whom I consider one of the most competent of field observers, believes the species a local one, and feels he has observed a family throughout the summer, fall and winter. However, be that as it may, a large Goose, designated as *occidentalis*, is present the year around. They rear their young in the fresh water lakes of the islands and mainland,

and during winter time, a given band will be found using the same locality more or less regularly. I first noted them in Big John Bay, in Keku Strait, November 18-20, 1919, when several hundred were seen in different flocks. Three specimens were collected, large heavy birds in extremely good condition, showing they secure a wealth of food to their liking. Large flocks were seen in the same locality, March 3-5, as they worked from one feeding ground to another, and one specimen was taken. From my notes of the trip I find, "It seems there are two large flocks of one hundred or more birds each in Keku Strait, one company using the territory adjacent to Big John Bay, the other the end of the pass near Sumner Strait. When feeding, these bands split up in bands of ten or more, possibly family groups, but in the evening, all the small flocks assemble with each bird calling as though to guide stragglers in the rear. The Geese were exceedingly wild and rarely used the same route twice in succession, so one could not successfully intercept them in their flyway." A few small flocks were noted in Dry Pass and El Capitan, and again on the Stikine Flats, April 18-22. Although geese were numerous in the latter place, I had difficulty in securing six specimens. There were many birds in Hooniah Sound which were paired, and I felt sure these were the local nesting geese. Breeding birds were noted rather commonly in Glacier Bay, June 12-22, along the west shore. There is a great valley on the east mainland shore, above the Beardslee Islands, and on August 12 my companion, George Folta reported nesting Geese, and said that he had seen young birds the size of Mallard Ducks. Geese were very numerous at Mud Bay, Chichagof Island, in October, but I am told these were migratory birds. I did not collect specimens during the fall.

***Branta canadensis minima*.** CACKLING GOOSE.—First noted in Hooniah Sound, May 7, when several flocks were in migration, or resting upon the bar near the entrance to Patterson's Bay. There must have been over two hundred birds passed our camp on this date, and as many more the next day. One flock had, according to my count, 97 birds. These little fellows are often in company with large Geese, but usually they preferred to flock by themselves. They do not look larger than Mallards at times, and the difference in their call from other geese is plainly noticeable. They were extremely wary, and I was unable to secure specimens. I saw a large band on one of the Beardslee Islands, close to Bartlett Cove, in Glacier Bay on October 11. The natives said there had been a few small Geese about for a week or more, and it is probable they referred to this species.

***Philacte canagica*.** EMPEROR GOOSE.—Mr. Rudy, of Juneau, told me he killed an Emperor Goose on the Mendenhall Bar in 1916; he stated he was well acquainted with the species, having hunted them in Bristol Bay, and in volunteering the information, he called the birds by name. Little collecting has been done on the outside islands, and when it has, I believe this species will be found more or less commonly.

Olor columbianus. WHISTLING SWAN.—A flock of 25 was seen October 15 as they flew down Icy Strait, and passed over Point Couverton. Dick Harris, my boatman, told me he saw a flock of about the same size at Sumdum, Holkham Bay, at about the same time of the year, in 1919.

Ardea herodias fannini. NORTHWESTERN COAST HERON.—This species was first seen in Keku Strait, November 22, 1919, and at Wrangell a few days later, when another was noted along the beach; a bird was about the waterfront daily, and according to the fishermen, remained all winter. I saw it again, or another, February 26, and one at Craig, March 12. Willett told me they are not uncommon in that vicinity. At Wrangell, one bird was seen April 12–13. On each day it came from down channel, high in the air as though intent on passing over the mountain. When midway over the highest hill, it suddenly swerved, and came tumbling out of the air in that way so characteristic of birds dropping into their heronry in the evening. Noting birds do the same thing on two successive days, alighting in the same place, lead me to believe this pair must be nesting on the mountain side, so I endeavored to locate the nest, but to do so would be like finding the proverbial needle in the haystack. These birds must nest in very small numbers in a given locality, possibly each pair alone; Willett told me of a friend who found a nest with young in the thick woods, and the pair was nesting alone. I collected a female with very large ovaries in Glacier Bay on June 16, on the outer Beardslee Island. Two others were noted flying from the island, high over the channel toward the distant mainland shore. That these herons nest in the vicinity I am positive, for birds were seen daily August 8–15. Five were seen August 8 in Bartlett Cove, evidently a family group, with four immature birds following the old one. A fisherman had told me that he had seen a small colony of Herons nesting in the spruces on one of the Beardslee Islands, but we were unable to locate them. Two birds were seen in Kootznahoo Inlet, October 27.

Grus canadensis. LITTLE BROWN CRANE.—A flock of eight birds was seen over Wrangell February 29, flying south from the general direction of the Stikine River.

Lobipes lobatus. NORTHERN PHALAROPE.—Very abundant during their fall migration, especially in the vicinity of Glacier Bay and Icy Strait. Great flocks were assembled near the mouth of Glacier Bay, August 8–15, where they were feeding upon the water like so many Murrelets. Their nervous antics with bobbing heads, and the quick turning of their bodies is characteristic, and a flock of these little fellows may be identified at a long distance, even when one can not make out a definite form. They like to feed among the high rolling tide-rips, where the currents have carried debris, and flocks will rise before the boat when the waves are breaking white; again, when the water is smooth, they will be congregated about tide-lines, where a line of scum seems to be collected, and feed away for all they are worth, apparently oblivious to all else. My first records



1. SILVER BOW BASIN, NEAR JUNEAU. PERSEVERANCE MINE IN FOREGROUND.
2. A MOUNTAIN GLACIER, HEAD OF LEMON CREEK NORTH OF JUNEAU.
DIXON'S PTARMIGAN LIVE IN THESE LOCALITIES.

were in the bay June 12, when a small flock was sighted near Willoughby Island, and the next at Forrester Island, July 18 and 21, when possibly two hundred were seen off the northern end. August 8 they were very common off Point Augustus, in Icy Strait, and at the entrance to Glacier Bay. One was seen in Stephens Passage near Douglas Island, August 25, and one was collected in Gastineau Channel, September 8; four were noted in Holkham Bay, September 25.

Gallinago delicata. WILSON'S SNIBE.—Not common. The first was noted on the Stikine Flats, April 20, and another was flushed from a garden within the city limits of Wrängell April 24. Two were seen in Hooniah Sound, near Patterson's Bay, May 8. I collected a specimen in Holkham Bay, September 27, on a beautiful little sand island, which resembled a cay of the Gulf Stream, and I was so surprised to find the bird in such an unlikely spot that I ruined it by shooting too quickly. Two were seen in Glacier Bay, one on Beardslee Island, October 12, and the other in Sandy Cove two days later.

Macrorhamphus griseus scolopaceus. LONG-BILLED DOWITCHER.—Ten of this species were seen on the bar at the entrance to Patterson's Bay, in Hooniah Sound, May 16, and I collected three. A few were on the bar in company with other waders, May 17-18 and 20, but none were observed after that. They were in high plumage. They fed about the bar, probing here and there with their long beaks like so many "jack snipe." Only one other was noted, on the mud bar at the mouth of the Mendenhall River, June 3. Willett told me he collected several near Craig in May, and that they were fairly plentiful.

Arquatella maritima couesi. ALEUTIAN SANDPIPER.—Fairly common. I collected a crippled bird on the Mendenhall Bar, January 16. The bird had a badly broken leg, and a large sized shot was found lodged in the thigh. On Suemez Island, one was noted with a flock of Black Turnstones, March 11. Large flocks were on the Mendenhall Bar, being noted March 26 and April 2, at which time specimens were taken. These birds had been seen from February 1 on, but I had been unable to approach close enough to collect or identify them. There were about one dozen birds on Skull Rock in company with Black Turnstones and Surf-birds, August 23, and several flocks were on the reefs off the north end of Douglas Island August 25. Several were noted in Holkham Bay with Turnstones and Sanderlings, September 25 and 27, five were on Skull Rock, October 7, and two were seen in Kootznahoo Inlet, October 27. These birds are fairly common around Craig, according to Willett. They are tame, usually, and owing to their habit of swarming together in large flocks, make easy shooting for the pot-hunter.

Pisobia maculata. PECTORAL SANDPIPER.—Seven birds were seen in Hooniah Sound at the head of Patterson's Bay, where they were feeding about the little fresh water ponds formed by melting snow. They remained until May 20; one was noted in Seymour Canal, September 29.

***Pisobia bairdi*.** BAIRD'S SANDPIPER.—I collected one in Hooniah Sound, May 17, and although no others were seen, it is quite probably they were included in the large number of Sandpipers seen in migration. There were a few shore birds on a little point close to the ice-wall at Muir Glacier, August 12, and the one I succeeded in taking was an immature individual of this species.

***Pisobia minutilla*.** LEAST SANDPIPER.—Rather plentiful at the head of Patterson's Bay, Hooniah Sound, from May 7-24, where they hung about the little fresh water ponds. None was noted on the sand flats among the Western Sandpipers. These little fellows were very tame, allowing one to approach within a few feet, and if one sat quietly along the edge of their feeding place, they would soon be running about, apparently without fear.

***Pelidna alpina sakhalina*.** RED-BACKED SANDPIPER.—First seen in Keku Strait, November 19, 1919, when three were collected from a flock of about 30; three were noted at Salmon Creek, January 11, and a small flock again in Keku Strait, March 5. There were several large bands about Juneau from February 1 on, but no specimens were taken until March 20, when this species and Aleutian Sandpipers were taken from the same flocks. All were in winter dress. They were common in Hooniah Sound, May 7-24, being especially abundant May 12, and a good series was collected. All were in high plumage.

***Ereunetes mauri*.** WESTERN SANDPIPER.—Very common in Hooniah Sound from May 7-24, and they were still plentiful at the time of our departure. They associated with other species more or less, but large flocks could usually be seen swirling white against the light, and again seeming to disappear. A small flock was seen on Mendenhall Bar, August 7, in company with a band of Sanderlings.

***Calidris leucophaea*.** SANDERLING.—A small flock was noted on Mendenhall Bar, August 7, and 25 or more were seen at Holkham Bay, September 25-27. A few were on a little sand island the latter date in company with Black-bellied Plover. The place these little creatures chose as a resting spot was a beautiful one, for the rugged mountains were capped with snow, and the grim Sumdum Glacier seemed suspended on the mountain side, as though threatening anyone stopping below, while the channels and shore lines were choked with ice. It seemed incongruous to see a flock of these dainty little creatures feeding in the shadow of a large berg stranded on the high tide.

***Totanus melanoleucus*.** Three birds dropped among my Goose decoys on the Stikine Flats, April 22; they came in so suddenly I was unaware of their arrival until their outstretched wings "banked" for the drop to the flat. A flock of a dozen birds was noted with a few Lesser Yellowlegs on the bar in front of our camp in Hooniah Sound, May 7, and another band of similar size came in a week later, from which a few birds were collected. Seven birds were seen August 7 on Douglas Island, about opposite Salmon Creek, as they were feeding along the beach.

Totanus flavipes. YELLOW-LEGS.—Several small flocks, possibly 25 birds in all, were on the bar near our camp in Hooniah Sound, May 7-9. They were remarkably tame, and when approached, they simply ran over the bar, not taking wing until almost forced into the water.

Helodromas solitarius cinnamomeus. WESTERN SOLITARY SANDPIPER.—One was noted at the head of Patterson's Bay, Hooniah Sound, May 10.

Heteractitis incanus. WANDERING TATTLER.—Not noted in flocks, three birds being the most seen at one time. One was observed on Forrester Isl. July 19, three along the shores of Lynn Canal, a few miles below Tee Harbor, August 25 (two of which were collected), and another was taken on the Mendenhall Bar, September 8. Two others were seen during the fall, one at Grand Isle, Stephens Passage, September 25, and the last on Skull Rock, October 7. The specimen collected on the Mendenhall Bar was the only one observed on sand, all the others having been on rugged, rocky shores.

Actitis macularius. SPOTTED SANDPIPER.—First noted on May 15, in Hooniah Sound near our camp; this pair hung about daily, and four birds were seen May 20. The species was common after this date, and seemed especially abundant along Gastineau Channel in June. They were seen daily in Glacier Bay June 12-20 and were fairly common upon the moraine in front of Muir Glacier. I found a nest with the four eggs barely above high tide mark, in Berg Bay June 15. One was seen on Forrester Isl. July 19. I do not find records of later observations, and think probably this is due to carelessness on my part, rather than the birds had departed so early.

Numenius hudsonicus. HUDSONIAN CURLEW.—Hooniah Sound is evidently a favorite migration route of northern nesting birds. Fourteen of this species were observed near Patterson's Bay May 17, and on the following day, five bands passed up the bay, that we noticed, and many others must have followed the distant shore. Two females, very thin with undeveloped ovaries were taken and two others, May 19, from a flock of eight; five males and a female were collected May 22. This last flock was the only one seen feeding, the other birds all being in migration. They were tame as they worked over the kelp covered rocks. A small flock was seen over Bartlett Cove, Glacier Bay, October 10.

Squatarola squatarola. BLACK-BELLIED PLOVER.—Several birds were upon the bar in front of our camp in Hooniah Sound during our entire stay, from May 7-24. They were very tame, and rarely flew any distance when they were flushed. Nine were noted on a sand island in Holkham Bay, September 27.

Charadrius dominicus fulvus. PACIFIC GOLDEN PLOVER.—Very few were seen, and all records were made near Patterson's Bay, Hooniah Sound. Four were observed May 16 in company with an equal number of Black-bellied Plover, and a fine female with enlarged ovaries was taken.

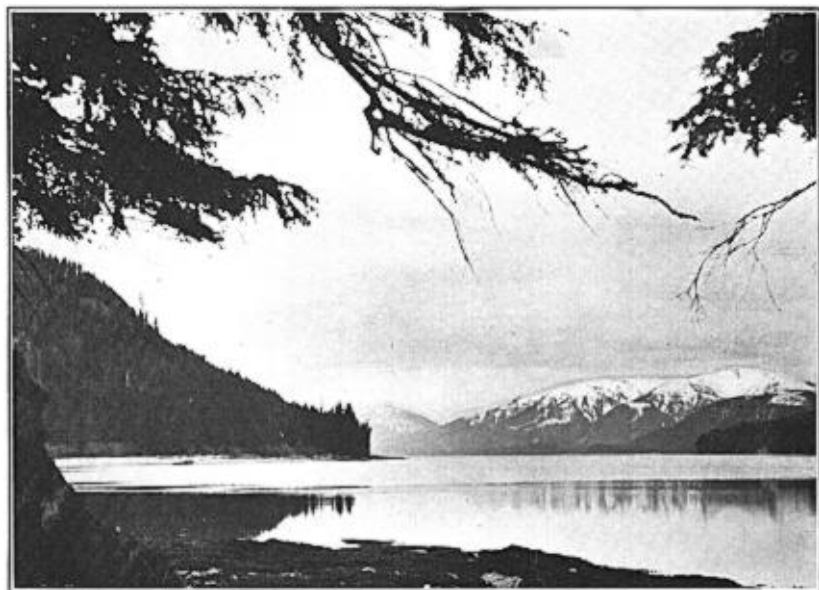
Another was collected from a band of six on May 17, and one bird was noted the following day. Willett had not taken any Pacific Golden Plover during his seven seasons work, and considered them rare.

Aegialitis semipalmata. SEMIPALMATED PLOVER.—A small flock was present on the bar near Patterson's Bay, Hooniah Sound, on our arrival May 7, and bands continued to come in until they were abundant by May 12, and continued so until the time of our departure, May 24. A good many were in migration the first few days. They were very common in Glacier Bay, June 12–22, and were especially numerous on the glacial moraines, where they were nesting, as was proven by their antics. Some of the plover were working along the edge of an old glacier, and often ran upon its worn, dirt-covered slopes. Several pairs were found at the head of Berg Bay, and one nest was found June 15. The four eggs were evidently heavily incubated, and were laid in a little hollow in the ground rock, with a few straws to form an imaginary lining for the nest. This species also proved abundant near Taku Glacier in June, especially so in front of dead Norris Glacier, where they were nesting on the moraine. The nesting season was far advanced at the time of my visit, June 29, and one downy young was seen—a fellow with strong legs and lungs.

Aphriza virgata. SURF-BIRD.—Noted at Skull Rock, near Young's Bay, in Stephens Passage, August 23. There were large flocks of Black Turnstones, with a scattering of this species, and Aleutian Sandpipers. Five specimens, all males, were collected; they were in good condition, and exceedingly fat. In flight, they reminded me of the Willet, because of their habit of soaring over head on quivering wings, and their generally similar coloration. George Willett found this species wintering in the vicinity of Wrangell, and we saw possibly a dozen birds, January 3, 1921, at Shoemaker Bay.

Arenaria interpres interpres. TURNSTONE.—This species was seen in Hooniah Sound, near Patterson's Bay, May 16–17. As I failed to collect specimens, I should hesitate to record their appearance, except that I am well acquainted with the bird, and had a good opportunity to observe the three. They were in company with a small band of Black bellied Plover on both dates.

Arenaria melanocephala. BLACK TURNSTONE.—These birds are fairly abundant, especially on the reefs among the southern islands. They were first seen in Keku Strait, March 5, about 25 in a flock, and then two days later, about 50 were noted in Dry Pass; all were trying to crowd on a little rock at the same time, with a continual flashing of wings. They do not straggle in loose flocks when on the wing, but swirl this way and that in compact bands, each bird apparently being able to anticipate the direction in which the leader desires to go. Fifteen were noted at Klawack, March 10, and about as many more on Suemez Island the next day. A small flock was seen in Wrangell Narrows April 20,



1. YOUNG BALD EAGLE IN HIGH NESTING TREE, FORRESTER ISLAND, JULY, 1920.
2. HOONIAH SOUND IN MAY. ONE OF THE MOST BEAUTIFUL OF ALASKAN WATERWAYS.

and one in Hooniah Sound, near camp, May 14. About 200 formed one large flock on Skull Rock, with a few Surf-birds and Aleutian Sandpipers included, August 23, while but six were seen there October 7. On January 3 and 5, 1921, one hundred or more were seen in Shoemaker Bay, near Wrangell, and a dozen were seen in Hobart Bay the morning of January 16, and as many more the same afternoon, in Portage Bay.

Haematopus bachmani. BLACK OYSTER-CATCHER.—This species is a coast bird, usually being found on exposed rocky shores where the surf breaks white, and the roar of breakers can be heard for a long distance. Six were noted in Dry Pass, near Deweyville, March 8, as they rested upon one of the treacherous reefs in the boat channel, and two more were seen the next day in Sukkwan Narrows, not far from Ulloa Pass. I next saw Oyster-catchers on Forrester Island in July. There were possibly eight or ten pairs breeding, and often a dozen birds would be seen sailing over the water, more or less in single file, and again, when one happened to be climbing over the boulders of the rugged shore, he would be aware of a bird slipping quietly from some crevice, and flying away. It was in the middle of the breeding season, and both young and eggs were observed; the Oyster-catchers lay their two large eggs directly upon the rock, the nest lining being made of fine bits of stone. It is evident these little rock particles are put in place, for the nesting material is usually much finer than the surrounding chips. They delight in finding a little pocket, well walled-in with huge boulders, where they can nest undisturbed. The two eggs are rather large, and those I saw light-colored corresponding with the surroundings. The young birds too, are protectively colored, and they are almost invisible when they hug the rocks; Willett pointed out a great water-worn slab as being the home of a young one, and it took several minutes to locate the little fellow as he crouched in plain sight, in a small dark-colored crevice. The adults keep near their nest and try to lead an intruder away. Willett states the birds will lay a second set, if they lose their eggs, and often, even a third set, all the nests being in the same general vicinity.

Dendragapus obscurus sitkensis. SITKA GROUSE.—A common species. Their distribution presents one of the interesting problems, in that several of the large islands which would seem especially fitted, have none of this species, Prince of Wales apparently being one of them (see report of the 1909 Alexander Expedition). I have seen this species throughout the year; they were first observed on Kupreanof November 22, 1919, when two were taken; five were collected on Douglas Island, January 9, and another near Juneau two days later. They were noted or heard hooting at the following points: Oliver Inlet, February 5, Wrangell, February 29, and on Kupreanof March 5. Hooters were common on the hill-sides near the Stikine and about Juneau the first of May. A female, evidently with young was seen at Point Couverton, June 11, as she continually clucked and I could see that her belly was bare. It may be

however, that her nest and eggs were near, and she was merely displaying anxiety. Males were heard in Berg Bay, June 15, and three birds were seen on Mt. Robert, above timber line early in September. Others were seen on the mainland during the same months at McGinnis Creek and Salmon Creek; six were above timber line in Seymour Canal, September 30, while others were observed on Point Retreat and Mt. Robert in October and November. The hooting habit of the males is well known, and they can be heard for a great distance. When several males are calling together, the air seems to vibrate; it is difficult to locate hooting birds, and when one is directly under them, it seems the sound comes from all directions. The birds are often so high they will not flush with the discharge of a gun; in fact, I have seen a Grouse sit within twenty feet of a gunner, who fired a dozen shots with a high power rifle in an attempt to shoot the bird in the head, without the bird seeming the least alarmed. In the early fall, many repair to the mountain tops with their broods, where they find ample cover among the dwarfed pines and dense alder thickets; then they drop to sea level during the cold winter months, and one will often see them below snow line, where the tide has cleaned the beaches. They feed on the hillsides, among the dead devil-club and berry bushes, and rarely fly when one passes. Although strongly tainted with the spruce, which makes up a great part of their food, the flesh of these birds affords a welcome addition to the camp-fare when one is afield.

Lagopus alexandrae. ALEXANDER'S WILLOW PTARMIGAN.—First noted in Glacier Bay, June 13, when a pair was collected on Willoughby Island. This island is about five miles in length, with scant vegetation, other than alder and stunted spruce. The knobs are devoid of plant life, and it is only on the terraces that soil can hold. The southern and eastern slopes are rather densely clothed with alders, however, and form ideal cover for Ptarmigan. Seven other birds were seen by Young, one of which was still in the winter white. The pair collected were breeding birds. In August, Ptarmigan were first seen at Sandy Cove, in Glacier Bay, when I rounded a point in a drizzling rain, looking for bear signs. A flock was flushed from a bed of wild strawberries, at an altitude of scarcely thirty feet, when I had expected to find them above timber line. There were several pairs of adults, as well as many young, and a good series was taken. An examination of crop contents proved the birds had been feeding entirely on strawberries and pea-vine, no alder or willow buds being found. After finding Ptarmigan in such a low altitude, I searched all the points along the east mainland shore, and did not fail once to find them, where there were berries. It was noticeable they preferred the points where they could feed close to a fringe of alder. On one of the Beardslee Islands, another series was taken, and on the outermost island, fully a mile from the nearest land, three others were flushed, and one taken. This proved a young one scarcely half grown, which brought up the interesting question whether the Ptarmigan were nesting

on these low-lying islands. It seems certain this is the case. In all, a good series was taken, showing young in all stages of plumage, as well as adults in summer dress.

I returned to Glacier Bay again from October 10-14, and observed the Ptarmigan under still different conditions. A stop was first made on the outer Beardslee, upon which the young bird had been taken. I was interested to see if the Ptarmigan had left the island, as it was now drab and dry looking, and the birds were assuming their winter's white. I found them very abundant, and over forty were flushed from the dense alders, and a few taken. They were extremely wild, as they should have been, for their changing plumage—entirely white below with many white feathers in head and neck, made them extremely conspicuous among the leafless alders. I had little chance to observe them, due to their wildness. Stops were made at two other points, not visited in August, and Ptarmigan were noted in both places. At Sandy Cove, October 14, I collected another series from the point they were first found in August. These were as conspicuous as the others, but when the flock was broken up, the birds did not flush so readily, and I had a chance to study them at close range. They ran over the ground the same as in August, evidently believing themselves inconspicuous, and when closely pressed, crouched quail-like and depended upon their "protective coloration." When the birds became scattered, several climbed into alders, about a foot from the ground, and sat hunched in some convenient crotch, where they were more evident than ever. I was surprised to find strawberries still abundant here, hidden under the mosses in shady places, and each of the specimens taken had its crop full. Ice had long since formed in little depressions away from the sun. I had an opportunity the same afternoon of observing the birds under timber line conditions, that is, in a snow storm, with little patches of white scattered over the ground. We had the first fall of the year upon the level, accompanied by a strong wind, so it was almost impossible to pick out the crouching birds, even when I knew within a few feet of where they alighted. They were probably in their most striking dress during October, with the contrast of brown and white, and were very conspicuous against their gray surroundings. The lack of predatory animals was very noticeable, for with the exception of two Eagles, none was noted, and no signs of predatory animals were seen on the outer Beardslee Island, although those nearer shore must have some carnivorous mammals. We saw a fox in June and August on the mainland shore, and wolves are abundant. It is rather apparent then that the birds are free from molestation, in direct contrast to their life upon the mountain slopes of the mainland. Ravaged by fur-bearers, it is possible the Ptarmigan first used the islands for protection, and having found both food and comparative safety, have continued to live under such conditions. On the other hand, the islands might be considered as being alpine in nature, with timber line conditions, as the spruce are small and willow and

alder predominate, with the characteristic profusion of small growths. The soil is scant, the glacial sands and moraine debris being exposed, while the windward shores of the outer Beardslee are precipitous; the glacial winds sweep down channel, ice bergs line the shores, and taking all into consideration, the region is probably the coldest of southeastern Alaska.

Willow Ptarmigan are pretty well distributed among the islands, but owing to the inaccessible regions they inhabit, are rarely taken except in winter, when they drop into the woods from their summer home on the mountain tops. They are found on Baranof and Chichagof, especially in the vicinity of Peril Strait, from information I have had from local hunters, who distinguish between the Rock and Willow Ptarmigan as Little and Big Ptarmigan, respectively. Willett tells me he has taken the Willow Ptarmigan on San Juan, Suemez, Kupreanof and Prince of Wales Islands. I have worked the mainland in many places, but have been unable to locate other than Dixon's and White-tailed Ptarmigan.

Lagopus rupestris dixoni. DIXON'S PTARMIGAN.—It was not until fall that I made my first trip to the mountain-tops and I then covered the hills of the mainland shore near Juneau, which average about 4000 feet in height; I ascended Mt. Robert, Mt. Juneau, Granite Creek Mountains, and the Salmon and Lemon Creek Mountains. During October there appeared a wealth of small birds, and many Ptarmigan were seen and collected. The vegetation was in the height of its "autumn glory," and a peculiar "lily-pad" which flourishes abundantly, colored the hills an intense yellow, above timber line, while still higher, among the piled boulders, there was a small ever-green growth upon which the Ptarmigan were feeding. A few were found in such a site, and some of them were extremely wild. To quote from my notes: "September 12.—The Ptarmigan in Granite Creek were taken among the boulders and slide rock on the summit of the highest mountains surrounding the valley, at an altitude of over 4000 feet. There was absolutely no vegetation. That they are well named 'Rock Ptarmigan' there can be no doubt after noting their habit of sunning themselves upon the tops of large boulders; one rested upon a little overhanging ledge which left a sheer drop to the valley floor far below. Several small flocks were seen flying about like so many Doves. They raised from the mountain on which we were hunting and sailed across the valley to the foot of a hanging glacier. One band flew over me and I tried to drop a bird on our narrow ridge, but the tumbling Ptarmigan sailed on into space, and dropped at least 1500 feet to the valley floor.

September 14. Returned to Granite Creek and saw but five birds. Collected a pair among the boulders on the very summit of the mountain.

September 23. Climbed Mt. Robert and flushed 12 birds. They were very wild and could hardly get near them although I succeeded in getting three. They are rapidly assuming their winter's dress of white, being at the most beautiful stage, with their mixtures of browns and white.

November 11. (Head of Lemon Creek Valley—five miles from beach). When just above timber line I saw a Three-toed Woodpecker on a dwarfed hemlock, and on the snow-fields above, about thirty Ptarmigan. The tops were icy, making creepers a necessity. The birds were in full winter plumage, wonderfully handsome fellows, the white of the males being relieved by the black eye patch. Their call notes could be heard from all sides of the snow covered mountains, and here and there cream-colored birds, gleaming in the sun-light could be seen. Overhead an Eagle circled, and soon the air was filled with flying Ptarmigan, although I did not see the Eagle make a swoop toward them. Of all the birds seen, only five were in one band, while the others were scattered in singles or pairs, and I wondered if they spread to feed among the little patches of grass sticking through the snow, or for the protection which isolation some times brings. The call note of the males was constantly heard. This note has an individuality about it which can be mistaken for no other bird. The Ptarmigan were tame, and often allowed us within good photographing distance, especially if we tried to imitate their note. They rise from the ground with great speed, and usually their flight is direct, although when flying out over a valley, they often slant down as though to attain greater speed. A few specimens were taken, and we found it difficult to secure our birds, for immediately they were hit, they started sliding down the slippery mountain side, and did not stop until they reached the brush line far below. This particular habitat was picturesque, to say the least, and on this day remarkably beautiful, for the cloudless sky was a deep blue, the horizon was the serrated white line of the mountain tops, and the winding glacier—from its colorless snow fields at the summit, to the seamed and rugged ice-field below, with its characteristic shadows and high-lights of blue and white, made a wonderful panorama."

After the winter snows have covered the mountains to a considerable depth, these birds drop to the valley floors where they feed among the alders and willows. They were often encountered during the following winter days, sometimes in large flocks, and many specimens were secured. The species may be considered a rather common bird in its proper habitat, near Juneau; it is simply a matter of looking in the proper place—and often involves some rather strenuous work.

Lagopus leucurus leucurus. WHITE-TAILED PTARMIGAN.—A few of this species were taken from among the flocks of Dixon's Ptarmigan wintering in the valley of Granite Creek Basin—one on January 25, 1921, another February 14, and four two days later. I had looked carefully for the species during the fall and early winter months, and I am satisfied their range is not near the coast, at least near Juneau, but rather in the interior, and that they only come out during the later winter months. It was of interest to note that the crops of this species contained only buds of the alder, while the Dixon's Ptarmigan taken at the same time had been eating only the fruit of the alder. The specimens of the White-tailed Ptarmigan taken were, of course, in white plumage.

Circus hudsonius. MARSH HAWK.—I have seen this form but once, but I have been told it is a common bird near Mendenhall River during the fall. A male was taken up the Taku River during the fall of 1919 by a trapper. He had roughed the skin out. On September 14, when on the summit of the Granite Creek Mts., at an elevation of over 4000 feet, one flew over me, apparently crossing the mountain range to the Taku River. I shot the bird, but it fell in such a precipitous place that I could not secure it.

Accipiter velox. SHARP-SHINNED HAWK.—Fairly abundant throughout the summer and fall. In Hooniah Sound, near the head of Patterson's Bay, I saw two, one on May 14, the other two days later. A male was collected on the Mendenhall River, June 5. I was out in a drizzling rain, following along the stream when a Forbush's Sparrow swirled along and darted into the grass at my feet, and as I instinctively looked around to see the cause of the bird's alarm, I noted this little Hawk just swerving away. Two were seen along Gastineau Channel near Juneau, September 1, and one was collected. During September, these birds were noted above timber line where they were hunting small birds. Four were on Mt. Robert, September 9, two on the Granite Creek Mts. the next day, one up McGinnis Creek, September 17, and another the same place October 17; two more were noted on Mt. Robert September 23, and a very small male was collected. The birds examined proved to be living entirely on other birds. That they are adepts at gaining a living there can be no doubt, and they have no equal when it comes to darting in and out among the dense vegetation, or swirling over the mountain tops with the speed of the wind. Many small Hawks were seen from time to time during the fall which were impossible to identify, as the several small species inhabiting the same locality are very similar in appearance. Perching birds were common on the mountain tops during the fall migration, and the cover was scarce, so it is natural that the small Hawks would be common at that high altitude. (I saw three birds during my field work which I took to be Cooper's Hawks, one in Hooniah Sound, May 10, and two on Mt. Robert, September 9. There were more Hawks in the air on this date, than were seen at any other time. There is too much chance for error in making sight identifications of Cooper's Hawk, so I am not positive of my records.)

Astur atricapillus striatulus. WESTERN GOSHAWK.—Not common. I saw one at the head of Patterson's Bay in Hooniah Sound, May 10, and killed one at Mud Bay, Chichagof Island, August 8, but was so unfortunate as to hit it in the head with my .30 rifle. One was seen above timber line near Twin Points, Admiralty Island, August 30, and two more the following day. A young bird was taken on the Mendenhall River, September 7, and another noted on McGinnis Creek, September 17. Mr. Rudy, who has a ranch on the Mendenhall River, told me this species causes him considerable trouble by killing his poultry, and said there was scarcely a day in the fall when one or more were not seen.

Buteo borealis alascensis. ALASKA RED-TAIL.—According to my experience, this is a rare form, I have never been able to collect a specimen and my sight records are few and far between. One was seen in Big John Bay, Keku Strait, November 19, 1919, two in Oliver Inlet flying with a pair of Eagles, February 5, one on Kupreanof March 5, and two at Craig March 12. Willett told me this species is not uncommon among the southern islands, in the vicinity of Craig and Sitka. Two were seen at Mud Bay, Chichagof Island, June 20, and one in Granite Creek, near Juneau, September 14.

Archibuteo lagopus sancti-johannis. ROUGH-LEGGED HAWK.—This species was taken only in Glacier Bay, where five were noted and four collected. A male was taken on Willoughby Island, June 12, a female at Sandy Cove, August 11, and another seen, and a pair collected on the outer Beardslee Island, August 14. All were in the dark phase except the one collected at Sandy Cove (No. 592), which was a light-colored bird (stomach contents of 592 consisted of eight *Microtus*). In connection with this specimen it is of interest to quote from the report of the 1907 Alexander Expedition, in which Dr. Grinnell states, "The probability seems to be that this "dark phase" is really a geographic form occurring in regions of excessive humidity, and not identical with the "light phase," American examples of which are said to not differ from the European form." I found a pair of breeding birds in Golovin Bay, on Bering Sea during the summer of 1921, one of which was in the "light phase," and the other in the "dark." (*Condor* 1926, No. 3.) p. 123.

Aquila chrysaetos. GOLDEN EAGLE.—I have only one definite record for the occurrence of this species in southeastern Alaska, and that, a female, was collected on Mt. Robert, near Juneau, September 23. I was above timber line, nearly at the summit of the mountain, when a very dark Eagle sailed under me along the edge of a precipice. I dropped the bird, which fell nearly a thousand feet. I understand this species is fairly common in the interior. This bird had been feeding upon a marmot, leg bones and fur being found in the stomach.

Haliaeetus leucocephalus alascanus. NORTHERN BALD EAGLE.—This is the most abundant of the birds of prey along the coast, and my notes show they were recorded from every locality visited; they are to be found especially abundant about points where herring are schooling, or about salmon spawning beds. The natives call them fish-eagles, properly, for their diet consist almost wholly of this food. There has been much said about their destructiveness to large game, and while it can not be denied they do occasionally kill a fawn, I think on a whole, they cause but little damage in southeastern Alaska. I saw a "flock" containing at least 300 March 10 at Klawack, where herring were schooling. Twenty-one birds were counted in one tree! It must be remembered, however, that this was prior to the breeding season, and all the Eagles for miles around were probably congregated due to the easily accessible

supply of food. At Hooniah Sound, during May, Eagles were common, at least fifty birds being within a radius of five miles of our camp. This is a large territory of course, and the fact that they are such big birds makes them conspicuous for a long distance, especially when they are silhouetted against the sky. They were just beginning to nest, and we found nine nests in our two weeks stay. One examined May 11 had one egg in it. I remember this nest particularly because a pair of crows had made their home under that of the Eagles. The nests are usually bulky affairs, placed in inaccessible trees, although they are occasionally placed where one can inspect them without risk. On Forrester Island, July 9, I examined a nest shown me by Willett. The nestlings were full grown at the time, although the wing feathers were not fully developed. Willett had examined the nest May 22, and the young then were but three or four days old. Eagles catch a good many Ptarmigan during the winter, according to the hunters. I saw the Ptarmigan flying wildly about November 11, when an Eagle flew over. I doubt if they catch many in the summer, however. The truth is, our noble bird is a scavenger, and he is usually seen out on a bar at low tide, picking up refuse. On one occasion I crippled a Duck at the mouth of the Stikine, and a few minutes later saw a grand old bald-headed fellow swoop down in the drifting ice, far off shore and catch my bird. He flew by me just out of gun range, but I fired, and at the report, he swerved, and dropped my duck upon the sand.

Falco peregrinus anatum. DUCK HAWK.—Three were noted at Sand Point, Glacier Bay, on August 11, two of which were collected. I had just rounded the point, following close to a dense screen of alders, when I flushed a flock of Ptarmigan which were feeding among the strawberries. They had hardly settled into the thicket than the three hawks were hovering low, as though trying to locate them. The Hawks were very tame, and continually circled overhead; I returned to the point later in the day with a shotgun and found the three birds sitting upon a log thrown upon the beach by the tide, and collected two. Their stomachs were empty.

Falco peregrinus peali. PEALE'S FALCON.—This, according to Willett, is the bird which breeds on Forrester Island, half a dozen pairs nesting along the cliffs. One or two pairs are to be seen daily. It is peculiar that such capable birds should nest in such accessible places, for they usually build their home on some little point within easy climbing distance. Willett has seen eggs which were half incubated May 2, and found downy young by May 22. These Hawks are the most predaceous of Forrester birds, doing far more damage among the other residents than does the Eagle, for they are more agile, swift of flight, and courageous. It is a wonderful sight to see one of these old robbers dart from a limb and take up the pursuit of a swift flying Puffin—darting along on silent wing. The number of feathers strewn about the Puffin and Auklet colonies

bears testimony to the fact they take a large toll from the underground tenants.

Falco columbarius columbarius. PIGEON HAWK.—These fast flying little Hawks are fairly plentiful during the fall migration, when both young and adults are to be noted. They were most numerous during September, high above timber line, where they were sailing over the mountain tops, or swooping low over rugged crests as they hunted for food. They are extremely capable, and do not seem to have much trouble gaining a living. Both specimens collected had been feeding on some passerine bird. I saw a Hawk each evening of April 19 and 21, at the mouth of the Stikine River. It is possible I saw the same bird each time, however. In each case, it was flying low, and extremely fast, one time in pursuit of a small band of Longspurs. I was unable to see the outcome of the race. One was seen in Hooniah Sound, May 17, and another at Muir Glacier, August 12. This bird was chasing an Arctic Tern. I collected a male at Twin Points, Admiralty Island, September 1, and several were seen on Mt. Robert, September 9, one at Granite Creek the next day, and two more September 14; two were noted at Salmon Creek and one taken September 11, and two others were noted high among the mountains of Admiralty Island, along Seymour Canal, September 30.

Falco sparverius sparverius. SPARROW HAWK.—I saw but one below timber line, and that at Craig, March 11. A female was seen within the city limits as it flew across a bit of cleared land. A male bird was noted above timber line on Mt. Robert, September 9, a pair was collected at Salmon Creek, September 11, and five were observed at Granite Creek, September 14, four of which were in one flock. There were small Hawks noted from time to time which might have been this species, or Sharp-shinned or Pigeon Hawks, but were too far away to positively identify. Both specimens taken were found to have the remains of *Microtus* in their stomachs.

Pandion haliaetus carolinensis. OSPREY.—One was seen at Zarembo Island, near Wrangell, early in the morning, July 24. This species was evidently more common a few years ago, for I heard a fisherman, who happened to be a good observer, ask why Fish-hawks were so scarce, when they used to be numerous around Wrangell and Killisnoo.

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(*To be concluded*)