

NOTES ON THE SUMMER BIRDS OF THE UPPER
YUKON REGION, ALASKA.

BY ELIOT BLACKWELDER.

In the summer of 1915 I made a journey to that part of eastern Alaska lying south and southwest of the Yukon River, and northeast of the Tanana. Although the object of the trip was geological, the birds were given such attention as opportunity permitted. Not being properly equipped for collecting specimens, my chief reliance for identification was a ten power Terlux binocular glass. The route traversed was along the Yukon River from White Horse in Yukon territory to Circle, thence westward across the mountains to the White Mountain range near the head of Beaver Creek. We descended Beaver Creek to the Yukon Flats and emerged upon the Yukon itself near Beaver village—about seventy miles below Ft. Yukon. From that point we returned up the river as we came.

The region has been sufficiently described by previous explorers,¹ and especially by members of the U. S. Geological Survey. In addition, ornithological investigations have been made along the Yukon. No ornithologist, however, has visited the remote White Mountains.

Most of the region is mountainous, but the relief is less than 3000 feet, and the highest peaks but little over 5000. Along the rivers there are some spacious basins. Of these the largest is the so-called Yukon Flats between Circle and old Fort Hamlin, an area of more than 7000 square miles.

Timber-line is about 2500 feet above sea level, but varies according to the direction of the slope, the nature of the soil and some

¹ Dawson, G. M., Explorations in Yukon and northern British Columbia; Geol. Survey of Canada Rept. for 1887-1888. Report B.

Prindle, L. M., A geological reconnaissance of the Fairbanks Quadrangle, Alaska: U. S. Geol. Survey Bull. 525, 1913.

Russell, I. C., Notes on the surface geology of Alaska: Bull. G. S. A. Vol. 1, 1890, pp. 72-99; 154-155.

Spurr, J. E., Geology of the Yukon gold district, Alaska: U. S. Geol. Survey Ann. Rept. 18, pt. 3, pp. 87-392, 1897.

other factors. This ill-defined limit separates the two distinct life zones of the region,— the Arctic-Alpine above and the Hudsonian below. Of the two, the latter is the larger in area and comprises all of the principal valleys. It is characterized by a dense growth of spruce, in which the trees are usually of rather small size. Near timber-line they are also of low stature. Along some of the larger streams we found spruce trees more than two feet in diameter, but they are by no means common. Alders, aspens, and willows form dense thickets along the streams and even around hillside springs. The white birch grows along the bottoms of the larger valleys, such as that of Beaver Creek. Although grass and other forms of herbage spring up in many places on the south-facing slopes, the prevailing cover of the ground is a thick carpet of brownish moss and lichens, which is evidently a botanic complex of many distinct species. This moss complex prevails not only in the spruce forest, but almost everywhere that it can gain foothold. Over certain large areas, especially where the slopes are gentle or nearly flat, it forms what is locally known as "nigger-head tundra," in which the tussocks apparently consist of certain coarse bunch-grasses, half smothered by the thick carpet of moss and lichens. Walking over this tundra is very fatiguing, owing to the insecurity of foothold and the soft yielding nature of the turf. Early in August dwarf blueberries are very abundant and characteristic of the tundra. A little later a small prostrate variety of cranberry ripens, especially in the more moist situations.

The characteristic summer birds of the spruce forests are the Hudsonian Chickadee, the Ruby-crowned Kinglet, the Robin, the Slate-colored Junco, and the Alaskan Jay. A species of rabbit is about the only mammal commonly seen, although there is evidence that the moose, black bear, lynx, and other large mammals are rather common.

At timber-line the spruce becomes scattered and stunted, through a narrow zone in which the dwarf birch and dwarf willow are abundant. The former generally grows in dense thickets, which are a serious obstacle to travel. Most of the alpine zone, however, is characterized by the usual covering of mosses and various kinds of grassy and flowering plants. In many places the gentler mountain slopes are veritable flower gardens during June and July.

In the summer this zone is inhabited by caribou, in roving groups or individuals, a few little bands of Dall's White Sheep, the Ptarmigans, Longspurs, Wheatears, Gray-crowned Rosy Finches, Pipits, and Duck Hawks. Neither reptiles nor amphibians were observed, and even insect life, with the exception of the ubiquitous mosquito, appears to be rather scarce.

The Yukon Flats are a plain covered with alternating swamps, lakes and forests, and permeated by meandering rivers tributary to the Yukon.

The luxuriant verdure of the Flats seems to pass through a definite ecologic cycle in which three stages are tolerably distinct. The newly abandoned gravel and sand bars are soon overgrown with dense willows, and the silt banks by horse-tail (*Equisetum*) reeds and tall grasses. When no longer subject to frequent overflow, the poplars, chiefly the Balm-of-Gilead and a species of aspen, grow up among the willows, smother them and form dense thickets. During the latter part of this stage, on fairly well drained land, the white paper-birch develops and may grow to a diameter of more than a foot. In the shade provided by the poplar and birch thickets, the spruce is slowly seeded and, eventually growing to a greater height, exterminates both of them by its deep shade. The permanent forest has then become a solid stand of spruce, in which the trees range up to about two feet in diameter. The characteristic small growth in its dark recesses consists of alders, the red currant, certain ferns, and a thin carpet of lichens and mosses. The bayous and swamps have a distinctive flora of reeds, grasses, and especially mosses, which apparently prevent the growth of trees even when the swamp has become solidly filled. The blueberries and the low-bush cranberries are locally plentiful on these moss-covered swamp flats and on such as have not been appropriated by the forests. The berries are, however, very much less characteristic of the Flats than of the hilly region to the south.

Although there is a definite tendency for the permanent spruce forest to spread over the entire area, actual observations show that it is decidedly patchy in its distribution, and in some areas covers only a small proportion of the ground, in comparison to the swamp, willow, and poplar floras. This is apparently due in part to forest fires, but chiefly to the annual inroads of the meandering streams.

After a spruce grove has once been mowed down by the gradual advance of a meander, it evidently requires several decades and probably more than a century for the spruce to regain its lost territory, which meanwhile has passed through the willow and poplar-birch stages.

During the short summer season the wilderness of the Flats is well stocked with birds. While drifting down Beaver and Birch Creeks we were frequently attended by solitary Loons (*Gavia stellata*) which now and then broke the general stillness with their weird and almost human cries. Several companies of Brown Cranes were seen stalking along the gravel bars, and hundreds of Geese were congregating in flocks preparatory to their southward flight. Large Horned Owls were so numerous along the willow-lined banks of Birch Creek that in one day we saw six of them in broad daylight. Probably the most common birds in the Flats are the various species of Ducks and Phalaropes which breed in countless numbers in the many scattered ponds and bayous.

The following detailed notes may have some value as coming from a remote and little known region:

Colymbus auritus(?). EARED GREBE.—Two seen August 12 on the sluggish lower course of Birch Creek in the Yukon Flats.

Gavia pacifica. PACIFIC LOON.—Several seen August 15 on the side channels of the Yukon, 50 miles below Ft. Yukon.

Gavia stellata. RED-NECKED LOON.—Common on Beaver Creek in August both in the mountains and on the flats. Often swam ahead of our raft for miles keeping at a distance of about 1000 feet and frequently voicing its weird wail.

Larus argentatus(?). HERRING GULL.—Common along the Yukon. Nests on the gravel bars of Beaver Creek, in mountains. Young able to fly were observed about August 1. This is the northwestern limit of its known breeding range.

Mergus serrator. RED-BREASTED MERGANSER.—Rather common on the larger creeks and on the Yukon. Young not yet able to fly, seen August 10. Last seen August 26 on the Lewes River near Lake Labarge.

Mareca americana. AMERICAN WIDGEON.—The most common duck on the marshy lakes of the Birch Creek flats.

Nettion carolinense(?). GREEN-WINGED TEAL.—A teal, apparently this species, rather common in the Beaver Creek flats early in August.

Dafla acuta. PINTAIL.—Two seen after being shot at Dawson, August 20.

Histrionicus histrionicus. HARLEQUIN DUCK.—A few, singly or

in pairs, were seen on the swift upper tributaries of Beaver Creek in July.

Branta canadensis hutchinsi (?) HUTCHINS' GOOSE.—Nests along Beaver creek from Willow Creek to the flats. Flocks were seen on the gravel bars in the middle of August and again on the Yukon flats. Some young still unable to fly were found about August 5.

Grus canadensis. LITTLE BROWN CRANE.—Common in August on Beaver creek at the edge of the flats. One that was shot had blueberries in its crop. At this time they go in small flocks of three to eight. When alarmed they give out a loud guttural croak or clatter that sounds like the rattling of a pebble in a tin can.

Gallinago delicata. WILSON'S SNIBE.—One seen at Dawson August 20. Common in the marshy flats of Birch Creek, July–August 15. Has a habit of flying overhead in the evening like a nighthawk, although more rapidly, meanwhile making a strange whistling sound.

Pisobia bairdi. BAIRD'S SANDPIPER.—Only four were seen.

Helodromas solitarius cinnamomeus. WESTERN SOLITARY SANDPIPER.—A few were seen along Beaver Creek in the flats.

Actitis macularia. SPOTTED SANDPIPER.—Widely scattered along the Yukon and its tributaries far back into the mountains.

Lagopus sp. PTARMIGAN.—A Ptarmigan, with much white on the wings and tail, is common on heather slopes above timber-line. Young learning to fly July 1–10.

Circus hudsonius. MARSH HAWK.—Common in the marshes of the Birch Creek flats.

Accipiter velox. SHARP-SHINNED HAWK.—Common on lower Birch Creek.

Buteo sp.—Large soaring hawks of unknown species from dark brown to light gray seen throughout the region.

Archibuteo lagopus sancti-johannis. AMERICAN ROUGH-LEGGED HAWK.—Several seen in the Birch Creek flats.

Aquila chrysaetos. GOLDEN EAGLE.—Not uncommon in the mountains west of Circle. One pair with fledglings was found occupying a bulky nest of sticks in a high dolomite crag on the southeast slope of the White Mountains, July 17.

Haliaeetus leucocephalus alascanus. ALASKA BALD EAGLE.—Not very common. Two adults were seen in the White Mountains and three in the flats of Beaver Creek early in August.

Falco peregrinus anatum. DUCK HAWK.—Common wherever suitable nesting sites are available among high crags or rock spires in the Yukon canyon and especially in the White Mountains. It is very pugnacious, and often attempts to drive an intruding man out of its locality by diving at him repeatedly and with incessant screeching.

Scotiaptex nebulosa nebulosa. GREAT GRAY OWL.—The wings and head of a dead bird were seen in a cabin at Beaver. The bird had been killed nearby, but the date was not known. Another skin was nailed up on a house at Yukon Crossing, Y. T.

Bubo virginianus saturatus. DUSKY HORNED OWL.— A rather dark variety, with prominent sulphur patches on the sides. Fairly common everywhere but actually abundant (six seen in one day) along the Beaver and Birch Creek flats. Often hunts in daylight. The call of the male is shorter and of lower pitch than that of the female. A parent bird was seen teaching a full-grown young to hunt on August 13.

Surnia ulula caparoch. HAWK OWL.— Not uncommon in the tundra and scrub spruce areas on Beaver Creek. Seen hunting in daytime.

Ceryle alcyon alcyon. BELTED KINGFISHER.— Locally common, in the flats of Beaver and Birch Creeks, and on the Yukon only above White River. None were seen elsewhere. It requires clear water, presumably in order to see its prey.

Picoides americanus fasciatus. ALASKA THREE-TOED WOODPECKER.— Two seen late in July, in thick spruce forest in the bottom lands of Beaver Creek, below the mouth of Fossil Creek.

Colaptes auratus luteus. NORTHERN FLICKER.— Common in the Birch Creek flats and locally along the Yukon.

Chordeiles virginianus virginianus. NIGHT HAWK.— One seen in the upper Yukon valley, near the Hootalinqua (Teslin River), August 26.

Sayornis sayus. SAY'S PHOENIX.— A somber flycatcher apparently of this species was fairly common here and there over the region. A nest under the eaves of a road-house near Circle contained newly hatched young July 1. Several pairs were found nesting in dolomite crags above timber-line in the White Mountains.

Empidonax traillii alnorum. ALDER FLYCATCHER.— A few seen in willow thickets along the Yukon in June.

Otocoris alpestris arcticola. PALLID HORNED LARK.— Frequents the drier summits and ridges above timber-line in the mountains around the head of Beaver Creek.

Pica pica hudsonia. MAGPIE.— A few were noted on the Yukon between Lake Labarge and Stewart River, but none below that.

Perisoreus canadensis fumifrons. ALASKA JAY.— Common everywhere in the timbered areas.

Corvus corax principalis. NORTHERN RAVEN.— Common wherever food was available. Abundant along the Yukon and Upper Beaver Creek.

Euphagus carolinus. RUSTY BLACKBIRD.— A few small flocks were seen in August on the flats of lower Birch Creek.

Leucosticte tephrocotis. GRAY-CROWNED ROSY FINCH.— Abundant in July on barren dry slopes of the White Mountains above timber-line. None seen elsewhere.

Acanthis sp. REDPOLL.— Both singly and in flocks. A common denizen of the mountain valleys, especially near timber-line.

Calcarius lapponicus alascensis. ALASKA LONGSPUR.— Two males in faded nuptial plumage were seen on a grassy ridge 4000 ft. above sea-level near the White Mountains on July 15.

Calcarius pictus. PAINTED LONGSPUR.— Same habitat as the Horned Lark. Not common.

Passerculus sandwichensis alaudinus. WESTERN SAVANNAH SPARROW.— Commonly associated with Pipits on the mountains twenty-five miles west of Circle about the middle of July. At this season it is always above timber-line.

Zonotrichia l. gambelli. GAMBEL'S SPARROW.— This is the most common bird along Yukon canyon and in the mountains west of Circle. It became scarce about July 10, and was last seen on August 8. It probably migrates early.

Spizella monticola ochracea. WESTERN TREE SPARROW.— Common near timber-line in the mountains west of Circle.

Junco hyemalis hyemalis. SLATE-COLORED JUNCO.— Common in the spruce and birch timber everywhere.

Passerella iliaca(?). FOX SPARROW.— Several were seen in the willow thickets in the Birch Creek flats on August 12.

Petrochelidon lunifrons lunifrons. CLIFF SWALLOW.— A small colony was found nesting on the limestone cliffs on the Yukon River below Thanksgiving Creek. None were seen elsewhere.

Tachycineta thalassina lepida. NORTHERN VIOLET-GREEN SWALLOW.— Abundant along the Yukon and locally in the mountains farther west. Normally it nests among the cliffs in chinks in the rocks, but it was also seen going in and out of the Bank Swallow's burrows in the silt terraces along the river and was also using old mud nests of the Cliff Swallows. It was last seen on August 11.

Riparia riparia. BANK SWALLOW.— Nests locally in silt banks along Yukon canyon. Not abundant.

Dendroeca aestiva rubiginosa. ALASKA YELLOW WARBLER.— A few were seen among the willows along the Yukon in June.

Dendroica coronata. MYRTLE WARBLER.— Rather common in the spruce woods along Beaver Creek in July and August. Last seen August 14.

Seiurus noveboracensis notabilis. GRINNELL'S WATER THRUSH.— A few were seen along the banks of the creeks in July and August.

Anthus rubescens. PIPIT.— Present everywhere on the mossy slopes above timber-line. Seen at Fort Yukon on the Flats August 17.

Penthestes hudsonicus hudsonicus. HUDSONIAN CHICKADEE.— Common in spruce forest near the White Mountains in July and in the Yukon Flats in August.

Regulus calendula calendula. RUBY-CROWNED KINGLET. Common in spruce forest around White Mountains in July. Last seen August 12.

Hylocichla aliciae aliciae(?). GRAY-CHEEKED THRUSH.— A thrush with the peculiar wiry buzzing note of the Veery was heard rather frequently along the flood plains of the Yukon River and Birch Creek, from June 10 to August 15.

Hylocichla ustulata swainsoni. OLIVE-BACKED THRUSH.— Very common along the Yukon in June, but much less so in the mountains in July. Last heard August 9.

Planesticus migratorius migratorius. ROBIN.— Rather scarce but

locally common, as in mountains between Miller House and the White Mountains. It became scarcer about July 20, and was seen last on August 14.

Ixoreus naevius meruloides. NORTHERN VARIED THRUSH.—A few were found nesting in the thick spruce forest along Fossil Creek in July at 2000 ft. elevation.

Saxicola oenanthe oenanthe. WHEATEAR.—The bird has the same habitat as the Pipit and, like it, flits from rock to rock on the mossy slopes above timber-line. Young just learning to fly, July 15. Not seen in flocks.

NOTES ON SOME BIRDS OF THE OKANAGAN VALLEY, BRITISH COLUMBIA.

BY J. A. MUNRO.

Aechmophorus occidentalis. WESTERN GREBE.—Migrant and scarce winter resident; April 23, 1911, is the earliest spring record. In the spring of 1914 they were very plentiful. May 12 was a warm still day, without a breath of wind or a ripple on the surface of the lake; from the shore near Okanagan Landing, one can see down the lake for five miles, to where a rocky point interrupts the view. Small bands of Western Grebe were scattered everywhere, the sun glittering on their white under-parts. I estimated that there were eight hundred, on this small portion of the lake. In the fall, they are less common and more regular in their appearance. The earliest record of arrival is September 5, and the latest, September 28.

Colymbus holboëlli. HOLBÖLL'S GREBE.—Abundant summer resident: a few winter on Okanagan Lake. During April, flocks of these birds congregate on Okanagan Lake, keeping well out from the shore, and engage in a noisy courtship, attended by much splashing and diving. For several weeks, their yelping call can be heard day and night. They breed in suitable places on all the marshy lakes of this district; frequently nests are found within thirty feet of each other, but I have never found them breeding in colonies. On May 15 and June 8, 1916, ten nests were found in the tules, fringing an alkaline lake. In every case there was a Coot's nest within a few yards.

Larus argentatus. HERRING GULL.—A common winter resident on Okanagan Lake; they make daily trips the length of the lake, following the steamer. Unlike the Herring Gulls of the Great Lakes or the sea-coast, these birds are quite wary; it is generally impossible to get within gunshot range. Several times I have watched them following a flock of