

as the Grasshopper and Henslow's Sparrows, Blue-headed Vireo, etc. Prolonged warmth holds some birds here and further north in abundance greater than is usual. The effect of temperature is illustrated in the Mockingbird. At the beginning of October, 1889, they were abundant, but a sharp turn and heavy frost drove all but winter numbers southward before the week was over. The year before, when exceptionally mild, they had not reached this basis on the 24th, although diminished by a cool wave and slight frost that came September 30. It appears to be true that an early cool spell is more potential with certain species than subsequent protracted mildness—the bulk retiring before the chill instead of tiding it over. The genial weather later, however, may encourage other species coming from further north to remain in larger numbers than they would if it were ordinarily cold.

(*To be continued.*)

A PRELIMINARY LIST OF THE BIRDS OF THE GRAY'S HARBOR REGION, WASHINGTON.

BY R. H. LAWRENCE.

GRAY'S HARBOR lies on the Pacific Ocean in the extreme western part of Chehalis County, Washington, about forty miles north of the mouth of the Columbia River. It is the most northern of the few safe and large harbors between San Francisco and the Straits of Fuca. The harbor drains a large area, is bordered by much marshy land, and, being large and mostly shallow, shows when the tide is low a vast expanse of mud-flats cleanly cut by the two main channels—the north and the south. These channels separate inside the bar and run eastward till they join again near Aberdeen. The harbor is about sixteen miles long east and west, by twelve north and south at its western end, narrowing much toward its eastern end. It is protected from the sea by two long, narrow, sandy points, Point Brown on the north and Point Chehalis on the south. Its largest river, the Chehalis, rises in the Cascade Mountains near Mount Rainier, and is navigable by steamers for twenty miles or more. The Humptulips,

next in size, rises in the Olympic Mountains, flows southwest fifty or sixty miles, and empties into its northwest side. This stream is shallow, rapid, broad, and very clear; it is not navigable by steamers, excepting small ones for three miles. Canoes are poled up-stream for thirty miles. All the harbor streams have much marsh land about their mouths. The whole country back of this low land is hilly and is densely covered with a heavy growth of large timber — fir, hemlock, spruce, and cedar. The firs and spruces grow to be giants: it is usual to see them from four to seven feet in diameter, and over two hundred feet high. Underneath these great trees is generally a thick growth of vine-maple, hemlock, large and small, alder, etc., the ground being a network of ferns, vines, bushes, and brush, with fallen giant trees here and there in all stages of decay. On all this much moss grows; and long festoons hang from the branches of the standing trees. Except in the few dry weeks of midsummer, the bushes and ferns are generally wet. With one's face spattered with rain-drops and cobwebs, and with an unsure footing, it is no wonder progress is slow through such a tangle. There are a few scattered prairies or 'opens' north of the harbor, mostly of poor soil covered with a large growth of ferns. Stevens Prairie is the largest and most grassy. Three towns are on the harbor: Aberdeen at the junction of the Wishkah and Chehalis Rivers; Hoquiam on the Hoquiam River, four miles farther west; and Ocosta on the opposite (southwest) side between the Johns and Elk Rivers. The only industry is the manufacture of lumber.

In April, 1890, I first visited this section, for a few days, going just beyond the present site of Ocosta. Afterwards a few more hurried trips were taken; and one in May was extended to Stevens Prairie, a natural prairie lying along the north side of the Humptulips River for two miles, and reaching back for a mile to Stevens Creek, which borders it on the north. Humptulips is situated on the prairie. Flowers blossom there plentifully, and in the river-bottoms, the soil being very rich, is a great growth of underwoods with large cottonwoods, alders, and maples, and a scattering of giant spruces. Humptulips is about twenty-four miles northward of Hoquiam by the county road. From the first part of June to the first part of October, 1890, and again from about the middle of December, 1890, to July, 1891, I was in the county, and most of my time was spent on the East Humptulips

River, in a very rough and densely wooded region, some ten miles northeast of Stevens Prairie. Occasional trips were taken to the harbor, and in June, 1891, one long tramp of five days to Quiniault Lake, a lovely sheet of water lying eighteen miles north from Stevens Prairie. Until April but little chance was had to study the bird life. The winters are generally mild at Humptulips, though there are many frosty nights in summer. There is a great rainfall from late autumn to well into the spring; perhaps nearly one hundred inches of rain fall yearly. What snow falls usually melts in a few days, except on the high ridges. The summers are generally dry and fine from late June to September.

To Dr. J. A. Allen many thanks are due for much assistance in determining species and for courtesy shown.

Æchmophorus occidentalis. WESTERN GREBE. — Winter resident? Occasional? Have seen a mounted specimen, shot on the harbor about February.

Urinator imber. LOON. — Winter resident? A skin examined of one shot on the harbor in March.

Lunda cirrhata. TUFTED PUFFIN. — Accidental. Rare at this point on the coast. I have examined a mounted specimen and a skin of birds secured on the south and north sides of the harbor after a great storm, or series of storms, about December 25, 1890, when a large number of the bodies of these birds were driven on to the beach. About thirty were seen by Mr. S. A. Wye below Peterson's Point (Point Chehalis), and perhaps as many above Point Brown — one of these birds was alive.

Larus glaucescens. GLAUCOUS-WINGED GULL. — Winter resident. Very common about tide-water from fall until late spring. During the salmon runs in fall and winter, when so many hundreds of these fish are at times rotting along certain branches of the Humptulips, and far up the river, these birds fly often thirty miles or more up-stream to feed upon them, returning at evening to the harbor.

Larus occidentalis. WESTERN GULL. — Winter resident. Very common on tide-water, and I think in greater numbers than any other Gull. Habits similar to *L. glaucescens*.

Larus philadelphia. BONAPARTE'S GULL. — Winter resident. Habits similar to those of the two above. In numbers not so plentiful. Large flocks reported seen on Quiniault Lake in April.

Merganser americanus. AMERICAN MERGANSER. — Resident. Common on the Humptulips, where they breed.

Anas boschas. MALLARD. — Resident? Common during migrations. A few are said to breed on the Humptulips and Upper Quiniault Rivers, but I am not yet quite positive of this.

Anas strepera. GADWALL. — Migrant? Two seen May 17, near Hoquiam, flying at a distance.

Anas americana. BALDPATE. — Migrant? Not common. A mounted bird seen, shot on the harbor about March.

Aix sponsa. WOOD DUCK. — Resident? Not common. A few seen on the Chehalis River May 12. A few said to winter about the harbor.

Aythya vallisneria. CANVASBACK. — Migrant. Fairly common on the harbor during migrations.

Aythya marila nearctica. AMERICAN SCAUP DUCK. — Winter resident? Pretty common.

Aythya affinis. LESSER SCAUP DUCK. — Winter resident? Common. In greater number than *A. m. nearctica*. Habits similar. One shot May 11.

Glaucionetta islandica. BARROW'S GOLDENEYE. — Winter resident. Not common? A mounted specimen seen, shot on the harbor in February.

Charitonetta albeola. BUFFLEHEAD. — Winter resident. Not very common. A mounted specimen seen, shot on the harbor in February.

Oidemia perspicillata. SURF SCOTER. — Winter resident. Pretty common. Frequents the ocean—the saltier—side of the harbor.

Erismatura rubida. RUDDY DUCK. — Resident? Saw two Ducks on Quiniault Lake, June 14, at a distance, which I felt sure were this species. They were very wild.

Branta canadensis. CANADA GOOSE. — Migrant. Common on the harbor tide-flats during the migration, in large flocks, and with other species. One seen on the East Hoquiam River May 21.

Branta nigricans. BLACK BRANT. — Migrant. Fairly common on the harbor during migration. A flock seen flying south August 30, 1890, near Axford Prairie, four miles south of Humptulips.

? *Olor columbianus*. WHISTLING SWAN. Migrant. Rather rare. Two Swans were shot this year on the harbor by boatmen; one April 18, out of a flock of seven or eight. A flock of about twenty was reported by a settler as passing over Humptulips about April 10.

Botaurus lentiginosus. AMERICAN BITTERN. — Resident? Not common. Several seen near Ocosta April 3, 4, and 5, 1890.

Ardea herodias. GREAT BLUE HERON. — Resident? Rather common. Several seen near Ocosta April 3, 4, and 5, 1890, and after. Seen on the lower Humptulips; also one on Quiniault Lake June 14.

? *Nycticorax nycticorax nævius*. BLACK-CROWNED NIGHT HERON. — A Heron, which was taken for this one, flew up as our canoe approached the east shore of Quiniault Lake, June 12.

Grus mexicana. SANDHILL CRANE. — Migrant. Fairly common on the harbor during migrations. A flock of eighteen or twenty seen April 20, near the head of tide-water on the Hoquiam River, flying north.

Gallinago delicata. WILSON'S SNIPE. — Migrant? On the evening of April 2, 1890, I picked up one which was injured, on the street in Aberdeen. They often fly very low over the harbor towns, in the gloaming. I saw a large flock near Hoquiam on March 8, 1891.

Tringa alpina pacifica. RED-BACKED SANDPIPER. — Migrant. Common. Many flocks of six to twenty were seen on the north shore of the harbor May 11. Also sparingly associated with *Ereunetes occidentalis*.

Ereunetes occidentalis. WESTERN SANDPIPER. — Summer resident? Very common. Many large flocks were seen May 11 on the north shore of the harbor; in them were almost invariably a few *T. a. pacifica*. Flocks of Sandpipers, taken to be *E. occidentalis*, were seen on the harbor July 4.

Actitis macularia. SPOTTED SANDPIPER. — Summer resident. Very common during migrations. Some breed on the Humptulips River.

Numenius hudsonicus. HUDSONIAN CURLEW. — Winter resident? Large flocks seen April 19 at a distance on the 'flats' at Hoquiam.

? *Callipepla californica*. CALIFORNIA PARTRIDGE. — Resident. From stock introduced in the fall of 1889 by a settler living on the Humptulips near Stevens Prairie. Flocks of young birds seen in the summer of 1890 and in May, 1891, by settlers at Stevens and Axford prairies. Descriptions not clear; may be *Oreortyx pictus*.

Dendragapus obscurus fuliginosus. SOOTY GROUSE. — Resident. Common. Oftener heard booming from some tall spruce or fir than seen. In winter rarely seen, as it lives in the tree tops two hundred feet above ground.

Bonasa umbellus sabinii. OREGON RUFFED GROUSE. — Resident. Common. More plentiful than *D. o. fuliginosus*. Most plentiful in the river-bottoms and more open places in the woods, unlike *fuliginosus* which loves to haunt the large timber.

Columba fasciata. BAND-TAILED PIGEON. — Summer resident. Common in the larger river-bottoms where cottonwoods, alders, and other soft woods grow, and berries abound.

Aquila chrysaëtos. GOLDEN EAGLE. — Resident. Rare. One was seen May 10 perched in a tall spruce on the bank of the lower Humptulips.

Haliaëtus leucocephalus. BALD EAGLE. — Resident. Rather common on the harbor, and occasionally seen on the Humptulips. A pair, evidently breeding, observed at Quiniault Lake June 12.

Falco columbarius. PIGEON HAWK. — Resident. Not common. One flew very close to me, May 22, near the Hoquiam River. A few seen elsewhere and on the Humptulips.

Falco sparverius. AMERICAN SPARROW HAWK. — Resident. Pretty common. One seen August 13, 1890, on the East Humptulips. Small Hawks now and again seen there, at Stevens Prairie, and on Gray's Harbor, some of which were noted as this bird, others probably being *Accipiter velox*.

Pandion haliaëtus carolinensis. AMERICAN OSPREY. — Resident? One seen April 12, catching fish near the mouth of the Humptulips. Near the same place saw two, May 11, evidently breeding there.

? *Strix pratincola*. AMERICAN BARN OWL. — Resident. This Owl was seen twice in February near the East Humptulips by a neighbor who de-

scribed it to me pretty clearly. The bird seemed to be attracted by the carcass of a small striped skunk.

Scotiaptex cinerea. GREAT GRAY OWL. — A skin examined of one shot near Ocosta in May.

Nyctala acadica. SAWWHET OWL. — Resident. Reported by settlers who had heard and seen it on the lower Humptulips in March and April, 1891. It frequented then an overflowed bottom.

Glaucidium gnoma californicum. CALIFORNIA PYGMY OWL. — Resident. One shot on the East Humptulips September 2, 1890; another seen at same place January 22.

Coccyzus americanus occidentalis. CALIFORNIAN CUCKOO. Summer resident. Uncommon. I heard one near the East Humptulips River September 15, 1890, and at the same place saw and heard one high up in a dead fir a few days later — September 27. The man who was then with me reported hearing one on the Wishkah River in June, 1891.

Ceryle alcyon. BELTED KINGFISHER. — Resident. Very common on the lower parts of the harbor streams; fairly common on their upper waters and on the Quiniault River.

Dryobates villosus harrisi. HARRIS'S WOODPECKER. — Resident. Common everywhere.

Colaptes cafer. RED-SHAFTED FLICKER. — Resident. Pretty common on the occasional grassy prairies along the Humptulips and on the scantily wooded salt marshes about its mouth.

Trochilus rufus. RUFOUS HUMMINGBIRD. — Summer resident. Very common on Stevens Prairie, and common on the Humptulips River bottoms where salmon-berry and other flowering bushes grow. First seen in 1891, April 12, near James's Rock on the north side of the harbor.

Trochilus alleni. ALLEN'S HUMMINGBIRD. — Summer resident. Perhaps as common as *T. rufus*, and frequenting similar places. First noted in 1891 on the East Humptulips, April 30. I had a good view of one on Quiniault Lake June 13.

Trochilus calliope. CALLIOPE HUMMINGBIRD. — Summer resident. As common perhaps as *T. rufus*. First seen in 1891 on Stevens Prairie, April 22. The Hummers are very plentiful in this region, and are found in abundance on Stevens Prairie where the conditions are very favorable for breeding, the prairie being bounded north and south by two streams, Stevens Creek and the Humptulips River, whose fertile bottoms have quite a growth of salmon-berry and other bushes. The prairie produces many kinds of flowers and berries. No specimens of Hummers were secured.

Contopus richardsonii. WESTERN WOOD PEWEE. — Summer resident. One shot June 3 on Stevens Prairie. Heard occasionally there and on the Humptulips; also at Quiniault Lake, June 14.

Empidonax difficilis. WESTERN FLYCATCHER. — Summer resident. One of the commonest, if not the commonest, of the Flycatchers here.

Empidonax pusillus. LITTLE FLYCATCHER. — Summer resident. Rare. One seen August 21, 1890, and another May 25, 1891.

Otocoris alpestris strigata. STREAKED HORNED LARK. — Resident? A pair, seen June 12 on the Upper Quinault River by my companion, came to our camp at a small clearing on the river bank. One reported by a settler on the Lake as seen several times in April. My companion also described a pair which lived from April to June near his house in the woods four miles north of Humptulips; the forest there was broken by open beaver marshes.

Cyanocitta stelleri. STELLER'S JAY. — Resident. Common on the water courses, and in the clearings; in the forests largely replaced by *P. obscurus*. Very suspicious and alert.

Perisoreus obscurus. OREGON JAY. — Resident. Common in the heavy timber; not often seen in the opener places. An unsuspecting and rather silent bird.

Corvus corax sinuatus. AMERICAN RAVEN. — Resident. Fairly common in the thicker timber; probably would be so in the opener places, but *C. caurinus* makes war on it. Sometimes not seen for days, then a flock may be located by the noise it makes over some elk's or deer's carcass.

Corvus caurinus. NORTHWEST CROW. — Resident. Very common on the lower Humptulips and the harbor tide-flats; common on the upper river. With the Gulls they are good scavengers when salmon are running in fall and winter.

Agelaius gubernator. BICOLORED BLACKBIRD. — Winter resident? I saw a few at Hoquiam March 8. I think they stay on the harbor all winter.

Scelopophagus cyanocephalus. BREWER'S BLACKBIRD. — Resident? Pretty common on the harbor; a few winter there, I believe. Saw one at Stevens Prairie May 3.

Loxia curvirostra minor. AMERICAN CROSSBILL. — Resident. Common. Gregarious. Oftener heard chipping in the high tree tops, than seen. Confined mostly to the thick and tall timber. Generally seen in flocks of six to ten. Near the Hoquiam River on December 13 I saw a great flock of two or three hundred perched high in two tall dead trees.

Ammodramus sandwichensis alaudinus. WESTERN SAVANNA SPARROW. — Summer resident. Common on the harbor about Hoquiam and on Stevens Prairie where they breed. This bird may be typical *sandwichensis*, but the measurements of a skin I have seen too small.

Zonotrichia leucophrys intermedia. INTERMEDIATE SPARROW. — Resident. Very common on Stevens Prairie and on the harbor, where they breed. First noted in 1891 on Stevens Prairie April 12. Some probably winter there. A sweet songster.

Junco hyemalis oregonus. OREGON JUNCO. — Resident. Not as common as *Z. l. intermedia* or *M. f. guttata*, but fairly common.

Melospiza fasciata guttata. RUSTY SONG SPARROW. — Resident. Very common everywhere on the harbor, and along its tributary streams, and on the few natural prairies. Fairly common on the Quinault. Heard two singing sweetly at Aberdeen in February in cold wintry weather. The finest songster in this region.

Chelidon erythrogaster. BARN SWALLOW. — Summer resident. Common on the harbor, especially at Hoquiam. A few seen on Stevens Prairie.

Tachycineta bicolor. TREE SWALLOW. — Summer resident. A pair seen May 10 perched on a snag on a sand bar of the lower Humptulips. Another noted near the same place, July 4.

Tachycineta thalassina. VIOLET-GREEN SWALLOW. — Summer resident. Pretty common on the harbor, especially at Hoquiam. Have noted none at Stevens Prairie.

? *Clivicola riparia.* BANK SWALLOW. — Summer resident. Not common. First noted in 1891 on Stevens Prairie May 3. Seen also on the lower Humptulips July 4 and at other times. I have no specimen of this bird; it may be *S. serripennis*.

Lanius ludovicianus excubitorides. WHITE-RUMPED SHRIKE. — Resident? Rare. Three seen June 10, 1890, in a small clearing on the Humptulips. None seen since.

Vireo gilvus. WARBLING VIREO. — Summer resident. I secured specimens while at Quiniault Lake June 12 and 14. I have heard it often on the Humptulips before and since then.

Helminthophila celata lutescens. LUTESCENT WARBLER. — Summer resident, not very common. One shot on Stevens Prairie April 22; others shot June 15 and 23.

? *Dendroica aestiva.* YELLOW WARBLER. — Summer resident. A Warbler, taken to be this one, was seen June 12 perched in a small tree on the river-bottom of the Upper Quiniault.

Dendroica auduboni. AUDUBON'S WARBLER. — Summer resident. Not common. One shot April 22 on Stevens Prairie, the only one noted.

Dendroica nigrescens. BLACK-THROATED GRAY WARBLER. — Summer resident. A pair seen May 11 on the harbor near Hoquiam. No others noted.

? *Dendroica occidentalis.* HERMIT WARBLER. — Summer resident? At Hoquiam, July 10, I am very sure I saw a female of this species. It was but a few yards away, on and about a clump of bushes on the open marsh, and was very restless. A few days afterward I saw the same bird, — or another one like it.

Geothlypis macgillivrayi. MACGILLIVRAY'S WARBLER. — Summer resident. One shot on Stevens Prairie, June 23, was the only one noted.

Sylvania pusilla pileolata. PILEOLATED WARBLER. — Summer resident. Very common throughout this region. In 1891 first noted April 29 on the East Humptulips. The commonest Warbler here.

Anthus pensilvanicus. AMERICAN PIPIT. — Migrant. Uncommon. Two were shot on Stevens Prairie, April 22, out of a flock of seven or eight which were the only ones seen there.

Cinclus mexicanus. AMERICAN DIPPER. — Resident. Common on the upper part of the Humptulips, where the river is swift and its bed rocky. On April 12 I found these birds far down the Humptulips at the time of high water, but on July 4 there was no trace of them there. They

descend the Upper Quiniault in the winter to the Lake, I am told, and can then be found on its beach.

Salpinctes obsoletus. ROCK WREN. — Summer resident? A few observed on the Wishkah River and on the East Humptulips in June, 1890; no specimen shot. Not seen in 1891 on the East Humptulips. I have not been on the Wishkah since August, 1890.

Troglodytes hiemalis pacificus. WESTERN WINTER WREN. — Resident. Common everywhere in the thick undergrowth and 'trash' of the heavy timber. Sunshine and light this bird does not need to help it trill its cheery song.

Certhia familiaris occidentalis. CALIFORNIAN CREEPER. — Resident? Uncommon. I saw a few in January on the East Humptulips.

Parus gambeli. MOUNTAIN CHICKADEE. — Resident? One seen at Hoquiam, May 16, was the only one noted.

Parus rufescens. CHESTNUT-BACKED CHICKADEE. — Resident. Nearly as common in the timber and elsewhere as *Troglodytes h. pacificus*.

Regulus satrapa olivaceus. WESTERN GOLDEN-CROWNED KINGLET. — Resident. Not nearly as common as *P. rufescens*. A small flock seen on the East Humptulips in January, and three birds near the West Humptulips May 29; the latter seemed to be breeding. Heard at times. Seen at Hoquiam in May.

Regulus calendula. RUBY-CROWNED KINGLET. — Resident? Rare. Shot two on Stevens Prairie April 22. One had not a vestige of the scarlet crown patch. No others noted.

Turdus ustulatus. RUSSET-BACKED THRUSH. — Summer resident. Very common throughout the river-bottoms, and common on the small prairies and in the timber. Musical and timid. It comes about the time the salmon-berry bushes blossom; and goes when its berries are gone.

Merula migratoria propinqua. WESTERN ROBIN. — Resident. Less common than *Turdus ustulatus*, but a common bird on the harbor, the Humptulips, and Stevens Prairie. I saw some on Axford Prairie in February in the midst of our wintriest weather.

Hesperocichla nævia. VARIED THRUSH. — Resident. Not quite as plentiful, I think, as *T. m. propinqua*. Most migrate, but a few stay through the winter on the East Humptulips. One seen there February 7 during cold weather.

Sialia mexicana. WESTERN BLUEBIRD. — Migrant? One seen May 15 at Hoquiam, perched on an electric-light wire. No others noted.

Sialia arctica. MOUNTAIN BLUEBIRD. — Migrant? Two were seen on Stevens Prairie April 22; one was secured. No others noted.