

NOTES ON THE BIRD LIFE OF NORTHWESTERN
WASHINGTON.

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Passer domesticus. ENGLISH SPARROW.—Very plentiful, and just as undesirable, and as much as a nuisance, as in the East. June 16 I investigated a small colony of Cliff Swallows nesting under the eaves of a farm house, and found one of their nests taken possession of by a pair of these birds. It held six well incubated eggs, and could be picked out from the others by the grasses at the entrance, a thick lining of grasses and large chicken feathers having been added after the original owners had been driven away.

Poocetes gramineus affinis. OREGON VESPER SPARROW.—I saw this species nowhere but in the open prairie country south of Tacoma, but here it was fairly plentiful during the spring and early summer. My first record for the spring migration was that of two birds seen May 9, feeding at the edge of an open field. A nest found May 29 held four incubated eggs, and was sunken flush with the ground in a thick clump of grass at the edge of a bunker on an open golf course. It was well built of weed stems and grasses, lined with finer grasses and horse hair.

Passerculus sandwichensis alaudinus. WESTERN SAVANNAH SPARROW.—My one record for the occurrence of this species here was a single bird seen at Westport March 28, feeding at the edge of a small pond in an open field. None winter, so this bird was apparently an early migrant.

Passerculus sandwichensis brooksi. DWARF SAVANNAH SPARROW.—This recently described subspecies breeds on the open tide flats about Tacoma, and is fairly plentiful there. I crossed these tide flats April 11, and heard the birds singing all about me.

Zonotrichia leucophrys nuttalli. NUTTALL'S SPARROW.—A plentiful summer resident, with a very evident preference for thickets and underbrush bordering open fields. It was last seen in the fall on Oct. 3, a flock of ten birds being noted that day feeding at the side of a road. The first bird reappeared in the spring March 24, but it was not until April 12 that they were finally fairly plentiful, and singing. I succeeded in finding three nests about Seattle, one May 12 with four half incubated eggs, another May 17 with four well incubated eggs, and the third June 19 with three fresh eggs. They were all within three feet of the ground in thick bushes in fields overgrown with scrubby underbrush, and were rather bulkily built of weed stems, grasses, dead fern leaves and a few rootlets, deeply cupped and lined with fine grasses and a little horse hair. A fourth nest found at Tacoma May 15 with four slightly incubated eggs differed quite radically from the others for it was sunken flush with the ground in a little

thicket at the edge of a short stretch of woods, and was loosely built of weed stems, grasses and a few shreds of bark, lined with fine grasses and a little cow hair.

Zonotrichia coronata. GOLDEN-CROWNED SPARROW.—This species was a rather plentiful spring migrant, and may occur in the fall, although I overlooked it entirely then. As it was the latter part of September before I reached Seattle it is very probable that these birds had come and gone by that date. The first migrants, two males, were seen April 28, and by the 8th of May numerous small flocks could be found feeding in thickets and underbrush at the edge of short stretches of woods. My last record for the spring migration was that of a single bird seen May 22, feeding in a thicket at the side of a path through a stretch of woods. A few birds linger through the winter, and I have two records for their occurrence at this time of the year, one being seen Jan. 28, and another Feb. 29, feeding in thickets at the side of a road.

Spizella passerina arizonae. WESTERN CHIPPING SPARROW.—A fairly plentiful summer resident, scattered pairs being found in the open fir woods. Two birds were seen for the first time in the spring on May 2, and within a few days singing males were more or less in evidence. Three nests that were found, one May 15, another May 16 and the third May 23, were all at the outer end of drooping limbs of large Douglas firs at the edge of stretches of woods, varying in height from five to ten feet from the ground, and each held four fresh eggs. They were alike in construction, being well built of weed stems, rootlets and grasses, lined with horse hair, and differing from those of the eastern Chipping Sparrow only by their perceptibly larger size.

Junco hyemalis connectens. SHUFELDT'S JUNCO.—This species was very plentiful about Seattle during the fall and winter, numerous flocks being seen, but they gradually disappeared early in the spring and none remained to breed. About Tacoma, however, they were one of the characteristic breeding birds of the scattered stretches of open fir woods, none being without several pair at least, and usually more. Here birds were frequently flushed from nests that almost invariably were sunken in the green moss that covered the ground, and protected and concealed by a dead fir limb or, rarely a clump of dead ferns. They were substantially built of weed stems and fine grasses, in one case with green moss intermixed, and lined, sparingly at times, with horse hair. Evidently four eggs are usually laid for none were found with more, and only two with but three. One nest was placed in a very odd situation for it was snugly built in an old rusty tin can lying at the edge of an open field, and twenty feet from the nearest underbrush. My earliest breeding record was a nest found May 9 with four fresh eggs, my latest a nest found June 6 that also held four fresh eggs.

Melospiza melodia morphna. RUSTY SONG SPARROW.—Resident, and plentiful throughout the year in thickets and underbrush about water. This preference for moist situations was very noticeable for while a few

birds were seen practically anywhere it was only at the edges of streams, or the scattered swamps, or pools, that they were at all numerous. Here, too, in the reeds and marsh grass that fringed the water the nests were frequently found, never over a foot from the ground, and though substantially built, rather well concealed. One nest was over two feet of water, in a clump of dead reeds near the center of a swamp, but this was probably rather exceptional. Other situations in which nests were found were a foot from the ground in clumps of dead ferns at the edge of fields overgrown with scrubby underbrush, five feet from the ground in a dense growth of vines covering an old stump at the edge of an open field, sunken flush with the ground at the foot of an alder sapling and unusually well concealed by the green moss that draped the foot of the tree and completely covered it, and a few inches from the ground among the stalks of a small thick bush at the edge of a short stretch of open woods. They were well built, and at times almost bulky, of coarse pieces of reeds, weed stems, dead leaves, strips of bark and grasses, lined with fine grasses and very often horse hair. Full sets consisted of either three or four eggs, both being equally common, while none were found with more than four. A nest found April 10 with two fresh eggs, an incomplete set, was my earliest breeding record, my latest a nest found June 18 with three slightly incubated eggs. At any time between these two dates it was possible, I soon realized, to flush a bird from a nest holding fresh eggs.

Melospiza lincolni lincolni. LINCOLN'S SPARROW.—I have but two records for the occurrence of this species here, both for the spring migration, single birds being seen April 4 and May 5, feeding in underbrush bordering open fields. Either, or both, may have been Forbush's Sparrow, *Melospiza lincolni striata*, but as neither was collected this could not be determined.

***Passerella iliaca,* and subspecies.** FOX SPARROW.—A chance question concerning the status of the Fox Sparrow here revealed the fact that it was considered an uncommon migrant, and that little was known as to the relative abundance or scarcity of the various subspecies that might reasonably be expected to occur about Seattle, so I devoted considerable of my time to collecting a small series of these birds. I soon found that they were far commoner than was generally realized, and I feel now that they were merely overlooked. Feeding as they do in rather thick brush, often deep in the woods, or in dense thickets bordering open fields, they were never conspicuous, and if approached they at once became timid and difficult to see, so it is small wonder they were thought scarce. From the 4th of January through the 30th of April I spent part of many mornings or afternoons hunting these birds, crawling through dense salal when one was heard scratching vigorously in the dead leaves ahead of me, or watching the thickets ahead of me as I followed a path through the woods, and in that time succeeded in securing a sufficient number to give me a fair idea of the occurrence of the different subspecies. Many of the skins were sent to the Biological Survey for correct identification, and with these as a basis to work with little difficulty was experienced in determining the

form each bird should be referred to. The Valdez Fox Sparrow, *Passerella iliaca sinuosa*, proved the commonest, fully half of those taken being of this subspecies. They were seen almost daily, rarely over two at one spot, and they remained later than the others, two taken April 30 being the last noted here. The Sooty Fox Sparrow, *Passerella iliaca fuliginosa*, was next in abundance, a fourth of those collected being of this form. Single birds, or at times two, were seen at irregular intervals, but they were never actually scarce until April 26 when one was collected for the last time. The Shumagin Fox Sparrow, *Passerella iliaca unalaschensis*, was possibly but half as plentiful as *fuliginosa*, judging from the number of specimens taken. The first bird was noted Feb. 15, and it was the middle of April before many were seen, although after that date, until April 28, one was collected almost daily. The largest of the group, the Kadiak Fox Sparrow, *Passerella iliaca insularis*, was very scarce, and was represented by but one specimen taken April 19. One Eastern Fox Sparrow, *Passerella iliaca iliaca*, was also taken Feb. 15 as it fed with several Rusty Song Sparrows in a thicket at the edge of an open field, and to the best of my knowledge constitutes the first record for the state.

Pipilo maculatus oregonus. OREGON TOWHREE.—Resident, and plentiful throughout the year in thickets and underbrush both in the open and in the scattered short stretches of woods. My first nest, with three slightly incubated eggs, was found May 12, while my latest was found June 25 and held four eggs possibly half incubated. Seemingly the birds breed irregularly for at frequent intervals between these two dates one was flushed from a nest holding eggs. These were invariably sunken flush with the ground, at times at the base of an old stub or of a small sapling, and were quite well concealed by the Oregon grape and clusters of ferns that cover the ground here. They were well built of dead leaves, weed stems and grasses, rarely a little green moss or shreds of bark, and were lined with fine grasses. Three eggs are usually laid for of nine nests which I have recorded in my note book but two held four.

Zamelodia melanocephala. BLACK-HEADED GROSBEAK.—This species was a fairly plentiful summer resident, but in my experience by no means common. One was seen for the first time in the spring on May 14, and within a week scattered birds could be found in favored spots in the short stretches of woods.

Passerina amoena. LAZULI BUNTING.—I found this species a rather scarce summer resident in underbrush bordering open fields. It was first seen in the spring on May 19, and but rarely thereafter.

Piranga ludoviciana. WESTERN TANAGER.—I found this species also a rather scarce summer resident in the scattered stretches of open fir woods. None were seen until May 21, two males being noted that day feeding with a flock of Townsend's Warblers in the upper branches of several large firs in a wooded ravine.

Progne subis hesperia. WESTERN MARTIN.—This species was a plentiful summer resident about both Seattle and Tacoma, but did not breed

in the open country surrounding these cities. Two birds were seen for the first time in the spring on April 24, feeding over the water in an inlet on Lake Washington, and by the latter part of May many were found nesting in crevices and crannies of the larger buildings in the business sections where at present they are entirely confined during the breeding season.

Petrochelidon lunifrons lunifrons. CLIFF SWALLOW.—A plentiful summer resident, small colonies being noted about a number of buildings where remnants of old nests showed they had nested previous years. They were first seen in the spring on April 24, possibly thirty birds being found that day showing great interest in a few last year's nests under the eaves of a building on the campus of the University of Washington. On June 16 I came across a small colony of some twenty pairs that had plastered their nests under the eaves of a farm house, and in one nest that could be easily reached found six well incubated eggs.

Hirundo erythrogaster. BARN SWALLOW.—A fairly plentiful summer resident, but seemingly there was less tendency to colonize than is the case in the east for without exception each pair would be found nesting alone. Considering the mild climate they arrived much later in the spring than I would have expected for it was not until the 8th of May that two birds were seen for the first time feeding overhead. My first nest was found June 13, and held three slightly incubated eggs. It was on a projection above a pillar in one corner of a porch of a house in Tacoma, and was characteristic of this species, being built of pellets of mud intermixed with grasses, lined with fine grasses and then chicken feathers. Three other nests that were found, one on the 16th of June and two on the 20th, were all on beams in sheds, in two, four fresh eggs and in the third, five, slightly incubated.

Iridoprocne bicolor. TREE SWALLOW.—This species was likewise a fairly plentiful summer resident, and one of the first migrants to appear in the spring. Feb. 29 seven birds were seen, scattered along a telephone wire at the side of a road, and by the middle of March small flocks were frequently noted feeding over open fields. A nest with three fresh eggs found May 19 at Renton was ten feet from the ground in a cavity in an old rotten willow stub in underbrush bordering a stream, and was built entirely of large chicken feathers. Another found June 18 held four slightly incubated eggs, and was fifteen feet from the ground in an old Flicker's hole in the dead top of a willow at the edge of an open field. It was more substantially built of grasses, with a thick lining of large white chicken feathers.

Tachycineta thalassina lepida. NORTHERN VIOLET-GREEN SWALLOW.—This species was a plentiful summer resident, and one that apparently, in this part of the state at least, has readily accepted the benefits to be derived from the proximity of man, for during the breeding season they were rarely seen far from houses. Three birds were noted for the first time in the spring on March 14, feeding over an open field with a small flock of Tree Swallows, and within ten days they were quite common. While at Tacoma, April 3, I was interested in their abundance about the

large swamp south of the city, literally hundreds being seen there that day feeding low over the reeds and stretches of open water. A nest found June 9 held four slightly incubated eggs, and was on a beam in a corner inside the attic of an old unused house. It was a large mass of weed stems, grasses and feathers, the middle being neatly cupped and well lined with large chicken feathers. Another nest found June 13 held six half incubated eggs, and was in a cavity between two logs in the side of an old log cabin. It was the usual mass of grasses and large chicken feathers, so much out of proportion to the size of the bird, the top being as before neatly cupped and lined with the chicken feathers.

Stelgidopteryx serripennis. ROUGH-WINGED SWALLOW.—This species was, in my experience, less plentiful than the other Swallows but this was probably due to the scarcity of suitable nesting sites. Possibly if I had spent more time on the Sound I might have found many of them taking advantage of the high bluffs there, but I lacked the opportunity of so doing. Two birds were seen for the first time in the spring on April 10, feeding over a stretch of open water near the edge of a swamp, and a nest was found near this spot on June 6 that held five fresh eggs. It was at the end of a foot and a half hole in a bank at the side of a road, and was flat but substantially built of twigs, rootlets and weed stems, lined with grasses.

Bombycilla garrula. BOHEMIAN WAXWING.—One of the pleasantest experiences of the winter was the opportunity I had of witnessing a large invasion of these birds, and of becoming familiar for the first time with their habits and temperament during this part of the year. The first flock of fully a hundred appeared on Dec. 6, and almost at once they became plentiful, large flocks being noted almost daily. Their lack of timidity was a never failing source of interest to me, and one experience I had seems almost unbelievable now. It shows so well their surprising tameness that I shall quote directly from my notebook, and give the details as they were written then:—"Dec. 16—The birds on the University campus have gradually increased until now there are fully eight hundred of them there; they feed on the ground or in the thickets where the bushes are full of berries, and are remarkably tame, allowing anyone to walk up within a foot of them; two lit on me as I stood watching them, one on my shoulder and one on the top of my head, the latter bird remaining there for several minutes; a few minutes later, I held out my hand full of berries and one bird actually lit on my arm and standing on the sleeve of my mackinaw ate the berries without paying the slightest attention to me; a sudden noise startles them, and the passing of an automobile or the closing of a window invariably causes them to fly into the top of the nearest tree from which they soon drop into the bushes again." Warm weather during the latter part of January brought out many insects, and these birds were then frequently noticed "flycatching," circling and soaring through the air for minutes at a time, and reminding me very much of Swallows. The last flock was seen Feb. 20, twelve birds being found in the top of a tree at the edge of a field.

Bombycilla cedrorum. CEDAR WAXWING.—This species was fairly

plentiful during the fall, but seemingly does not winter, for the small flocks that were seen had disappeared by the latter part of October, and it was not until May 1 that two birds were recorded again for the first time in the spring. My first nest was found June 17, and held four fresh eggs. It was five feet from the ground in a small bushy willow at the edge of a thicket in an open field, and was shabbily built of coarse weed stems, rootlets and grasses, lined with fine weed stems. Another nest found June 20 at Tacoma held five slightly incubated eggs, and was six feet from the ground at the outer end of a lower limb of a large Douglas fir at the edge of a grove of firs surrounding a farm house. It was well built of fir twigs, brown usnea moss and a few grasses, lined with the moss and a few fine grasses.

Lanius borealis. NORTHERN SHRIKE.—I have but three records for the occurrence of this species here so it is evidently an uncommon winter resident. Single birds were seen Oct. 11, Nov. 21 and Feb. 23, each time in the top of a tree or bush at the edge of an open field.

Vireosylva olivacea. RED-EYED VIREO.—This species is a very scarce summer resident here, and I saw but one pair, on June 16, in a short stretch of woods near Seattle. The male was following the female about, singing, as she fed from tree to tree, but as far as I could determine they were not nesting yet, even at this late date.

Vireosylva gilva swainsoni. WESTERN WARBLING VIREO.—A plentiful summer resident, but limited to a large extent to the stretches of woods bordering both Lake Washington and scattered small streams where hardwoods, alders and maples predominated. One bird was seen for the first time in the spring on May 12, and within a few days they were quite common. Between the 11th and the 24th of June five nests were found, each time by tracing the bird as it sang while incubating, a trait apparently rather common with this species. All held four eggs, and were in either alders or maples, varying in height from eight to thirty-five feet from the ground. They were compactly built of grasses, green moss and plant down, lined with fine grasses, and ornamented slightly on the outside with spiders' web.

Lanivireo solitarius cassini. CASSIN'S VIREO.—This species was quite plentiful during the summer months in the short stretches of woods about Tacoma, but strangely scarce at Seattle where it was rarely seen. The first bird appeared in the spring on April 12, and on May 23 a nest was found, at Tacoma, that held five half incubated eggs. It was twelve feet from the ground at the outer end of a limb of a small scrub oak in a stretch of open fir woods, and was built of grasses and usnea moss, lined with fine grasses and bright red moss rootlets, and well ornamented on the outside with white spiders' egg cases and bits of dead leaves. I would have expected these birds to nest in the firs, but as far as my experience went they have no liking for conifers and invariably select a deciduous hardwood in which to build. Within the next month four other nests were found, and two of them were in small oaks and two in alder saplings,

varying in height from five to ten feet from the ground. One, on May 31, held four well incubated eggs, another, on June 9, held four fresh eggs, while two were found June 20, in one four fresh eggs and in the other three, well incubated. They varied little in construction from the first nest, although three were well ornamented with fragments of a hornet's nest and in one green moss was used.

Vireo huttoni obscurus. ANTHONY'S VIREO.—This little Vireo may be fairly plentiful here but it is so quiet and inconspicuous that it is easily overlooked and may therefore be thought scarcer than it really is. It is certainly unlike any of the other vireos with which I am familiar for I rarely heard it utter a sound, and during the spring it oddly enough became even more retiring and nothing even slightly resembling a song was heard. At intervals throughout the winter single birds were seen feeding in underbrush in the short stretches of woods, frequently with restless flocks of Kinglets, but I soon realized that unless actually looked for they possibly would not have been noticed. A nest was found May 2 in a stretch of large second growth Douglas fir near Kirkland that held three slightly incubated eggs. It was thirty-five feet from the ground at the outer end of a limb of a fir, and was built entirely and compactly of light green usnea moss, lined well with fine grasses. The female was not incubating when I climbed the tree but soon appeared followed by the male and at once showed great uneasiness, although she never uttered a sound as she moved nervously about in the nearby trees. Another nest found May 9 near Tacoma held three well incubated eggs, and was twenty-five feet from the ground at the outer end of a limb of a Douglas fir near the edge of a stretch of open woods. It likewise was built entirely and compactly of light green usnea moss, lined with fine grasses, but was rather ragged externally, suggesting that perhaps the moss was continually added during incubation, more or less for ornament, as the Cassin's Vireo uses the spiders' web. The female was incubating, and was quite fearless, refusing to leave the nest until actually pushed from her eggs.

Vermivora celata celata. ORANGE-CROWNED WARBLER.—My experience with this species has appeared in 'The Condor' for Nov.-Dec., 1920, Vol. XXII, No. 6, so I shall touch on it but briefly at this time. Always considered a rather scarce spring and fall migrant I found these birds not uncommon during the winter, feeding with restless flocks of Kinglets and Chickadees where, being quiet and inconspicuous, they were easily overlooked. One was seen Dec. 26, another Jan. 31, a third Feb. 9, two Feb. 13, and a sixth Feb. 27. Four of them were collected that there might be no question as to their identification.

Vermivora celata lutescens. LUTESCENT WARBLER.—A plentiful summer resident in underbrush at the edges of the scattered short stretches of woods. They were early migrants for two, both singing, were seen at Westport March 29, and by the 12th of April they were plentiful about Seattle. On May 13 a bird was flushed from a nest that held four slightly incubated eggs that was sunken flush with the ground at the base of a

thick clump of grass within two feet of a path through a short stretch of open woods. It was built of dead leaves and fine shreds of bark, and well lined with fine grasses.

Dendroica aestiva brewsteri. CALIFORNIA YELLOW WARBLER.—A plentiful summer resident in the stretches of willows and alders bordering Lake Washington, and noted in small numbers about fields overgrown with scrubby underbrush. Two birds were seen for the first time in the spring on May 1, feeding, singing, in alders fringing the Lake, and almost at once they were fairly plentiful. The first nest was found May 24, and held four fresh eggs. It was four feet from the ground in a small willow in underbrush bordering a stream, and was compactly built of gray plant fibres, fine shreds of bark and a few grasses, deeply cupped and lined with plant down, a few feathers and several horse hairs. Between that date and the 20th of June eight other nests were found, four eggs in each. Five were in willows and three in alders, varying in height from five to twenty feet from the ground, the average being six feet. They varied little in construction from the first nest, the shreds of bark being absent in a few and, more rarely, the gray plant fibres.

Dendroica coronata hooveri. ALASKA MYRTLE WARBLER.—This species was one of the earlier migrants for a flock in which there were possibly ten birds was seen March 14, feeding at the edge of a short stretch of woods, and while at Westport March 28 five birds were seen in the open woods near the beach.

Dendroica auduboni auduboni. AUDUBON'S WARBLER.—This species is more or less resident here for while it was a little scarce during the winter months single birds were seen at frequent intervals after the small flocks had disappeared in the fall. They breed early for a nest was found May 3 with four young several days old. It was fifteen feet from the ground at the outer end of a limb of a Douglas fir at the edge of an open field, a situation quite typical of this species. While at the nest the male appeared with food and at once fluttered along a limb within a few feet of me, feigning a broken wing. Another nest found the same day held four fresh eggs, and was twenty feet from the ground at the outer end of a limb of a Douglas fir at the edge of an old slashing. It was compactly built of rootlets, shreds of bark and, externally, numerous downy spiders' egg cases, deeply cupped and lined with feathers and a few horse hairs. It is possible that two broods are reared for a third nest was found June 13 at Tacoma that held three fresh eggs. It was fifteen feet from the ground at the outer end of a limb of a large Douglas fir in a short stretch of open woods, and was compactly built of fir twigs, shreds of bark and grasses, well lined with black horse hair and a few Steller's Jay feathers.

Dendroica nigrescens. BLACK-THROATED GRAY WARBLER.—A fairly plentiful summer resident, but rather local in distribution. One bird, a male, was seen for the first time in the spring on April 26, feeding, singing, in the lower branches of a large Douglas fir, and within a few days they were reasonably common. A nest was found May 26 in a stretch of woods

near Kirkland that held four slightly incubated eggs. It was twenty feet from the ground and ten feet out at the outer end of a limb of a large Douglas fir, and was built of green moss, shreds of bark and rootlets, well cupped and lined with fine grasses and the feathers of a Varied Thrush.

***Dendroica townsendi*.** TOWNSEND'S WARBLER.—I found this species fairly plentiful during the fall, rather scarce throughout the winter, and quite plentiful for a few weeks in the spring. From the latter part of September through the middle of November one was seen at frequent intervals feeding either in underbrush or as often in the upper branches of the larger trees, but from the first of December until the middle of April but few were noted. May 1 they were especially numerous, small flocks being seen in many of the short stretches of woods. None remained to breed, however, for they had all disappeared within a week.

***Dendroica occidentalis*.** HERMIT WARBLER.—This species was not seen at all at Seattle, but was fairly plentiful in the stretches of fir woods in the open prairie country about Tacoma. Here a nest was found June 10 that held five slightly incubated eggs, and that was fifteen feet from the ground and twenty feet out at the outer end of a limb of a large Douglas fir at the edge of a short stretch of open woods and facing an open field. It was compact and deeply cupped, and built of fir twigs, rootlets and green usnea moss, lined with fine grasses and then gray horse hair.

***Oporornis tolmiei*.** MACGILLIVRAY'S WARBLER.—This species was a fairly plentiful summer resident in underbrush in the scattered short stretches of woods. One bird was seen for the first time in the spring on April 26, but it was not until June 23 that I succeeded in finding a nest that held three fresh eggs. It was two feet from the ground in a thick bush in the middle of a short stretch of open woods, and was large and bulkily built of coarse weed stems, grasses and numerous short strips of white paper, well cupped and lined with black rootlets.

***Geothlypis trichas arizela*.** PACIFIC YELLOW-THROAT.—This species was a plentiful summer resident in stretches of reeds and cat-tails fringing any open water. The first birds were noted in the spring on April 10, about the large swamp south of Tacoma, and on the 12th many were seen in the reeds bordering Lake Washington. A nest was found May 9 at Tacoma that held three fresh eggs, and that was a few inches from the ground in a thick clump of reeds and marsh grass at the edge of the swamp. It was rather loosely built of coarse pieces of reeds, lined with fine grasses and then considerable horse hair.

***Wilsonia pusilla chryseola*.** GOLDEN PILEOLATED WARBLER.—This species was fairly plentiful at Seattle, but decidedly scarce about Tacoma where I understand it is rarely seen. The first bird appeared in the spring on May 1, and four days later many could be found feeding, singing, in thickets and underbrush at the edges of the short stretches of woods.

***Anthus rubescens*.** PIPIT.—This species was a common migrant, and small flocks are said to winter on the tide flats near Tacoma although I saw none about Seattle after the latter part of November. The first flock

appeared in the fall on Oct. 4, possibly fifty birds being seen feeding in an open field. While at Westport March 28, a small flock of thirty birds was seen, well scattered over a tide flat covered with low marsh grass.

Thryomanes bewicki calophonus. SEATTLE WREN.—Resident, and plentiful throughout the year in thickets and underbrush both in the open and in the short stretches of woods. They breed early, but also rather irregularly, for while my first nest, with five slightly incubated eggs, was found April 29, four young birds, out of the nest several days at least, were seen the following day, and other nests with eggs were noted at intervals during the following two weeks. My latest breeding record was that of a nest found May 16 with five half incubated eggs, so I am uncertain as to whether or not more than one brood is reared. The usual situation chosen for the nest was in a natural cavity in an old rotten stump within a foot of the ground, either in underbrush or in an open slashing, my one exception being a nest built in the upturned roots of a large fir at the side of a small stream in a ravine. They varied little in construction, being fairly substantial but somewhat loosely built of twigs, weed stems, shreds of bark, dead leaves, bits of green moss and grasses, well cupped and lined with feathers, rarely a little rabbit fur, and invariably a few fragments of an old snake skin.

Troglodytes aedon parkmani. WESTERN HOUSE WREN.—This species was a plentiful summer resident about Tacoma, but very scarce for some reason at Seattle where it was rarely seen. The first bird appeared in the spring on April 12, and on May 31 a nest was found, at Tacoma, that held seven fresh eggs. It was five feet from the ground in a natural cavity in a fir stub in the middle of an open slashing, and was loosely built of twigs, shreds of bark and grasses, thickly lined with feathers of a Sooty Grouse and fragments of an old snake skin.

Nannus hiemalis pacificus. WESTERN WINTER WREN.—Resident, and plentiful throughout the year, although seen largely during the summer months in cool moist ravines. From my rather limited experience with the Winter Wren in the east I had acquired the idea that in selecting a suitable nesting site these birds almost invariably chose the upturned roots of a fallen tree, so I was quite interested in the different situations in which the nests were built here. My first nest, with six fresh eggs, was found April 26, and was two feet from the ground in the upturned roots of a large fir at the side of a stream in a wooded ravine. It was a ball of green moss, intermixed with grasses and, about the opening at the side, fine fir twigs, well lined inside with feathers. A second nest that on May 4 held six half incubated eggs, was two feet from the ground in a crevice at the end of an old rotten log on a hillside in a ravine, and was built entirely of green moss, with a very few fir twigs at the entrance, well lined inside with the feathers of a Varied Thrush. A third nest found at Tacoma May 9 held five slightly incubated eggs, and was three and a half feet from the ground in a hole in an old rotten stump in a stretch of thick woods. The cavity was but three or four inches deep so except for the lining of feathers

only green moss had been used, the usual fine twigs being missing. A fourth nest was to my mind even more unusual for it was five feet from the ground well concealed in a mass of dead leaves lodged in a clump of shoots growing from the trunk of a large alder in a short stretch of open woods. It was found May 11, and held on that date half grown young.

Telmatodytes palustris paludicola. TULÉ WREN.—Resident, and plentiful throughout the year in the stretches of reeds and cat-tails so numerous here. They breed early for fresh eggs can be found the latter part of March but as might be expected where birds nest together in large numbers as these do there is quite an irregularity in the date that individual pairs undertake domestic duties. On April 10 I searched but a small part of the large swamp south of Tacoma, and in an hour or so succeeded in finding forty-nine nests. Many of these were undoubtedly decoys for it is a well known custom of these Marsh Wrens to build three or four nests and use but one, and I was not surprised that but seven out of all that were found held either eggs or young. In one there were two fresh eggs, in another three, in a third four, in two five, but slightly incubated, in one six, well incubated, and in the last small young. All were fairly well concealed in thick clumps of reeds, within two or three feet of the water, and were globular and with the entrance at one side and well toward the top. They were compactly built of matted fragments of reeds and cat-tails and cat-tail down, lined inside with the down and feathers. I spent a short time with another smaller colony of these birds in a stretch of reeds and cat-tails bordering Lake Washington, and, on April 24, found nine nests there, in two of which were five well incubated eggs.

Certhia familiaris occidentalis. CALIFORNIA CREEPER.—This species was resident here, one or two being seen during the winter months in many of the short stretches of woods about Seattle. Their numbers dwindled perceptibly early in the spring, however, and relatively few remained to breed. I succeeded in finding one nest June 2 in a stretch of thick woods near Kirkland that held five slightly incubated eggs. It was six feet from the ground behind a loose piece of bark on the trunk of a large western red cedar, and was bulkily built of pieces of rotten wood and shreds of bark, the cavity in the top being lined with soft shreds of cedar bark and a few feathers. They breed abundantly at Tacoma, every stretch of woods in the open prairie country having at least one pair, but this is due largely I understand to the success J. Hooper Bowles has had in luring them to the nesting sites he has provided for them. Some few years ago the idea occurred to him that they might readily accept loose pieces of bark placed securely on suitable trees, and almost at once his optimism was rewarded by their using many of his unique "bird houses." I personally saw seven nests built behind pieces of bark provided by him, and placed within five feet of the ground on the trunks of large Douglas firs. The first held on May 15 six fresh eggs, while the latest held five half incubated eggs on June 13. Five eggs is seemingly the number usually laid for only two out of the seven held six. They varied little in construction, the available

cavity being more or less compactly filled with fir twigs, bits of rotten wood, fine shreds of bark, grasses and green moss, lined at the top with such soft material as plant down, bits of rabbit fur and feathers. Only one nest was found at Tacoma in a natural situation, and it was ten feet from the ground behind a loose piece of bark on the trunk of a small dead oak at the side of a road through a short stretch of woods. It held, on May 30, six slightly incubated eggs, and was bulkily built of twigs and pieces of rotten wood, well lined at the top with fine shreds of bark and feathers.

Sitta canadensis. RED-BREADED NUTHATCH.—Resident, and fairly plentiful in the scattered stretches of fir woods. My first nest, with five slightly incubated eggs, was found May 9, and was eighteen feet from the ground in a cavity in the trunk of an old dead fire-charred fir at the edge of an open field. Another that, on May 16, held seven slightly incubated eggs was fifteen feet from the ground in a cavity near the top of a small slender fir stub in the middle of a short stretch of woods. Both were rather meagerly built of grasses, shreds of bark and a few feathers, while the entrance, as is characteristic with this species, was heavily smeared both above and below with pitch. Each time the female was incubating, and flushed at once when the tree was rapped. A third nest that was found May 23 held six slightly incubated eggs, and was but five feet from the ground in a cavity in an old rotten fir stub at the edge of a short stretch of woods. It was quite substantially built of green moss and fine shreds of bark, and the entrance, especially below, was very heavily smeared with big drops of pitch.

Penthestes atricapillus occidentalis. OREGON CHICKADEE.—This species was very plentiful here, but to some extent was local in its distribution, especially during the summer months, for it was then limited largely to the stretches of deciduous woods fringing Lake Washington where alders and willows predominated. Small flocks were noted during the winter about Tacoma, feeding then, as at Seattle, in the open fir woods, but they became decidedly scarcer as spring approached. My first nest, with six slightly incubated eggs, was found May 7, and between that date and the 30th of May I succeeded in finding nine others, in one but four half incubated eggs, in another five, slightly incubated, in three six, and in four seven, the latter varying from fresh to well incubated. The cavity is excavated by the birds themselves in small rotten willow or alder stubs in underbrush near water, usually five or six feet from the ground, and a soft often deeply cupped nest built then of green moss, bits of rabbit fur, cow hair, plant down and soft shreds of bark, well matted together. The behavior of the incubating bird surprised me a little for frequently, instead of flushing when the stub was rapped or merely refusing to leave, one would display real indignation at my intrusion, hissing vigorously and thumping the sides of the cavity with her wings. This was unquestionably a means of protection against such enemies as snakes or ground squirrels for I hesitated myself the first time in my uncertainty as to what I had found.

Penthestes rufescens rufescens. CHESTNUT-BACKED CHICKADEE.—Unlike the last this was a bird of the fir woods, especially the larger thicker stretches, for even during the winter months the small flocks that were seen showed no tendency to wander elsewhere. About Tacoma they replaced the Oregon Chickadee to a large extent, and it was here that practically all my nests were found. The usual situation was in a fir stub, varying in height from a foot and a half to nine feet from the ground, although one nest was twelve feet from the ground in a knot hole in the trunk of a large dead oak at the edge of a stretch of open prairie, while another was five feet from the ground in a cavity in the thick bark of a large Douglas fir in a short stretch of open woods. They were larger and more substantially built than those of the Oregon Chickadee, and the choice of material varied considerably, one pair having a deeply cupped bed of green moss, horse hair, considerable cotton and feathers of a Steller's Jay, another using green moss, rope fibre, bits of rabbit fur and considerable white cat fur, and a third being apparently satisfied with fine grasses, cow hair and rabbit fur. Large broods are evidently not uncommon for while the average nest held six or seven eggs two were found, one on May 30 and the other on June 6, that each held nine. My earliest breeding record was that of a nest found May 16 with seven slightly incubated eggs, my latest a nest that on June 10 held six eggs possibly half incubated. These birds had the same habit of hissing and fluttering about when a stub was rapped, although they were just as apt to flush at once when disturbed.

Psaltriparus minimus minimus. BUSH-TIT.—This species was resident, and plentiful throughout the year, but far more in evidence during the winter months when quite large flocks were seen. It was not uncommon to find thirty or thirty-five of these birds feeding together, and as they seldom wandered far apart the underbrush would appear literally alive with them. Their desire for companionship was to my mind one of their most characteristic traits for more than once four or five in a flock would be seen huddling together for several minutes before scattering to feed again. On March 19 a pair were noted working on a partly completed nest, and on April 22 it finally held a full set of six fresh eggs. It had unquestionably taken the birds at least five weeks to complete this nest, but considering its size and the material that was used I doubt if this length of time is exceptional. Like all the others that were later found it was gourd shaped, and a foot in length, solid for fully half its length, and with the entrance to the cavity that held the eggs at one side and at the top. It was built of green moss, bits of dead leaves, plant down, cobwebs and lichens, and well lined inside with feathers. Being seven feet from the ground in an alder sapling in rather open underbrush it was quite conspicuous, and visible for some distance, and at the time I wondered how the birds could possibly succeed in rearing their brood. Perhaps its resemblance to a thick strand of moss hanging from the tree, and too, its utter dissimilarity to what is generally considered a bird's nest, may be the factors that insure

its safety. This situation proved the one usually chosen for other nests found throughout May were in bushes or saplings in thickets or underbrush at the edges of fields or short stretches of woods, varying in height from five to fifteen feet from the ground, and while at times partially concealed by the surrounding foliage were by no means inconspicuous. One exception was a nest found May 25 with seven fresh eggs that was eight feet from the ground at the outer end of a limb of a Douglas fir at the side of a road. Six or seven eggs are usually laid, although two nests were found, one on May 7 and the other on May 16, that each held eight.

Regulus satrapa olivaceus. WESTERN GOLDEN-CROWNED KINGLET.—Resident, and fairly plentiful throughout the year in the short stretches of fir woods. One nest was found May 22 near Kirkland that held small young, and that was twenty feet from the ground at the outer end of and on the under side of a drooping limb of a large Douglas fir. It was very well concealed by the green sprays surrounding it and was barely visible from the ground, even after the birds had revealed its exact location by their numerous visits with food.

Regulus calendula grinnelli. SITKA KINGLET.—This species was a plentiful winter resident, occurring in small flocks that fed very largely in low underbrush near the ground in the scattered short stretches of woods. The first birds were noted Dec. 3, and within a week they were fairly plentiful.

Hylocichla ustulata ustulata. RUSSET-BACKED THRUSH.—This species was a very plentiful summer resident, each short stretch of woods having at least one pair, and frequently several. Two birds were noted for the first time in the spring on May 15, in underbrush at the side of a path in a wooded ravine, and almost at once they became fairly common. They breed late for it was not until June 17 that I found my first nest with four fresh eggs. Within a week, however, I had succeeded in finding ten others, the latest, on June 24, also with four fresh eggs. They were in bushes or small saplings, varying in height from two to seven feet from the ground, and where the woods were rather open they were usually in thickets or short stretches of underbrush. All were very similar in construction, being compactly, and rarely bulkily, built of weed stems, dead leaves, green moss, grasses and rootlets, well cupped and lined with either grasses or fine rootlets, and fragments of skeleton leaves. Four eggs are usually laid for in only three out of the eleven nests were there but three.

Hylocichla guttata nanus. DWARF HERMIT THRUSH.—This species was a rather scarce migrant, and seen only at infrequent intervals. It evidently winters sparingly for one was noted Feb. 7 feeding in a thicket at the edge of a field. The first birds appeared in the spring April 14, two being seen in underbrush at the edge of a short stretch of woods.

Planesticus migratorius propinquus. WESTERN ROBIN.—This species was quite plentiful during the fall, numerous large flocks being seen, but these gradually disappeared toward the latter part of October, and it was the last of February before they were of more than casual occurrence

again. One flock of thirty birds was seen Jan. 13, but at no other time during the winter were more than two or three birds noted together, and then only at long intervals. My first nest with three slightly incubated eggs was found April 14, and from that date through the 20th of June others were seen almost daily. Seemingly three eggs is the number usually laid for only three nests out of the twenty-five recorded in my note book held four. The usual situation chosen for the nest was in a bush or small sapling within five or six feet from the ground, a small Douglas fir being very frequently used. Several times they were found but a foot from the ground, and only once as high as twelve feet. One was in a small brush pile and another on the top of an old stump, but otherwise no originality in selecting a suitable site was displayed. This was quite different from the habits of the birds in the East, which place their nests practically anywhere, but this is to be more or less expected until these western birds acquire more confidence in man. About Seattle comparatively few show any preference as yet for the vicinity of houses, old slashings, short stretches of woods, and fields overgrown with scrubby underbrush being the spots where at present they can be found during the summer months.

Ixoreus naevius naevius. VARIED THRUSH.—This species was fairly plentiful during the winter months, small flocks of ten or twelve birds being seen in many of the short stretches of woods. They lingered through the middle of April, many being heard singing then, but after that date they gradually disappeared, and very few remained to breed. On May 28 a male was seen singing from the top of a tall fir in a wooded ravine in Ravenna Park, well within the city limits of Seattle, but a search for the nest proved unsuccessful.

Sialia mexicana occidentalis. WESTERN BLUEBIRD.—This species was a fairly plentiful summer resident, but was rather scarce during the winter months. After the latter part of November it was only at infrequent intervals that small flocks were seen, and it was the first week in March before they were common again, and found in pairs about slashings and open fields.

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