Again she called softly to her invisible little ones—kit-ty-kit-ty-ough'—and then to my astonishment flew out, almost straight at me, as it seemed, and up onto the school roof again, her feet rapping the shingles as she lit. From that height she could command the whole grassy lot and hear the least faint piping voice. Once more she called anxiously as if thinking of the black cat. To watch her movements better I changed my position. Whether the old Grouse heard me or at last discovered her brood near the woods and while my back was turned led the chicks to cover, I can never know, for although I waited a long time, and looked eagerly on subsequent days, neither she nor the chickens reappeared. The carpenter's prediction had doubtless been fulfilled—"She'll take her young ones into the woods if she finds the cat is after them."

The Oregon Ruffed Grouse were formerly plentiful here. Ten or twelve years ago, the hunter told me, "there used to be lots of them—we used to take the gun out and get all we wanted of them." But, he added, "they are getting thinned out now," only a few being seen when hunting, and those "way back in the hills."

(To be continued)

THE TOWNSEND SOLITAIRE

By FORREST S. HANFORD

JOHN MUIR in his charming book on the Sierras of California writes at length about the Water Ousel: "He is the mountain streams' own darling, the hummingbird of blooming waters, loving rocky ripple-slopes and sheets of foam as a bee loves flowers, as a lark loves sunshine and meadows.

. . . For both in winter and summer he sings, sweetly, cherrily, independent alike of sunshine and of love, requiring no other inspiration than the stream on which he dwells. While water sings, so must he, in heat or cold, calm or storm, ever attuning his voice in sure accord; low in the drought of summer and the drought of winter, but never silent".

The Solitaire, on the other hand, except for an occasional song during the nesting season, is invariably silent, reflecting his surroundings to a remarkable degree—a dim gray spirit of a bird flitting quietly through arched aisles of the coniferous forests. He is the reigning genie of the shadowy nooks, the remote solitudes; his favorite haunts the dark cathedral-like groves of alpine firs, ranging downward into the sunnier, more open pineries of the lower Sierras. He prefers the calm margin of a dreaming lake rather than the swift tumult of rivers, a sheltered cove in a quiet place to commotion and din. One does not discover the Solitaire through any effort on his part to make himself conspicuous or a nuisance like the jay, nor when his solitude is invaded does he resent your presence by scolding or chatter. His is rather a disposition at once sweet and tolerant; you take to him instantly and he accepts you at your true value, going about his business in his ordinary shy manner, showing neither distrust nor fear unless startled by an abrupt movement or loud sound.

So rare a singer is the Solitaire that during my mountain rambles, extending over a period of thirteen years, I have heard the song on only five occasions, which will long be remembered from the nature of the surroundings and the delightful melody of this dweller in the silent places. The first time was

in the forenoon of one of those bright, exquisite days of early spring at Lake Tahoe, when the warring elements had declared a truce and were at rest for a The little shadowy canyon wherein I rested enjoyed a hushed and solemn tranquility not diminished, but rather added to, by a drowsy murmuring from a bright brook splashing on its way to the lake. This, I thought, could be none other than the haunt of a Solitaire, and I wished that I might see the bird; and as in answer to my prayer came one, a small gray ghost of a bird that flitted silently in and out the leafy corridors of its retreat, finally resting on the limb of a pine not ten feet away. And as I watched, the feathers of his breast and throat rose with a song that softly echoed the beautiful voices of the brook, the gurgling of eddies, the silvery tinkle of tiny cascades, and the deeper medley of miniature falls. Infinitely fine and sweet was this rendering of mountain music. At times the song of the bird rose above the sound of the water in rippling cadences not shrill, but in an infinite number of runs and modulated trills, dying away again and again to low plaintive whispering notes suggestive of tender memories. I know of no bird song with which it can be compared except that of the Water Ousel. But the song of the Ousel is sung to the accompaniment of wilder waters; nothing less than the raging thundering cataracts of larger streams will do for him.

Another memorable occasion was at daybreak, after an interminable night without blankets at a high altitude. The great summit peaks of the Sierras, distinct against the western sky, had just begun to glow with the first delicate rose-tints of the dawn, while the forest mantling their granite flanks stood misty and somber and still above dead banks of snow. Suddenly, breaking the silence, came faintly the notes of a Solitaire, growing stronger with the light like the first low tentative laughter of a little alpine streamlet set free from ice. The same sweet notes that I remembered, clear as the drip from icicles, as spontaneous as the songs of mountain streams.

Sunny open glades in the woods, rather than the more secure shelter of dense forests, are usually selected by the Townsend Solitaire (Myadestes townsendi) for nesting purposes. Five nests which I have examined were thus situated in open or thinly forested areas surrounded by very dense woods, and were found more by accident than design, the birds flushing as I passed by. Their behavior when thus disturbed is in harmony with their quiet disposition; by their actions they show a tender solicitude, but not one of the five pairs of birds, when I was in the vicinity of their nests, uttered a single note of complaint or acted as if in great distress or fear.

The data of these nests are as follows: About the first of June, 1905, I was exploring a ridge above the Feather River in Plumas County, at 4000 feet altitude, when a Solitaire flew from behind a charred stub. This, on examination was found to be partly burnt out, forming a semi-circular cavity. Within this shelter a depression had evidently been scratched in the ground, in which was a great loose mass of pine needles, the interior being lined with dry grass stems. The nest contained four fresh eggs.

Again on June 10, 1908, at Fyffe, 3700 feet altitude, a nest was found eighteen inches up in a crevice of a charred oak log in the open forest. In construction it was about like the first nest, the bulk of the material being pine needles, the lining of grass stems. The contents were four half fledged young. July 9th of the same year another nest was discovered, in a peculiar situation on a small ledge of rock projecting from a high cliff, in Franktown Creek Canyon,

in western Nevada. The nest, as usual, was a bulky mass of pine needles, and so placed that an overhanging point of rock protected it from the elements. Some catastrophe had but recently overtaken this family, as four young birds were lying dead on the rocks below, yet the parent birds still hovered silently about in the vicinity.

Seemingly more suitable to the habits of this species than the last, were the situations of the other two nests. One day, July 5, 1913, as I was forcing a way up the steep heavily timbered slope of an immense glacier moraine south of Fallen Leaf Lake near Lake Tahoe, a Solitaire flew from under a small overhanging granite boulder at 7500 feet altitude. The nest contained three fresh eggs, and, as usual, was of pine needles, flush with the surface of the ground, not much attempt having been made at concealment. In situation and material this nest was the exact counterpart of the last one, found at Bijou, June 16, 1915, at 6500 feet altitude.

Oakland, California, December 1, 1916.

FURTHER NOTES ON THE BIRDS OF FORRESTER ISLAND, ALASKA

By GEORGE WILLETT

THE following notes are supplementary to the two articles that have recently appeared on the avifauna of Forrester Island, southeastern Alaska. One of these, by Professor Harold Heath, was published in The Condor (vol. xvii, 1915, pp. 20-41), and the other, by myself, in the Auk (vol. xxxii, 1915, pp. 295-305). Since the publication of these papers, the writer has spent two summers on Forrester Island in the interests of the United States Biological Survey. To be exact, the additional time spent in the locality was from April 23 to August 20, 1915, and from April 28 to August 31, 1916. Owing to my earlier arrival on the island in the springs of 1915 and 1916, a number of spring migrants were noted that were not seen at all in 1914, as I did not reach the island until well along in May of that year.

There were several marked differences between the spring migration of 1915 and that of 1916, probably to be accounted for by the very different weather prevailing. The spring of 1915 was warm and mostly calm, while that of 1916 was cold and stormy. Probably as a direct consequence of these conditions, the number of species, as well as of individuals, observed during the spring migrations was much fewer during the latter year than during the former. Also in the past summer the nesting land birds were less plentiful than usual and mostly of later arrival.

The following species are added to the island avifauna.

Colymbus holboelli. Holboell Grebe. Fairly common in spring migration, May 3 to $10,\,1915.$

Colymbus auritus. Horned Grebe. One bird seen in the harbor, May 6, 1915.

Gavia pacifica. Pacific Loon. Abundant in the spring of 1915, being most plentiful May 1 to 25. Two birds seen July 17. During the height of the spring migration this species passed northward in an almost unbroken series of small groups, the flocks occasionally alighting on the water for rest or food. All birds noted closely were in high spring plumage. During the spring of 1916 only a few individuals were seen.

Gavia stellata. Red-throated Loon. Three birds in spring plumage noted May 11, 1915.