

exact area occupied by the Aleutian Terns in this region remains to be determined.

In what direction, if any, does the Aleutian Tern of southeastern Alaska migrate?

If the Situk colony of terns is being reduced, it is hardly to be wondered at, for the rivers of this coast are fished by crews of natives, aliens, and some white citizens, who camp on the nesting ground of the birds. When fishing is slack or they wish a change of diet, they search for the eggs of the terns. Unfortunately, the terns can not command the sympathy that such a beautiful bird deserves, for here they feed to at least some extent on young salmon coming down the streams in the spring and early summer. Commercial fishermen are eager to lay heavy blame for destruction of fish on any other agency than their own operations, so the extent of the damage by the terns is being studied to ascertain the truth about the matter. Fox tracks were seen in the sand on Strawberry Island and no doubt the foxes take their toll of the birds.

U. S. Biological Survey, Juneau, Alaska, February 28, 1923.

NOTES ON THE SONG AND THE NEST OF THE RUBY-CROWNED KINGLET

By WINTON WEYDEMEYER

EARLY IN THE spring of 1921, in a brushy flat along an old slough near Fortine, Montana, in northeastern Lincoln County, I heard a Ruby-crowned Kinglet (*Regulus calendula*) give a song which differed from the ordinary lay of this species. The first two parts were the same as in the usual song, but the final notes were quite different and much more pleasing. The song sounded something like this: *Kezee, kezee, zeek, zeek, eek, eek, eek, eek, chiva, chiva, chiva, chiva, chiva, chiva, chiva-lete! te-telete! te-telete! te-telete! te-telete!* Nearly every day that summer and fall, except during the molting season, this song, or a portion of it, was heard in the flat. As the nesting season approached, the song was not so often heard, and usually when it was, only the last part was given. During August it was seldom heard; by September, the last part was heard occasionally; and by the middle of that month the song was again given as in the spring.

Whether or not the first part of this song was ever omitted during the nesting season I could not determine, as I was never able to distinguish between the first two parts of this song and the corresponding parts of the kinglet's ordinary song. During the nesting season the ruby-crowns of that locality, at least, usually give only the first two parts of their characteristic song. The second part is usually quite prolonged, and broken off rather suddenly: *Kezee, kezee, zeek, zeek, eek, eek, eek, eek, chiva, chiva, chiva, chiva, chiva, chiva, chiva, chiva, chiva, chiva, chiva, chiva, chiva*— . As they also sometimes omit these parts and sing only the last part, as with the song in which a variation occurred in the final notes, it is probable that the last part of the latter song was also sometimes omitted.

As this unusual song was never heard that summer except from one partic-

ular clump of spruces in the flat, it is probable that only one ruby-crown was endowed with this special accomplishment. The following year the same bird—or one with identically the same song—remained throughout the season in a grove of spruces about a quarter of a mile from the place which it had inhabited the previous summer. I have never heard the same song anywhere else, although my brother heard it at a lake about five miles distant during the spring migration season in 1922.

On July 9, 1922, my brother and I discovered, in the grove of trees which the kinglet with the strange song had inhabited the previous season, the nest of a pair of ruby-crowns. This nest was about fifty feet from the base of a partly fallen spruce, sixty feet from the Roosevelt highway, which runs beside the flat. It contained seven nearly grown young, five of which fluttered from the nest when we disturbed them.

The nest was fourteen feet from the ground, and eighteen inches from the end of a seven-foot branch extending downward from the trunk. It was nearly pensive, being unsupported beneath, but with its sides attached to small twigs on two thickly-leaved perpendicular shoots extending downward from the limb. These shoots concealed the nest from view on all sides, while another small branch sheltered it from above.

In color, the nest looked much like the surrounding spruce foliage. In general appearance, it resembled an elongated Wright Flycatcher's nest constricted at the top. The cup was between four and four and one-half inches deep, and two and one-half inches wide at the center, narrowing toward the top to form a circular opening not more than an inch and a quarter in diameter.

Later I collected the nest and examined it more closely, in the end tearing it to pieces in order to discover how the cottony plant material and small feathers of which it was largely composed were so firmly held together. Thistle down, cotton from the catkins of the aspen, and small feathers made up a large part of the body of the nest. The outside was thickly covered with finely shredded inner bark of aspen, a few small blades of dry grass, and ground and tree mosses, with a surface covering of grayish lichens and a few small spruce twigs.

The interior of the nest was thickly lined with feathers. The sides were covered with body feathers of the Canadian Ruffed Grouse, arranged with the points of the quills down and covered by the tips of the feathers below. The tips of the uppermost feathers curved slightly inward just below the opening of the nest. At the bottom was a thick covering of breast feathers of the female mallard.

With the exception of the feathers forming the inner lining, the various materials composing the nest were strongly bound together by an intricate and extensive network of extremely fine fibers from insect cocoons. The coarser material on the outside of the nest was also held together by stiff porcupine hairs, while the bottom was further strengthened with several long horsehairs. Thus, though the nest was unusually soft and quite yielding to the touch, it was nevertheless strongly held in shape.

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