

FROM FIELD AND STUDY

How Does the Ruby-crowned Kinglet's Crown Work?—The elusive brilliant crown-patch of the male Ruby-crowned Kinglet (*Corthylio calendula*), the first glimpse of which brings such a thrill for the amateur bird student, was displayed with unusual distinctness as I looked down on a bird from a second-story window. Momentarily the brilliant patch was seen to narrow into a slit, as if closed over by the feathers on either side, like the shutting of an iris diaphragm with an elongated aperture. Might this be the mechanism of revealing and concealing the crown patch, rather than a simple raising and lowering of the crown feathers?—FRANCES CARTER, *Berkeley, California, January 22, 1939.*

Duration of Colonies of the Cliff Swallow.—Near the close of his interesting paper on "The Swallows at the Life Sciences Building" (Condor, vol. 39, 1937, pp. 206-210), Joseph Grinnell remarks, "I cannot recall any relatively permanent cliff swallow colony, either on rock surfaces or on buildings. Colonies have come and gone. Two or three years of occupancy of any one exact site has seemed to be the limit."

This view, which is explicitly said to be based upon memory, is in such contrast to my own impression, which also depended largely on memory, that it surprised me greatly. The greater part of my experience with Cliff Swallows (*Petrochelidon albifrons*) was obtained in Nova Scotia, especially in the southwestern part of that province, during the years from 1909 to 1918. Colonies of these birds, nesting chiefly on barns, were then common in Yarmouth County, Nova Scotia, and, I understand, still are so. Except when destroyed by evident and irresistible agencies, these colonies seemed to me to be relatively permanent.

In order to obtain a more substantial and definite factual basis for an opinion concerning this matter, I have corresponded with two residents of Yarmouth County, namely, Mr. E. H. Rogers, of Arcadia, and Mr. Charles H. Butler, of Chebogue Point, who have colonies of Cliff Swallows nesting on their barns.

Under date of September 25, 1938, Mr. Rogers writes, with reference to his colony of Cliff Swallows: "I don't know how long they have been here. They were here as long ago as I can remember, which must be a good sixty years, as I am now sixty-eight years old. At that time there was a lot of the birds. About fifty years ago I counted the nests in the eaves of my barn. There were 254 nests. A few years later my barn roof began to leak. The water would run down and soak the nests and they would fall down. They kept going that way until there were only four or five pairs left. About five years ago I shingled my barn and was in hope that my birds would come back, but they do not increase very rapidly. I did not count them this year, but I think there were about fifteen pairs."

Under date of October 19, 1938, Mr. Butler writes that, before answering my inquiry, he consulted Reverend W. A. Robbins, of Shelburne County, Nova Scotia, whose father was born on the farm now occupied by Mr. Butler and lived there all his life. Reverend Mr. Robbins said that Cliff Swallows nested annually, throughout his father's life-time, on the barn on this property. Mr. Butler adds: "This summer has been the same; in fact, I think there was a much larger colony than ever before, as this 85-foot barn can boast of 150 nests in a row and I found that several pairs had gone over to another barn, some 150 yards away, and built their nests and raised their broods. . . . You will see by the number of nests that there must have been at least 150 pairs and I am safe in saying that swallows have been coming to this barn well on to ninety or a hundred years. This barn is a very old building and has been repaired many times; about five years ago I had the whole front torn out, new sills and doors put in, and then shingled up within one foot of all their nests; we were about a week doing the job, and these birds came and went and fed their young and paid little attention to us."

It appears that the duration of Cliff Swallow colonies is different in geographical regions so dissimilar as California and Nova Scotia, the colonies in the last-named region having often much longer duration than those in the first-named. This difference may be due to different inborn behavior patterns in different geographical sections or clans of the Cliff Swallow species, or it may be correlated with differences in parasites or with a difference between the climates of the regions concerned. That it is due to the known pronounced difference in climate seems to me most probable.—HARRISON F. LEWIS, *Ottawa, Canada, December 27, 1938.*

Nesting Habits of the Western Red-tailed Hawk.—During the spring and summer of 1937, I watched a nest of the Western Red-tailed Hawk (*Buteo borealis calurus*) by visiting it nearly every day. It was located upon a pinnacle three miles north of Price, Utah. This pinnacle