

frons) as follows: "Breeds from Central Alaska, the Upper Yukon Valley, north-central Mackenzie, northern Ontario, southern Quebec, Anticosti Island, and Cape Breton Island south over nearly all of the United States . . ."

Bent, in 'Life Histories of North American Flycatchers, Larks, Swallows, and Their Allies' (U. S. Nat. Mus. Bull. 179: 482, 1942) states: "The breeding range of the cliff swallow extends north to Alaska (Holy Cross, Rampart, and Bettles); northern Mackenzie (Rat River, Fort Goodhope, Lockhart River, Kendall River, and Artillery Lake) . . . The western limits extend north . . . to Alaska (Mount McKinley, Flat, and Holy Cross)."

While working on a Department of the Interior expedition in and near Teller, Alaska, during the summer of 1946, I observed a number of these birds nesting on sea cliffs above Port Clarence, a few miles out of Teller. Apparently this is the first record for this species from the Seward Peninsula, and places the bird within fifty or sixty miles of the northwesternmost extension of the North American continent proper, at Cape Prince of Wales.

The birds were first observed on July 11, while I was camera-stalking cormorants and puffins on higher cliffs near by. They flew within five or six feet of me as I lay in the tundra which fringes the edge of the cliffs, and identification was certain, though no specimens were collected. It is possible, however, that some subspecific differentiation may exist. What the relationship across Bering Straits may be can only be conjectured. The birds are physically capable of the flight to Siberia, and may nest there.

The nests were built on the side of a low cliff, twenty to thirty feet high. Some of them were within eight or ten feet of the water. Owing to difficulty of access, the nests were not examined for young ones or eggs. About half a dozen nests were observed, though others may have been present beyond my angle of vision.

It is evident from Bent's records for Holy Cross, Flat, and Rampart, that the bird ranges through the lower and central Yukon Valley, as well as the Upper Yukon, as given in the Check-List, and up the Koyukuk River at least as far north as Bettles. This means that the bird is almost certainly found on the southern and eastern shores of Norton Sound, and increases the probability of its occurrence in at least the southern half of the Seward Peninsula, which, although it differs from all but the very lowermost Yukon Valley in being almost entirely treeless, tundra country, offers no apparent barriers to a bird of this sort.

Latitudinally, both the Bettles and northern Mackenzie records of Bent are considerably north of any portion of the Seward Peninsula. Not improbably, this bird will be found to range to the northernmost limits of the continent, or very nearly.—RODGERS D. HAMILTON, *Museum of Zoology, University of Michigan, Ann Arbor, Michigan.*

Breeding of the Cedar Waxwing in Kentucky.—Although the breeding range of the Cedar Waxwing (*Bombycilla cedrorum*) in the higher mountains extends to northern Georgia, it has not been considered a breeding bird in the lowlands of central and western Kentucky. We have been able to find only seven records of the species occurring in the state in June and July and only one previous mention of an actual nest. Wetmore states that "on Black Mountain, southeast of Lynch, Harlan County, the Cedar Waxwing was fairly common from 3,900 to 4,100 feet, an adult female being taken on June 25" (Proc. U. S. Natl. Mus., 88: 529-574, 1940). Welter and Barbour for Rowan County, also in the eastern mountainous district, reported the Cedar Waxwing as a rare breeding bird but gave no indication that they had ever found a nest (Ky. Warbler, 18: 17-25, 1942). In central Kentucky, Beckham stated

that the Waxwing was "An irregular, but at times very abundant summer resident" in Nelson County (Ky. Geol. Surv.: 1-58, 1885); but Blincoe, who worked a longer time in the same territory, said of the species: "unusually scarce in mid-summer. Beckham did not find it breeding and I found nothing to indicate that it did" (Auk, 42: 404-420, 1925). Gordon Wilson in south-central Kentucky has found the Cedar Waxwing present in the summer only during the 1930 season, when three to ten were seen every day on the college campus at Bowling Green. The senior author noted two Waxwings in both July and August, 1945, at the Otter Creek Recreational Area in Meade County, 25 miles south of Louisville. Monroe has published the only definite nesting record, a nest containing young found in the Crescent Hill section of Louisville, August 19, 1934 (Ky. Warbler, 22: 45-46, 1946).

When Henry Zimmer reported a nest of this species in the process of construction in Jefferson County, about five miles south of the city limits of Louisville, we decided to keep it under close observation, since studies on the habits of a species at the extreme margin of its range might reveal what are the limiting factors to its distribution. The site chosen for the nests was a sparsely settled area surrounded by open farm land. The trees were confined to a strip along the road. A wild black cherry (*Prunus serotinus*) across the road from the nests furnished a large part of the food eaten by the adults, at least. Among the birds nesting in the area were a colony of Purple Martins in boxes, Robins, Catbird, Yellow-throat, Cowbird and a Chipping Sparrow. The first nest was begun on June 15, 1946. It was constructed to a large extent from pieces of soft white string which had been cut into twelve-inch lengths by the Zimmers. Both birds assisted in the nest building. On June 17, one of the Waxwings became entangled in the string and had to be liberated by Mrs. Zimmer. Also during this time a trench for a water line was dug along the street almost under the nesting tree, but neither of these unusual hazards frightened away the pair. The nest was 24 feet up in a red maple on a horizontal limb five feet from the trunk. The first egg was laid on June 22 and the last of the four eggs on June 25. When the nest was examined late that afternoon, an adult was already incubating. On July 15, when the nestlings were six days old, a heavy rain and wind storm blew all four from the nest, killing one of them. Mrs. Zimmer warmed and dried the survivors and her husband returned them to the nest. On July 20 they were again tossed out by another severe storm. This resulted in the death of a second bird. Again the survivors were returned to their nest. The fledglings left the nest on July 24 and were seen until July 30 in the vicinity, identification being rendered certain by bands.

Even before the young birds had achieved their independence, the adults on July 27 began a second nest in a tree 25 feet away. The two juveniles were seen in the tree calling for food as their parents were building. This nest, too, consisted of approximately 80 per cent white string, many pieces of which hung down in streamers. We counted 100 pieces in the nest after the birds had left it. On August 29, the second brood of three birds was well-feathered and one left the nest when we approached it. On August 31, all three young birds had left, but they were still in the tree being fed by their parents. They were able to fly from tree to tree when disturbed.

From the above account it is clear that both broods were successful and five birds were raised. However, two of these would have perished in the storm if it had not been for the intervention of man. We must conclude that Cedar Waxwings find conditions for nest building and raising young suitable in this locality and that there must be other reasons why they do not breed here more regularly.—HARVEY B. LOVELL, *Biology Department, University of Louisville*, and ANNE L. STAMM, *Lakeside, Louisville, Kentucky*.