

Mr. Lincoln wrote me that he believes I am the only coöperator who has had any returns or recoveries of the Snow Bunting. As a matter of fact very few other station operators have banded this species.

This recovery in Greenland is my second for this species. My other recovery was mentioned in *Bird-Banding*, Vol. 1, No. 4, p. 188. That recovery at Chelmsford, Ontario, Canada, leads me to think that the Snow Buntings that winter at or migrate over the vicinity of McMillan, Michigan, follow a route *via* Sault Ste. Marie, Michigan, rather than go over Lake Superior to their summer home within the Arctic Circle.—OSCAR MCKINLEY BRYENS, R. F. D. No. 1, McMillan, Luce County, Michigan.

Another Snow Bunting Recovery.—On February 3, 1932, Mr. Julius Thorsen, Conservation Officer, who resides at Newberry, Luce County, Michigan, brought me a Snow Bunting bearing band Number C98336. Mr. Thorsen informed me that the bird was found dead on the highway about five miles southeast of Newberry, Michigan, on January 30, 1932, by George Bennet, a schoolboy twelve years old. Upon looking through my records I find that I banded this bird on March 5, 1931. The place of recovery is about fifteen miles east of my banding station. So far as I know, this is the nearest place that any of the Snow Buntings that I banded last winter (1930-31) have been to my station this winter. The only birds of this species that I have captured this winter that I had last winter were Returns-1 last winter, and of course are Returns-2 this winter. This winter has so far (February 8, 1932) been unusually warm and there has not been much snow on the ground. This is the third recovery recorded of a banded Snow Bunting.—OSCAR MCKINLEY BRYENS, R. F. D. No. 1, McMillan, Luce County, Michigan.

Inbreeding Downy Woodpeckers.—The Downy Woodpecker (*Dryobates pubescens medianus*) is probably a permanent resident at my feeding and banding station. My adults in 1930 were banded with Nos. A260648 (♂) and A260651 (♀). In time their two broods of four young each accompanied them to the food-supply at my station. On July 27th I banded one of the young females (A260653), and on the 30th a young male was banded (A260655). This young male was present during all the following winter. The young female was not taken as a repeat after October until January 26, 1931, after which date she came to feed each day. The parent birds were not taken after the middle of August, 1930, but lingered about a little longer. The other young of both broods gradually disappeared, not coming to feed after the latter part of October. In January, 1931, the adult male (A260648) reappeared and was trapped January 25th. His mate has not been seen again.

The young, after coming to the station two to four months after leaving the nest, appear to scatter to find territories of their own. This period at the station is believed to be a result of the ample food supplied rather than to be due to family ties, as the adults sever all family ties long before the young disperse, and they drive their young about the yard and away from the food whenever they chance to be present together. On December 24, 1931, a male from one of the two 1930 broods was seen in a tract of mixed deciduous and coniferous woods half a mile from my banding station.

In the spring of 1931, father and son (Nos. A260648 and A260655) fought for and sought the favor of the young female (A260653), the son finally winning after days of courtship in our yard and vicinity. The court-

ship display of these three birds was the same as I have observed with other mating Downy Woodpeckers elsewhere in past seasons. At my station the mating activities began when the birds first met and was continued more or less regularly thereafter. The female is usually rather quiet, sometimes giving a *week, week, week, week*, or again a squeaking note. The males give forth a loud *wick, wick, wick, wick, wick, wick*, sometimes with a rolling *k-k-k-k* at the end. Very little drumming on resonant objects is done by the male, once a female is located, and in this case almost none was done except when one male was out of sight and hearing of the female and the other courting bird. To the casual observer, the chasing of the female by the male to a tree, and from tree to tree, in a seemingly idle manner (often, but not always, by both males) is in reality a part of the mating manœuvres.

When it happens that both males are in pursuit, the activities take on an added impetus. I have a number of times seen one male dash headlong across a fifty-yard opening to where the other two birds were, loudly uttering his cry, and, when alighting, dash at his adversary, the female squeaking intermittently, and swinging her body from side to side. The display also consists of spread wings nervously fluttered; raising and lowering of the scarlet patch; mad dashes from one tree to another at the fleeing female, who dodges to the opposite side of the tree as the pursuing bird alights; loud calls at intervals when he stops in his mad hopping up the limbs and smaller branches. This activity may last from five to thirty minutes, from the large elm in our yard, where the birds feed, to a larger area either south or east of the house. When two birds are alone together, it is common to find them perching near together and motionless for considerable periods of time, but let the second male appear and the first male will drive the female from the tree and the round is begun again. When two males come face to face in a headlong rush, wings spread, crest raised, and beak open in a challenging attitude, it is mostly sham, for they soon quiet down unless one advances up the tree toward the female clinging immovably above. Courting lasted for upwards of two weeks, or perhaps longer, before the female made her choice. Of the two rivals the son finally was accepted, the older male shortly disappearing.

The young pair nested at the edge of the woods south of the house, fifty feet up in the dead branch of a sugar maple, ignoring two near-by nesting-sites their parents had used. They brought off four young, and towards the last of June they were feeding at the station, and were banded on July 8, 1931, A265436-7-8-9, the first bird banded a female, the latter three males. This is the first record of such an instance of inbreeding that has come to my attention.—LEWIS O. SHELLEY, East Westmoreland, New Hampshire.

A Seven-and-a-Half-Year-Old Blue Jay.—The Blue Jay (*Cyanocitta cristata cristata*) previously mentioned in *Bird-Banding*, Vol. II, 1931, pp. 129 and 130, wearing band No. 352483, was found dead August 29, 1931, by Frank Meyer in his yard at 1365 Brockley Avenue, Lakewood, Ohio, about three-quarters of a mile south of the place of banding. This Jay, identified also by an injured wing, had come to the porch of Mrs. Frank Zink, near-by, almost daily for more than five years, being absent only during the molting period and perhaps one winter. It was still warm when found, showing no evidence of injury. Examination showed it to be in good condition with no evidence of internal injury or disease. As this bird when banded on November 3, 1924, was an adult, its age was not less than seven and a half years.—E. C. HOFFMAN, 1041 Forest Cliff Drive, Lakewood, Ohio.