

The overall frequency of such molestation behavior appears to be low within a colony. Its occurrence at all, however, raises some interesting questions about the endogenous state of females that perform such behavior and the stimuli given by chicks that may elicit such responses. However, the phenomenon is difficult to study because it is impossible to predict where or when such behavior will be exhibited.—LINDA K. KINKEL AND WILLIAM E. SOUTHERN, *Department of Biological Sciences, Northern Illinois University, DeKalb IL 60115*. Received 22 September 1977, accepted 28 November 1977.

Longevity of White-winged Scoters.—During annual colonial bird banding expeditions to Redberry Lake, Saskatchewan (52°40' N, 107°40' W), the senior author noted that adult female White-winged Scoters (*Melanitta fusca deglandi*) left their nests beneath clumps of the bristly gooseberry (*Ribes setosum*) in a slow and cumbersome manner (Houston, 1955). When reaching into such a tangle for a fleeing gull or pelican one could sometimes, almost in self-defense, seize an adult female scoter. Over half the incubating scoters could be caught by hand before they reached normal flight speed.

Scoter banding thus became an irregular and incidental procedure carried out by the senior author in 14 of 20 years that he visited islands on Redberry Lake. The number of scoter hens captured depended on the number and agility of helpers, the weather, and the proportions of vulnerable unfeathered young pelicans whose presence sometimes necessitated our quick departure. With the exception of 1974 when no visit was made, at least two scoters have been banded each year since 1966. The junior author studied scoters on the islands in 1975, 1976, and 1977.

Of 86 adult female scoters banded at Redberry Lake by the senior author, 28 have been caught on 33 occasions in subsequent years, a return rate of 33 percent. For the 66 scoters banded from 1966 on, 26 birds have been caught 31 times for a return rate of 39 percent. Six recaptures were after 1 year, 6 after 2 years, 4 after 3 years, 5 after 4 years, 5 after 5 years, 2 after 6 years, 2 after 8 years, 2 after 9 years, and 1 after 10 years. Of these, one was caught 3 times at 2, 3, and 4 years after banding. Three were caught twice: after 3 and 5 years, after 4 and 6 years, and after 9 and 10 years.

The mean length of time after banding for the 28 returning scoters was 4 years and the median time 3 years. The average age at recapture must have been at least 5 years, since scoters, buffleheads, goldeneyes, and mergansers are not known to breed before 2 years of age (Bellrose, 1976). Our figures, although somewhat skewed by inconsistent sampling, suggest an annual mortality for adult female scoters only about half of that given for most other duck species (Bellrose, 1976).

Our oldest scoter (637-97322) was caught both 9 and 10 years after she was first banded on her nest with 8 eggs on 9 July 1966. The junior author recaptured her on 19 July 1975 on 10 eggs, and again on 22 July 1976 on a nest with 9 eggs. On the latter date she was almost certainly at least 12 years of age, if one presumes that she first bred at 2 years of age. Continuing research by the junior author, using web-tags applied to scoter ducklings on their hatching day, may settle conclusively the age at which this species first breeds on this continent.

One unpublished record exists with a longer lapse between banding and recovery dates in the U.S. Fish and Wildlife Service files. This White-winged Scoter (577-26801), a flightless local when banded by Duane C. Lowery near Meadow Lake, Saskatchewan on 2 August 1961, was found dead at Tomales Bay, California in February 1973, at an age of 11½ years.

No North American longevity record was given for this species in a recent compilation (Kennard, 1975), and the two scoters reported above appear to represent new longevity records for this continent. The longevity record for the European race is said to be 12½ years (Rydzewski, 1975).

We wish to thank the many assistants who helped us catch these scoters, Jay Sheppard for searching the files of the Bird Banding Laboratory, Leigh H. Frederickson and Anthony J. Erskine for helpful advice, and Duane C. Lowery for permission to use his unpublished record.

LITERATURE CITED

- BELLROSE, F. C. 1976. Ducks, Geese and Swans of North America. Harrisburg, Stackpole.
- HOUSTON, C. S. 1955. White-winged Scoter banding. *Blue Jay*, 13: 28.
- KENNARD, J. H. 1975. Longevity records of North American birds. *Bird Banding*, 46: 55-73.
- RYDZEWSKI, W. 1975. Longevity records IX. *The Ring*, 84-85: 265-267.
- C. STUART HOUSTON, 863 University Drive, Saskatoon, Saskatchewan, Canada S7N 0J8 and PATRICK W. BROWN, University of Missouri-Columbia, % Gaylord Memorial Laboratory, Puxico, MO 63960. Received 8 November 1977, accepted 29 January 1978.

Predation by a Gray Rat Snake on Red-cockaded Woodpecker Nestlings.—Red-cockaded Woodpeckers (*Picoides borealis*) are unusual in their selection of nest trees because they use only mature living pine trees. In addition to excavating the cavity in a live tree,

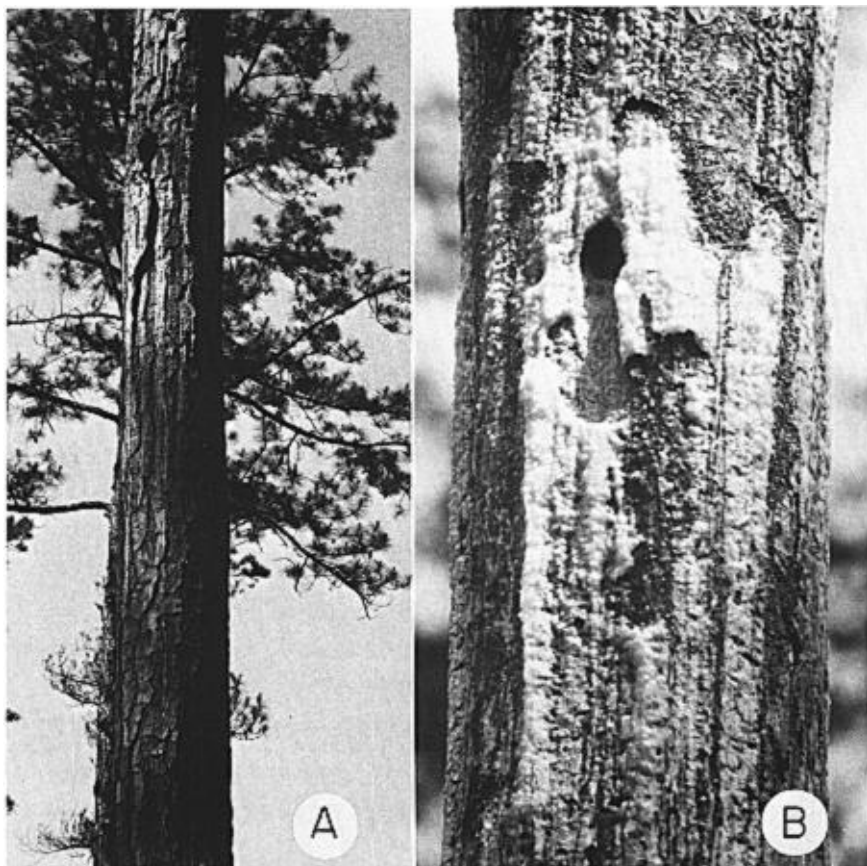


FIGURE 1. A. Gray rat snake climbing over dried gum to gain access to an abandoned Red-cockaded Woodpecker cavity. B. Red-cockaded Woodpecker cavity at which a gray rat snake was successful in preying on nestling Red-cockaded Woodpeckers. Note the excessive accumulation of gum around the entrance and the bare area created when the part of the gum accumulation fell.