

Merganser (*Mergus cucullatus*) have survival rates similar to our estimate for White-winged Scoters. These species are members of the tribe Mergini, and all are thought to require 2 years to reach sexual maturity (Bellrose 1980).

A minimum average age for females nesting on the islands in Redberry Lake can be estimated from our recaptures in 1980 (the year for which the most recapture data are available). Assuming that each female was 2 years old when first captured and banded, the average age for the population was 4.2 years. This estimate is certainly low, because it is unlikely that all females were banded in their first nesting season.

Our estimates of annual survival rate and the average minimum age of nesting females suggest that White-winged Scoters are long-lived waterfowl. The low annual mortality rate may be an important factor permitting White-winged and Velvet scoter populations to endure their consistently low annual production (Koskimies 1955, 1957, Hildén 1964, Brown 1981, Brown and Brown 1981).

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Goshawks Prey on Radio-tagged Sharp-tailed Grouse.—On 21 November 1977, at 1424, I observed a Goshawk (*Accipiter gentilis*) pursue a radio-tagged juvenile male Sharp-tailed Grouse (*Pedioecetes phasianellus*) 120 m across brush-prairie into a dense jackpine (*Pinus banksiana*) stand in Douglas County, Wisconsin. At 1431, 40 m from the jackpine stand, the Goshawk flushed from the grouse carcass and flew out of view. This Sharp-tailed Grouse weighed 935.0 g 24 days earlier when radio-tagged with a 26.7-g (2.8% of bird weight) radio-package similar in design to that used by Dumke and Pils (1973:43–44).

On 6 March 1979, in Burnett County, Wisconsin, I saw 2 radio-tagged birds, with 2 unmarked Sharp-tailed Grouse at 1422; they flushed as I approached them. At 1431, 45 m distant, I observed a juvenile Goshawk flush from the carcass of a juvenile female Sharp-tailed Grouse, one of the tagged birds seen 9 min earlier. This grouse weighed 679.5 g 79 days earlier when tagged with a 24.1-g (3.5% of bird weight) radio-package.

The time between radio-tagging and death indicates these grouse survived the "adjustment period" reported to be 2 days (Dumke and Pils 1973:46; Herzog 1979:318) to 2 weeks (Boag 1972:516) for other Galliformes with radio-packages of similar design. Neither bird had signs of skin irritation at the areas of contact with the radio-package. Radio-package weight was less than the 4% of body weight acceptable for birds (Brander and Cochran 1971:96). I detected no obvious behavioral differences between these Sharp-tailed Grouse and untagged flock members during previous observations. Despite apparent "proper" radio-tagging, I suspect these Goshawks selectively preyed upon the radio-tagged grouse.

Previous observations of Goshawk predation on radio-tagged Sharp-tailed Grouse are lacking or unpublished, although Ammann (1959) and Blus (1967) reported Goshawks preying on untagged Sharp-tailed Grouse at spring display grounds.

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Sightings of Knots Banded and Color-marked in Massachusetts in August 1980.—

The North American Red Knot (*Calidris canutus rufa*) is known to "winter" primarily in temperate latitudes of South America with small numbers also wintering in subtropical and temperate North America (Palmer 1967, in *Shorebirds of North America*, Viking Press, New York). However, the routes and stopover areas between breeding and wintering grounds are not well described. This report presents findings of a color-marking program we initiated in order to learn more about the population size and migration routes of *C. c. rufa*. We also hope this summary will stimulate further reporting of sightings of color-marked knots.

On 7 August 1980 we captured and marked 161 knots in Scituate, Massachusetts (ca. 42°N, 71°W) using a rocket net (18 × 9 m, 2.5 cm knotless nylon) propelled by 4 rockets. Each bird was (1) dyed yellow on the rump, tail, and undertail coverts with a saturated solution of 95% ethanol and picric acid, (2) banded on the left tibia with a stainless steel