

Woodsboro, Texas, for their support and cooperation.—DAVID K. GOERING, *Department of Zoology, University of Arkansas, Fayetteville, Arkansas* (Present address: *Department of Biology, Cottey College, Nevada, Missouri 64772*) AND RONALD CHERRY, *Department of Zoology, University of Illinois, Urbana, Illinois 61801, 2 October 1970.*

Collisions with wires—a source of anatid mortality.—As harvest demands upon waterfowl increase and their habitats diminish in quantity and quality, reduction of non-hunting mortality warrants increased emphasis. The authors' observations on the northern prairie breeding grounds suggest that anatid strikes of wires (fence, communications, and power) occur commonly, but go largely unnoticed and unreported.

Hochbaum observed and photographed a full-grown juvenile, female Pintail (*Anas acuta*) impaled on a strand of barbed wire on 15 August 1966, in the Portage la Prairie, Manitoba, Community Pasture (Fig. 1a). The bird flew from a roadside ditch and caught a barb, pointing against the direction of flight, in the skin on the top of the head. The bird's momentum swung it up and over the fence so it was impaled once more. Cornwell observed in August of 1966 an adult drake Blue-winged Teal (*Anas discors*) similarly impaled on the top strand of a barbed wire about three miles east of Woodworth, North Dakota. The drake was caught by the skin on the dorsal aspect of the neck and suffered a broken neck. There was no sign of an immediate wetland area. Charles Dane (pers. comm.) told us of a nesting, Blue-winged Teal female that appeared to have caught itself near the vent on a barbed wire near the nest site. The fence was electrified and the hen was long enough to reach from wire to wire. There was no reason to believe the bird had not been accidentally impaled. Jack C. Shaver (pers. comm.) told us of a drake Pintail flying into telephone wires and wrapping itself by the neck around two wires in July, 1948, 5 miles east of Saskatoon, Saskatchewan (Fig. 1b).

Stout (The nature and pattern of non-hunting mortality in fledged North American waterfowl. Unpubl. M.S. thesis, Virginia Polytech. Inst., pp. 77–81, 91–93) in a monumental, but unpublished, study of non-hunting mortality in waterfowl, reported 1,487



FIG. 1a. Female Pintail in southern Manitoba.

FIG. 1b. Male Pintail in southern Saskatchewan.

deaths from striking telephone and power lines, and 20 from striking fences and buildings in his survey covering a period of about 10 years. He suggests that: puddle ducks are most often involved in such wire strikes, males may be more vulnerable than females (perhaps, in part, because of the "reckless" nature of pursuit flights), and the greatest incidence of strikes is during migration.

No-longer-needed barbed wire fences should be removed from the publicly-owned waterfowl production marshes; and, when overhead lines become a frequent local source of mortality, they should be placed underground or moved. The practice of running fences and lines through marshes should be reevaluated and other alternatives considered.

These measures would bear a substantial esthetic bonus in that the natural beauty of our wetlands would be enhanced while at the same time husbanding the waterfowl resource.—GEORGE CORNWELL, *School of Forestry, University of Florida, Gainesville, Florida 32601* AND H. ALBERT HOCHBAUM, *Delta Waterfowl Research Station, Delta, Manitoba. 7 November 1970.*

The Ruddy Turnstone as an egg predator.—The Ruddy Turnstone (*Arenaria interpres*) is well known as an opportunistic feeder, as evidenced by a multiplicity of published notes on unusual food items. That eggs of other birds are not a major element in the normal diet of this species is suggested by their omission from the accounts of the turnstone in most standard reference works. Those few that do mention egg-eating (such as Palmer, in *Shorebirds of North America*, 1967:259) have apparently derived all of their information from Wetmore (in Bent, U.S. Natl. Mus. Bull. 146:288, 1929) and Bergman (*Acta Zool. Fennica*, 47:32–33, 1946). Crossin and Huber have recently published an additional observation of this behavior (*Condor*, 72:372–373, 1970).

All of these reports involve the Old World subspecies *A. i. interpres*. Bergman's is the most detailed description of egg-eating, and forms a part of a general study of the turnstone on its breeding grounds on the coast of Finland. Eggs eaten there included those of several species of gulls and terns, ducks, and other turnstones. The other two reports originated in the islands of the Pacific. Wetmore saw turnstones eating eggs of Sooty and Gray-backed Terns (*Sterna fuscata* and *S. lunata*) on Laysan Island in 1923, and the predation described by Crossin and Huber took place in 1969 on Eniwetok Atoll, Marshall Islands, the victims being Sooty Terns.

In the present note we report two additional observations of egg-eating by turnstones, the first instances of this behavior in the New World subspecies *A. i. morinella*. We will also point out variations in the behavior of the turnstones and of their victims.

John C. Ogden, Research Biologist at Everglades National Park, was kind enough to send us his notes from the Dry Tortugas, Florida. Participants in the Sooty Tern banding project there had noticed numerous punctured eggs in tern nests, especially along the perimeter of the colony, at the head of the beaches, some 4 to 10 yards above high water line. Turnstones had been suspected as likely culprits, as they had often been seen running among setting terns at the beach heads. Predation by turnstones was confirmed by Mr. Ogden in late April and late May 1969, when, during a number of 10–20 minute observation periods, he watched turnstones in the act of puncturing Sooty Tern eggs.

Our own observations took place during the last week of May 1970, when small numbers of turnstones were seen feeding along the shore of Great Gull Island, off the north-eastern tip of Long Island, New York. At about the same time, broken eggs had been found in 23 nests of the island's large colony of Common Terns (*Sterna hirundo*). Most