and 10,000 in Louisiana). This should provide a base-line index for future late summer censuses.—EDWARD L. FLICKINGER, *U.S. Fish and Wildlife Service, Victoria, TX 77901*; DAVID S. LOBPRIES, *Texas Parks and Wildlife Dept., Port Arthur, TX 77640*; HUGH A. BATEMAN, *Louisiana Wild Life and Fisheries Commission, Baton Rouge, LA 70804.* *Accepted 14 Jan. 1977.*

Slipper shells, a major food item for White-winged Scoters.—In the winters of 1973 and 1974, large feeding flocks of White-winged Scoters (*Melanitta deglandi*) moved into the New Bedford Harbor region of Buzzards Bay, Plymouth Co., Massachusetts. I collected 28 White-wings and examined their upper digestive tracts. Six individuals did not have sufficient food material in the gullet for analysis. The contents of the 22 individuals analyzed differed from those in the literature and from my own previous observations. Slipper shells (*Crepidula fornicata*) comprised 88% of the bulk organic matter by volume. The remainder of the stomach contents was mostly oyster spat and soft shelled clams. These did not exceed 25% of the bulk in any individual. Cottam (U.S.D.A. Tech. Bull. 643, 1939) reports from an examination of 819 adult White-wings, that ¾ of their food was mollusks, of which bivalves comprised 63% and less than 2% were slipper shells. Scott and Olson (Ecol. 54:996–1007, 1973) found in New Hampshire that 89% of the total volume of food of White-winged Scoters was bivalves and *Siliqua costata* was the dominant food; they recorded no slipper shells.

Trawl and dredge samples from the feeding area revealed a high accumulation of shell. These shell deposits are from shucking operations of local sea and bay scallop industries. Three species of *Crepidula* were attached to the shell deposits; *C. fornicata* was the dominant species. Hoff (Sci. Teach. 38:1, 1971) reported a heavy organic load in the surrounding waters, the primary source of which is untreated sewage from a nearby municipal sewer outfall.

It is apparent that the combination of high concentration of organic nutrients and shell substrate have provided an ideal habitat for slipper shells. These in turn have provided a different food budget for White-winged Scoters in southeastern Massachusetts.—JAMES G. HOFF, *Southeastern Massachusetts Univ., Dartmouth 02747.* *Accepted 16 Jan. 1976.*

Egg movement by a female Gadwall between nest bowls.—Gadwalls (*Anas strepera*) nest commonly on the Woodworth study area located 4.8 km east of Woodworth, North Dakota on the Missouri coteau (Kirsch and Higgins, Wildl. Soc. Bull. 4:16–20). This 1231 ha area is a research station of the Northern Prairie Wildlife Research Center.

On 13 June 1975 a Gadwall nest containing 10 eggs was found at the station headquarters inside an open-topped enclosure measuring 6 m by 6 m and fenced with 5 cm by 5 cm chain link wire mesh. Vegetation at the nest site consisted of smooth bromegrass (*Bromus inermis*) and absinth (*Artemisia absinthium*). This nest was in a corner of the enclosure with the rim of the nest touching the fence. The clutch had been incubated approximately 2 days.

We revisited the nest on 5 July and found that 8 of the 10 eggs had been moved into a new nest bowl on the other side of the fence adjacent to the original one. The other 2 eggs were in the original nest bowl and were cold. Incubation of the 8 eggs in the new nest was about 22 days. We moved the other 2 eggs into the new nest with the remainder of the clutch. Vegetation at this site was comparable to that at the first nest site.

On 7 July all 10 eggs had been moved back through the fence into the original nest and some of the eggs had hatched. Eight ducklings had hatched and left the original nest by 8 July and 2 dead embryos in partially pipped eggs remained in the nest.

A possible explanation of how this egg movement was accomplished has been discussed by Oring (Auk 81:88–89, 1964) who reported that some Pintails (*A. acuta*) and Mallards (*A. platyrhynchos*), but none of 15 trapped Gadwalls, moved their eggs into new nests after a trap was placed over the original nest. The ducks used the ventral surface of their bills to pull the eggs through the trap. This Gadwall may have moved her eggs in the same manner when she returned to her nest from opposite sides of the fence.

The authors thank Kenneth F. Higgins and Harold F. Duebbert for reviewing the manuscript.—ROBERT F. JOHNSON JR., *Dept. of Forestry, Michigan Technological Univ., Houghton 49931* and LEO M. KIRSCH, *Northern Prairie Wildlife Research Center, U.S. Fish and Wildlife Service, Jamestown, ND 58401.* *Accepted 3 Feb. 1976.*

Foods of western Clapper Rails.—The Colorado River population of the Clapper Rail (*Rallus longirostris yumanensis*) is presently listed as endangered (U.S. Fish and Wildlife Service, United States List of Endangered Fauna, p. 11, 1974). Its presence in fresh-water habitat during the 5-month breeding season and probable migration to Mexican coastal salt water swamps (Tomlinson and Todd, Condor 75:177–183, 1973) are considered unusual for Clapper Rails in general.

In June 1971, Tomlinson and R. L. Todd collected 35 Clapper Rail specimens in the southwestern United States and western Mexico to determine if a racial distinction occurred among the geographically isolated populations. Three separate races (*R. l. yumanensis*, *R. l. rhizophorae*, and *R. l. nayaritensis*) were confirmed from the collection (Banks and Tomlinson, Wilson Bull. 86:325–335, 1974). Because the food habits of these rails were unknown, 32 stomachs (proventriculus and gizzard) were preserved for later food habits analysis. This analysis provides the first insight into the freshwater food habits of *R. l. yumanensis*, and should be useful in future preservation and management considerations. The birds were collected in fresh-water marshes along the Colorado River from Needles, California south to the Delta in Sonora, Mexico and in mangrove (*Avicennia germinans* and *Rhizophora mangle*) swamps from Guaymas, Sonora, to San Blas, Nayarit, Mexico (Table 1). Airline distance from the northernmost to southernmost points is approximately 1800 km. The specimens, including specific data relating to their collection have been deposited in the U.S. National Museum, Washington, D.C.

Each Clapper Rail stomach was wrapped in cheesecloth in the field and preserved in a 10% formalin solution. Analysis was conducted at Arizona State University following procedures described by McAtee (Auk 20:449–464, 1912). The contents of each stomach were separated into ingesta types in a gridded petri dish and examined under a dissecting microscope. Each food type was visually estimated as a percentage of the total content in a particular stomach.

The major foods of Yuma Clapper Rails were invertebrates; little vegetative material was present (Table 2). Crayfish (*Procambarus* and *Orcopectes* are the common genera) were the dominant food in 9 of the 10 stomachs from Topock Marsh on the lower Colorado River south to Imperial Reservoir in Arizona and California; the other stomach was empty. Of 2 specimens collected at the confluence of the Gila and Colorado rivers, one contained primarily an introduced fresh-water clam (*Corbicula* sp.) (98%), and the other primarily isopods (97%). Colorado River Delta specimens in Mexico contained a greater variety of food organisms, but the major components were water beetles and fish.

Of the 16 *R. l. yumanensis* stomachs, 9 had crayfish, 11 contained insect fragments, 4 had water beetles, 4 had fish, and 3 contained clams. In addition to the water beetles, other insect matter consisted of small amounts of weevils (3 stomachs), damselfly nymphs (2 stomachs), dragonfly nymphs, grasshoppers, and insect eggs. Spiders, leeches, prawns,