Wilson Bull., 92(3), 1980, p. 403

Herring Gull predation on Red-breasted Merganser ducklings.—It has been suggested that gulls can seriously reduce duckling survival of island-nesting ducks by preying upon the ducklings as they enter the water (Vermeer, Wilson Bull. 80:78–83, 1968; Dwernychuk and Boag, Can. J. Zool. 50:559-563, 1972). During a study of island-nesting Red-breasted Mergansers (Mergus serrator) in Lake Michigan we observed Herring Gull (Larus argentatus) predation on merganser ducklings. The Wisconsin population of Red-breasted Mergansers nests primarily on a few islands off the Door County peninsula; these islands also support major nesting colonies of Herring Gulls. The observations we list below facilitate understanding the impact these gulls have on reproductive success of this limited and important population of mergansers.

On 22 June 1977, near Spider Island, a Herring Gull attacked a brood of 6 Red-breasted Merganser ducklings in the water, but the female was able to ward off several attacks by raising herself partly out of the water and striking toward the gull. She then safely led her brood toward the mainland about 1 km away.

A Herring Gull attacked 4 unattended ducklings on 6 July near Hog Island, but the ducklings dived simultaneously to avoid the gull. Shortly thereafter, these 4, plus 5 additional ducklings, joined a female nearby and headed toward the mainland. The female had to strike at swooping gulls several times to protect her young, but did safely lead them out of the area of gull activity. On 7 July, we saw a Herring Gull that was flying over Hog Island swallow a Red-breasted Merganser duckling it had been holding in its bill.

On 22 July, while watching 9 Red-breasted Merganser ducklings and 3 adults swimming close to Spider Island, we saw a Herring Gull fly in, grab 1 of the ducklings and fly off with it over the island. A few minutes later a gull swooped twice toward the young, but did not catch any. However, about 20 min later a gull carried off another duckling, only momentarily startling a female swimming next to the duckling.

During the course of our study we also saw Herring Gulls carry off 2 Mallard (Anas platyrhynchos) ducklings. On 3 occasions, we saw Red-breasted Merganser ducklings swimming in full view of many gulls, but no attacks occurred.

Collier (Ibis 4:490-512, 1904) saw a Greater Black-backed Gull (*L. marinus*) pick up and swallow 2 Red-breasted Merganser ducklings from a brood, and Mills (The Wildfowl Trust 13:79-92, 1962) observed the species taking a young Red-breasted Merganser. We have not read of Herring Gulls preying upon Red-breasted Merganser ducklings, but they have been reported to prey upon young Common Eiders (*Somateria mollissima*) (Minot, M.S. thesis, Univ. Maine, Orono, Maine, 1976) and Shelducks (*Tadorna tadorna*) (Spaans, Ardea 59:73-188, 1971).

Although our limited data do not permit a good estimation of the success rates of Herring Gulls preying on Red-breasted Merganser ducklings, it does appear that when gulls choose to attack and do so persistently they sometimes do succeed in killing ducklings. Why attacks occur at some times and not others remains an important question that might be approached by studying such factors as food availability, size of gull chicks in the colony and whether only a few Herring Gulls in each colony have learned to prey on ducklings or whether all will do so occasionally. It is already apparent that both adult and young Red-breasted Mergansers are aware of the threat posed by Herring Gulls and respond appropriately to attacks by defensive action.—Barbara M. Braun, Patuxent Wildlife Research Center, U.S. Fish and Wildlife Service, Laurel, Maryland 20811; Patricia A. Heinz, Route 2, Box 256, Laurel, Maryland 20811; And Gary H. Heinz, Patuxent Wildlife Research Center, U.S. Fish and Wildlife Service, Laurel, Maryland 20811. (Present address BMB: Dept. Ecology and Evolutionary Biology, Univ. California, Irvine, California 92717.) Accepted 10 May 1979.