

## GENERAL NOTES

**A shift in nesting habitat by a population of Common Eiders.**—The Common Eider (*Somateria mollissima dresseri*) of the North American Atlantic coasts nests in forest, shrub, and grassland habitats (Gross, Wilson Bull., 56:15–26, 1944; Choate, J. Wild. Mgmt., 31:769–777, 1967; Bourget, Auk, 90:809–820, 1973; Reed, Service de la Faune du Québec Bull. no. 18, 1973). However, Paynter (Ecology, 32:497–507, 1951) reported that in 1947 the population of eiders nesting on Kent Island (a partially spruce- and fir-covered island in the Bay of Fundy), New Brunswick, Canada, was concentrated at the treeless southern end, at the expense of the north-end woodland. Twenty-six years later, in June 1973, I was intrigued to find that the bulk of eiders nesting on Kent Island were congregated under the trees. A brief census in areas of both forest and field (where ragweed, *Ambrosia artemisiifolia*, dominated) reinforced this impression.

I counted eider nests in 10 sample areas, five in forest and five in fields. Each of these 50 by 100 m (5,000 m<sup>2</sup>) quadrats was set out with a 100 m side running along the border between vegetation and rocky coastline and was then systematically covered. The eiders' preference for nesting under forest ( $\bar{x}$  19.0  $\pm$  8.9 nests per 5,000 m<sup>2</sup>; 38.0 nests per ha) rather than within fields ( $\bar{x}$  1.2  $\pm$  0.7 nests per 5,000 m<sup>2</sup>; 2.4 nests per ha) was clear-cut, despite the considerable variation among quadrats from the same habitat type. In contrast to the eiders, a census of Herring Gull (*Larus argentatus*) nests showed a marked preference for open field ( $\bar{x}$  57.6  $\pm$  26.2 nests per 5,000 m<sup>2</sup>; 115.2 nests per ha) over forest ( $\bar{x}$  13.8  $\pm$  6.1 nests per 5,000 m<sup>2</sup>; 27.6 nests per ha). The gull nests in the forest quadrats were concentrated along a narrow coastal strip; eider nests were farther inland under the heavy tree canopy.

Two lines of evidence suggest that pressure from gulls in open terrain caused the eider population to shift habitat between 1947 and 1973. Along the nearby coast of Maine, gull predation on eider nests decreases with increasing nesting cover for the eiders (Choate, op. cit.; Bourget, op. cit.). On the treeless Razade Islands in the Saint Lawrence estuary, an increase in Herring Gull nests (843 to 1,717), between 1938 and 1966, was accompanied by a decrease in eider nests (1,412 to 649) (Reed, op. cit.). Reed's explanation for the decrease in eider nests on the grassy Razades could hold for the shift of Kent Island birds to forest, i.e. "direct expulsion of eiders by aggressive territorial gulls [and/] or through reduced recruitment of eiders as a result of predation on their nests by gulls." The shift by eiders to woodland on Kent Island may not have occurred earlier, because, at least in the late 19th and early 20th centuries, the population of gulls nesting on the island was still rather low (Townsend, Can. Field Nat., 37:141–144, 1923).

I thank W. H. Drury and H. L. Mendall for commenting on an earlier draft of the manuscript, and G. H. Grubb for help with field work.—THOMAS C. GRUBB, JR., *Department of Zoology, Ohio State University, Columbus, Ohio 43210. Accepted 31 May 1974.*

**Collision between a vulture and an aircraft at an altitude of 37,000 feet.**—On 29 November 1973, a Rüppell's Griffon (*Gyps rueppellii*) collided with a commercial aircraft at 37,000 ft over Abijan, Ivory Coast, western Africa. The altitude is that recorded by the pilot shortly after the impact, which damaged one of the aircraft's engines and caused it to be shut down. The plane landed safely at Abijan without further incident. The remains of the vulture consisted of five complete and 15 partial feathers from the

wings (secondaries, lesser, and underwing coverts), tail, neck, and breast. Sufficient details are apparent in these feathers to allow their certain identification as *G. rueppellii*, using comparative material in the U.S. National Museum of Natural History.

The previous record altitude for a bird-aircraft collision was of a Mallard (*Anas platyrhynchos*) at 21,000 ft (Manville, *Wilson Bull.*, 75:92, 1963), based on feathers that I identified from the strike. That collision occurred between Battle Mountain and Elko, Nevada, on 9 July 1962. Other high-altitude records of birds include sightings of migrating geese at 29,000 ft, over the Himalayas (Griffin, *Bird Migration*, Natural History Press, Garden City, N.Y., 1964), and soaring Bearded Vultures (*Gypaetus barbatus*) at over 24,000 ft (Ali, *Birds of Sikkim*, Oxford University Press, London, 1962).—ROXIE C. LAYBOURNE, *National Fish and Wildlife Laboratory, Bureau of Sport Fisheries and Wildlife, National Museum of Natural History, Washington, D.C. 20560. Accepted 7 June 1974.*

**American Coots feeding in association with Canvasbacks.**—Commensal feeding associations between different species of waterbirds have been reported by several authors in recent years. Such associations have been described between Wilson's Phalaropes (*Steganopus tricolor*) and Northern Shovelers (*Anas clypeata*) (Siegfried and Batt, 1972), grebes (*Podiceps* spp.) and Cape Shovelers (*A. smithii*) (Siegfried, 1971), Little Grebes (*P. ruficollis*) and European Coots (*Fulica atra*) (Ashmole, Brown, and Tinbergen, 1956), Little Grebes and Northern Shovelers (King, 1963), Least Grebes (*P. dominicus*) and Mallards (*A. platyrhynchos*) (Paulson, 1969), and between several species of ducks and geese and Whistling Swans (*Cygnus columbianus*) (Sherwood, 1960; Bailey and Batt, 1974). Increased feeding rates by one of the participants in these associations have been reported for grebes (Siegfried, 1971; Paulson, 1969) and for phalaropes (Siegfried and Batt, 1972).

In Utah, Ryder (1959) described American Coots (*F. americana*) as "attending" feeding Whistling Swans in the spring. This behavior consisted of one to four coots circling around swans and picking up debris churned up by the latter's feeding activity. Coots were seen defending this food source from Redheads (*Aythya americana*). Ryder also observed coots attending Mallards, Pintails (*Anas acuta*), and Redheads in a similar manner.

During observations of waterfowl feeding activity on the Delta Marsh, Manitoba, in 1973, I observed an obvious and quite common feeding association between American Coots and Canvasbacks (*Aythya valisineria*). The association was observed at five different locations on the marsh between 25 August and 14 October.

Feeding Canvasbacks stirred up a great deal of debris with their feeding and rooting activity. One or two coots would commonly associate with single, or occasionally with two, Canvasbacks. In contrast to their normal feeding behavior, attending coots swam tightly around the diving Canvasbacks, turning and often spinning phalarope-like, plucking at the surface. At least 18 different coots and 16 Canvasbacks were observed feeding in this manner. Both adult and immature coots associated with Canvasbacks. On two occasions individual adult coots defended their feeding areas, once driving away another adult and once an immature coot.

Attending coots stayed very close to their companion Canvasbacks, always within a circle around a duck of approximately one m in diameter. On seven separate occasions, Canvasbacks even surfaced directly under the attending coot. Twice on these occasions the Canvasback threatened the coot; the latter quickly flapped away, but soon returned. On all other occasions the duck did not react at all, and the coot retreated briefly before