

**Blue Crab as Starvation Food of Oiled American Eiders.**—In December 1951, Ludlow Griscom *et al.* (1952, Audubon Field Notes, 6: 55) estimated that the flock of American Eider (*Somateria mollissima dresseri*) wintering off Monomoy Island, Chatham, Massachusetts, had grown to half a million from the four thousand recorded by Hagar in December 1936 (1937, Bull. New England Bird-Life, 1 (3): 2). This great number was apparently finding ample food in the mussel beds of the region until a very severe northeast storm during the early morning of February 18, 1952, caused the breaking up of two welded World War II tankers (the "Fort Mercer" and the "Pendleton") that were standing out to sea in the vicinity of Pollack Rip Lightship off Chatham. Each of these vessels had a capacity of 110,000 barrels of oil, and it was estimated that 150,000 barrels of oil were released in the vicinity of the eiders when the ships broke in two.

Lawrence S. Smith, Refuge Manager for the Monomoy National Wildlife Refuge on the island, counted more than 400 dead and oiled eiders immediately after the storm; probably all of these as well as many more were buried by sand during another gale shortly after. Most of the dead birds were found on the western or bay side of the island, whereas the tankers had released their oil on the seaward side, to the east. Mr. Smith gave the following explanation in a letter: "Even a small spot of oil, saturating the feathers and allowing the cold water to touch the bird's skin would make it cold, hence induce it to leave the water and remain on land. Many eiders flew into the more sheltered waters west of Monomoy and thus came up on the west shore. Others certainly walked across the half mile of dunes to the inside beach, seeking shelter, for many were found dead in bayberry thickets inland." Food to which the eiders were accustomed is not plentiful in the shallow waters off the west shore, and in most cases the eiders, weakened by exposure, did not reenter the water to seek food.

Three weeks after the first storm, Mr. Griscom and a group of ornithologists went down Monomoy Island, which stretches almost due south for ten miles below Chatham, to investigate the effect of the released oil on the eiders. Dead and dying birds were strewn along the beaches of the island, the total count being: 380 American Eider (331 ♂♂ and 49 ♀♀), 4 Common Loon, 4 Gannet, 3 Old Squaw, 5 White-winged Scoter, and 3 Surf Scoter. In addition, they estimated only 2000 eiders alive at sea (all well oiled), plus 500 in Stage Harbor, Chatham. At the Powder Hole, near the southern tip of Monomoy on the west side, six dead eiders were picked up and brought back to the Boston area to be made into study skins. Of these birds, two each had a Blue Crab (*Callinectes sapidus*) stuck in the esophagus. The spines on the extremities of the carapace of a crab three and one half inches across had pierced the wall of the female's throat and ruptured blood vessels in the neck. The gizzard was empty, but whether this bird bled or starved to death can only be conjectured. The crab in the drake's throat had a maximum breadth of three inches and was firmly lodged; the bird's gizzard was empty, and its fat was used up.

As *Callinectes* had not been listed by Cottam (1939, "Food Habits of North American Diving Ducks," U. S. Dept. Agric. Tech. Bull. No. 643: 100), nor by Kortright (1942, "Ducks, Geese and Swans of North America," pp. 307-308) as food of the eider, a search was made on March 26 to determine how many other dead ducks had fed on this crustacean. However not a single Blue Crab could be felt in the throat of 155 ducks handled. Of these birds only 11 were apparently unoiled, while the oiling of the remainder ranged from a single spot to almost complete coverage. At this time, an examination of the stomachs of 15 eiders

revealed gizzards that were empty or contained only a few bits of Horse Mussel (*Brachydontes demissus*) shell, Mud Whelk (*Nassarius obsoletus*) shells, gravel, and/or some oil. Four of the birds with oil in the gizzard were heavily oiled externally; the internal oil may have been ingested in preening. All of these 15 ducks had completely used up their fat supply, as evidenced by the lack of adipose deposits under the skin.

Although no count could be made of the complete death toll of eiders resulting from the oil from the tankers, it is possibly significant that on December 28, 1952, Mr. Griscom estimated only 150,000 birds in the wintering flock off Monomoy, as compared to 500,000 a year previous.—FRANCES L. BURNETT, *Museum of Comparative Zoology at Harvard University, Cambridge, Massachusetts*, and DOROTHY E. SNYDER, *Peabody Museum of Salem, Salem, Massachusetts*.

**Unusual Feeding Behavior of the Lesser Scaup.**—In the last week of February, 1953, I saw groups of six to eight Lesser Scaup (*Aythya affinis*) on four occasions swimming in extremely shallow water among the breakers along the sandy beach at Bull's Island, South Carolina, at times when the tide was falling. On February 25, at approximately mean low water, I saw six scaup squatting with bellies flat on the wet sand feeding vigorously around them. Every so often a wavelet of the receding tide would put them afloat. Usually, however, they would get up and waddle a few steps so as to keep in a zone close to the waters edge where the sand was wettest. The ducks would then again squat on their bellies and stretch their head and neck straight out. Apparently what they were feeding on was abundant along the margin of the receding wavelets, for they never appeared to hunt for food. When I stood within 150 feet, four scaup swam into deeper water. They appeared normally active and healthy. The behavior of the scaup on the beach suggested that the birds were actively feeding, possibly on mollusks (*Donax*) or crustacea (*Emerita*) which would be available in considerable numbers at low water. It is also possible that the ducks were able to obtain their prey by diving as long as the tide had not fallen too low, but when the water left, they continued to feed over the same area by squatting on the bare sand. What the birds actually ate could only have been determined by examination of stomach contents.—LAWRENCE KILHAM, M.D., 8302 Garfield St., Bethesda, Maryland.

**Ruby-throated Hummingbird Feeding at Yellow-bellied Sapsucker Holes.** On September 2, 1953, between 1:45 and 2:30 p.m., I observed a Ruby-throated Hummingbird (*Archilochus colubris*) in an activity which I thought was quite extraordinary. I was at Island Lake, 25 miles east northeast of Detroit Lakes, Minnesota. Walking on a road from the north end of the lake to Mud Lake, I noticed an American elm tree with numerous holes in it. The holes were those made by a Yellow-bellied Sapsucker (*Sphyrapicus varius*). I saw a female hummingbird taking sap from the holes. An immature sapsucker was in the vicinity, but the hummingbird kept him away by making sudden darts at him.

I returned about 15 minutes later with my father, Mr. H. D. Smith. The action was still going on. The hummingbird would take sap from the holes, on the wing as they take nectar from flowers. An adult sapsucker came and the hummingbird left for about five minutes but then came back. The adult sapsucker at first made passes at the hummingbird; then both birds fed peacefully about a yard apart. In the meantime, the young sapsucker found more holes farther up the tree and began to feed.—JEROME HAZEN SMITH, 4815 Erskine, Omaha, Nebraska.