

ENTANGLEMENT OF COMMON EIDERS IN CLAM CULTURE NETS

by Edwin M. Hoopes

Over the past twenty years there has been much public awareness of the incidence of marine mammals drowning after becoming entangled in fishing nets. Until recently, however, there has been less awareness of the incidental take, or bycatch, of seabirds and other water birds in fishnets. There are many species of birds that are taken in a variety of gear types and the number of birds drowned far exceeds the mortality of marine mammals (Atkins and Heneman 1987). The incidental take of birds has been reported in net, trap, fishing line, and gill-net fisheries throughout North America (Croxall et al. 1984). I present data on Common Eiders (*Somateria mollissima*) drowning after becoming entangled in nets surrounding clam culture floats.

On May 19, 1989, the Provincetown Police Department reported a "large" number of birds that had washed ashore at Beach Point on the Provincetown-Truro town line. With help from rangers at Cape Cod National Seashore, I found and collected approximately twenty Common Eiders that washed ashore over a two-hundred-meter length of shoreline. The cause of death was not readily apparent, although incidences of Black-legged Kittiwake mortality due to *Aspergillosis fumigatus* had been a common occurrence in the past five to ten years. Consequently, three eider carcasses were shipped to the U. S. Fish and Wildlife Service laboratories in Madison, Wisconsin, to determine the cause of death and to ensure that these birds did not represent the initial stages of a more serious epizootic. Over the next two days, over one hundred more Common Eiders washed ashore in the same area. All birds, including the twenty from the previous day, were classified as either adult or immature based on plumage, and adults were further identified by sex. The U. S. Fish and Wildlife Service laboratory in Madison reported on May 21, 1989, that the three carcasses sent for examination had died as a result of drowning.

A total of 146 Common Eiders washed ashore at Beach Point between May 19 and May 21, 1989. Of these 146 birds, thirty-six (24.7 percent) were adult males, fifteen (10.3 percent) were adult females, and ninety-five (65 percent) were immature birds. After the cause of death had been verified, a National Park Service dive team made two dives in Provincetown Harbor where there were several clam culture lease sites. They found one clam culture float with a net surrounding it and estimated the net contained approximately fifty to seventy-five more Common Eider carcasses (J. Ebert, personal communication). However, these carcasses were not collected.

While incidences of bird mortality have been reported in a variety of gear types (Carter and Sealy 1984; Piatt et al. 1984; Piatt and Nettleship 1985, 1987), I am not aware of any reported mortality for this type of fishery. Common Eiders are observed in small to large flocks along the shores of Cape Cod Bay in

summer. Further, clam culture lease sites are becoming increasingly abundant in these areas. Consequently, incidental take of Common Eiders and other diving birds could become locally significant in the clam culture fishery.

References

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