NORTHERN BOTTLENOSE WHALE (*Hyperoodon ampullatus*): Western North Atlantic Stock

STOCK DEFINITION AND GEOGRAPHIC RANGE

Northern bottlenose whales are characterized as extremely uncommon or rare in waters of the U.S. Atlantic Exclusive Economic Zone. The two sightings of three individuals constituted less than 0.1% of the 11,156 cetacean sightings in the 1978-82 CeTAP surveys. Both sightings were in the spring, along the 2,000 m isobath (CeTAP 1982).

Northern bottlenose whales are distributed in the North Atlantic from Nova Scotia to about 70° in the Davis Strait, along the east coast of Greenland to 77° and from England to the west coast of Spitzbergen. It is largely a deep-water species and is very seldom found in waters less than 2,000 m deep (reviewed by Mead 1989).

There are two main centers of bottlenose whale distribution in the western north Atlantic, one in the area called "The Gully" just north of Sable Island, Nova Scotia, and the other in Davis Strait off northern Labrador. Studies at the entrance to the Gully from 1988-1991 identified 208 individuals and estimated the local population size at a few hundred individuals (Faucher et al. 1991). Mitchell and Kozicki (1975) documented stranding records in the Bay of Fundy and as far south as Rhode Island. Stock definition is unknown.

POPULATION SIZE

The total number of northern bottlenose whales off the eastern U.S. coast is unknown.

Minimum Population Estimate

Present data are insufficient to calculate a minimum population estimate.

Current Population Trend

There are insufficient data to determine the population trends for this species.

CURRENT AND MAXIMUM NET PRODUCTIVITY RATES

Current and maximum net productivity rates are not known for this stock. The maximum net productivity rate was assumed to be 0.04 for purposes of this assessment. This value is based on theoretical calculations showing that cetacean populations may not generally grow at rates much greater than 4% given the constraints of their reproductive life history (Anon. 1994).

POTENTIAL BIOLOGICAL REMOVAL

No PBR can be estimated for this species at this time, because the minimum population size cannot be determined.

ANNUAL HUMAN-CAUSED MORTALITY

No mortalities have been reported in U.S. waters. A fishery for northern bottlenose whales existed in Canadian waters during both the 1800s and 1900s. Its development was due to the discovery that bottlenose whales contained spermaceti. A Norwegian fishery expanded from east to west (Labrador and Newfoundland) in several episodes. The fishery peaked in 1965. Decreasing catches led to the cessation of the fishery in the 1970s, and provided evidence that the population was depleted. A small fishery operated by Canadian whalers from Nova Scotia operated in the Gully, and took 87 animals from 1962-1967 (Mead 1989; Mitchell 1977).

Fishery Information

Because there are no observed mortalities or serious injury, no fishery information is presented. The total fishery-related mortality and serious injury for this stock is considered insignificant and approaching zero mortality and serious injury rate. This determination cannot be made for specific fisheries until the implementing regulations for Section 118 of the MMPA have been reviewed by the public and finalized.

STATUS OF STOCK

The status of northern bottlenose whales relative to OSP in U.S. Atlantic coast waters is unknown; however, a depletion in Canadian waters in the 1970s may have impacted U.S. distribution and may be relevant to current status in U.S. waters. The species is not listed as threatened or endangered under the Endangered Species Act. In Canada, the Cetacean Protection Regulations of 1982, promulgated under the standing Fisheries Act, prohibit the catching or harassment of all cetacean species. There are insufficient data to determine the population trends for this species. This is not a strategic stock because there are no recent records of fishery-related mortality or serious injury.

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