



MARINE MAMMAL COMMISSION

5 November 2012

Mr. P. Michael Payne, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Re: Permit Application No. 17355
(Northeast Fisheries Science Center)

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. The Northeast Fisheries Science Center is requesting authorization to conduct research on 37 specified cetacean species and unidentified *Mesoplodon* spp. in waters of the exclusive economic zones of the United States and Canada from Florida to the Scotian Shelf during a five-year period. The Center is seeking to renew and amend permit 775-1875.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit, but condition it to require the Center to make observations sufficient to detect possible short- and long-term effects of biopsy sampling and tagging and report the effort made and the information collected to the Service.

RATIONALE

The purpose of the proposed research is to fulfill the Center's stock assessment report obligations that include investigating (1) abundance and distribution, (2) genetics and stock structure, (3) movement patterns, (4) demographic parameters, (5) dive behavior, and (6) recruitment trends.

The Center proposes to observe, photograph, videotape, and record acoustically numerous individuals of various species of cetaceans each year (see the take table in the application) during year-round systematic line-transect aerial and vessel surveys. During the surveys, Center researchers would collect environmental and standard survey data (i.e., species, number, distance/heading, behavior, etc.). The activities could harass individuals of all age classes and either sex. To minimize disturbance of North Atlantic right whales during surveys for that species, the Center would use fixed-wing aircraft flown at a minimum altitude of 230 m. The survey aircraft would circle sighted animals as many as 10 times for up to 15 minutes to obtain good quality photographs and group size and species composition data and to document signs of human interaction. For other cetacean

species, the Center also would use fixed-wing aircraft flown at a minimum altitude of 150 m and would circle sighted animals for approximately 6 minutes.

In addition, the Center would conduct vessel surveys using both large (up to 68 m in length) and small vessels (5–10 m in length). Large vessels would approach sighted animals at a minimum distance of 100 m and small vessels would approach large whales no closer than 15 m and small cetaceans no closer than 5 m. Vessels would approach a given animal or group of animals no more than 10 times in a day and would spend no more than 60 minutes photographing the animals and no more than 4 hours conducting focal follow observations. If the opportunity arises, Center researchers may approach female-calf pairs for photo-identification and observation. However, they would cease efforts immediately if there is any evidence that the activity may be interfering with pair-bonding, nursing, feeding, or any other vital functions. Center researchers also would monitor cetaceans acoustically using a hydrophone array deployed from a vessel, bottom-mounted hydrophones, and autonomous underwater vehicles, and they would collect sloughed skin and feces from the water using a net or sieve. The Center requests authorization to import and export those samples for analysis.

The Center also proposes to biopsy sample and instrument numerous individuals of each species per year (see take table) with suction-cup tags. Researchers would approach the animals at a minimum distance of 5 m to biopsy sample them using a crossbow or modified rifle. However, they would approach animals at a minimum distance of 7 m to tag them using a long pole. Suction-cup tags may include data loggers that would record and store time, depth, temperature, salinity, acoustic recordings, pitch, and roll. They would make no more than five biopsy sampling and tagging attempts per individual per encounter, with encounters lasting for up to 1 hour. Researchers also would not biopsy sample or tag North Atlantic right whale calves less than one month of age, females with those calves, or calves less than one year of age for all other cetacean species. However, they would biopsy sample females with calves for all other species but would not tag those females. They would cease any sampling or tagging attempt if the animals exhibit a strong reaction (i.e., breaching, rapid evasion, or any other high-energy behavior) to the activity. Female-calf pairs that are engaged in nursing behavior would not be approached under any circumstances. The Center also would continue to coordinate all activities with other researchers in the area to minimize duplicative sampling and tagging, which include the Southeast Fisheries Science Center, Georgia Department of Fish and Game, and Fish and Wildlife Research Institute.

The Service considers any animal approached within a certain distance as having been taken, regardless of whether the animal reacts to the approach or related research activities. Therefore, the Center estimated the total number of takes per species for biopsy sampling and tagging activities based on all anticipated approaches, including successful sampling or tagging of an individual, sampling or tagging misses (i.e., the dart/tag misses the animal and hits the water), and unsuccessful sampling or tagging attempts (i.e., the dart bounces off the animal, the suction-cup tag does not adhere to the animal, or the animal dives before the dart is deployed or tag can be attached). Thus, the number of individuals successfully biopsied or tagged would comprise a subset of the requested takes.

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Data regarding the behavior of females accompanied by calves would be useful, but such data should not be collected at the expense of adversely affecting the calves. In the past few years, the Commission has recommended that the Service adopt a policy authorizing a slow and graduated increase in activities involving female-calf pairs, coupled with careful monitoring and reporting of potential adverse effects. Until recently, the Commission generally has recommended that researchers not tag females with dependent calves, particularly those likely to be less than six months of age. However, the Commission has recommended additional leeway in working with those pairs for other applicants. In addition, the Commission is aware of no reports indicating that strong adverse effects have occurred when researchers studied female-calf pairs. On that basis, the Commission believes it is reasonable for the Service to allow flexibility in working with those pairs, provided that the Center monitors the activities carefully and reports the results. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require the Center to make observations sufficient to detect possible short- and long-term effects of biopsy sampling and tagging and report the effort made and the information collected to the Service.

The Center's Institutional Animal Care and Use Committee has reviewed and approved the research protocols. The Center also is aware of the need to obtain permits under the Convention on International Trade in Endangered Species of Wild Fauna and Flora prior to importing or exporting parts from marine mammals listed in the Convention's appendices.

The Commission believes that the activities for which it has recommended approval are consistent with the purposes and policies of the Marine Mammal Protection Act.

Please contact me if you have any questions concerning the Commission's recommendation.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director