



MARINE MAMMAL COMMISSION

18 March 2021

Dr. Mary Cogliano, Chief
Branch of Permits, MS: IA
Division of Management Authority
U.S. Fish and Wildlife Service
5275 Leesburg Pike
Falls Church, Virginia 22041-3803

Re: Permit Application No. 14537C
(U.S. Fish and Wildlife Service,
Marine Mammals Management)

Dear Dr. Cogliano:

The Marine Mammal Commission (the 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 MMPA). Marine Mammals Management (MMM) is seeking to renew its permit to conduct research on walrus in the Bering and Chukchi Seas during a five-year period—permit 039386 authorized similar activities.

MMM proposes to conduct research on walrus in the waters of the Bering and Chukchi Seas year-round. The purpose of the research is to investigate (1) population structure and life history parameters, (2) distribution and abundance, and (3) movement patterns and habitat use. Researchers would harass, observe, photograph/videotape, sample, and/or instrument numerous walrus of both sexes and various age classes (see the take tables for specifics). MMM requests up to 26 walrus mortalities¹. Researchers would use various measures to minimize impacts on walrus and also would be required to abide by the U.S. Fish and Wildlife Service's (FWS) standard permit conditions.

The Commission provided extensive informal comments and questions on this application to FWS in October 2017, many of which related to whether the *bona fide* and humaneness criteria under section 104 of the MMPA could be met based on the proposed research activities. Most critically, it was unclear whether MMM could successfully estimate the population size and demographic parameters of walrus with its proposed mark-recapture methods.

In its [18 July 2011 letter](#) on MMM's previous permit, the Commission expressed concerns that MMM's proposed mark-recapture methods were premised on assumptions related to the probability of walrus of different age and sex classes being biopsy sampled and questioned whether sufficient information was available to test and validate those assumptions. The

¹ Either unintentional or intentional mortality (i.e., euthanasia for humaneness purposes). It is not clear in the application whether 26 mortalities per year or 26 for the duration of the five-year permit are being requested.

Commission recommended that MMM conduct a review of its mark-recapture approach before initiating field work to ensure that collection procedures would be consistent with the assumptions necessary for generating a population estimate, but it does not appear that such a review was ever conducted. Using this mark-recapture approach, MMM fell far short of achieving the required 6,000 walrus biopsies per year (i.e., 3% of the estimated population of 200,000 animals). Instead, it collected up to approximately 2,000 samples each year from 2013 through 2017², with some animals being re-sampled up to four times a year. The preliminary estimate of population size was 500,000 walrus. Considering the low statistical power and apparent biases in sampling design, this number may not represent the true abundance of walrus.

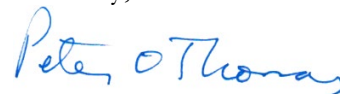
In its current application, MMM proposes to use the same mark-recapture approach but indicates that a smaller number of walrus biopsies (around 5,000) would be required per year (i.e., 1% of the re-estimated population size). The proposal does not explain why a reduced percentage would now be sufficient to give the statistical power for a robust estimate of population size. Nevertheless, the application also states that MMM only expects to collect between 1,500 and 3,000 samples in a year. With continued questions on the mark-recapture methods, untested assumptions, and smaller proposed sample sizes than requested in the original study, it is still unclear whether MMM's proposed activities would constitute *bona fide* research on walrus.

Additional issues with the current application noted informally by the Commission include its failure to (1) provide sufficient detail to justify the proposed research activities; (2) indicate examples of specimens to be collected, e.g., skin, liver, blubber, etc.; (3) for the 26 requested mortalities deaths, (a) justify such a considerable increase when only one mortality was previously requested and (b) clarify whether the 26 requested were per year or for the five-year duration of the permit; (4) indicate a sufficient and consistent number of takes for incidental disturbance of walrus during (a) biopsy sampling and (b) tagging; and (5) provide evidence in each curriculum vitae that the principal investigator and co-investigators have sufficient experience to conduct the activities they would be authorized to conduct under the permit.

Nearly three and a half years after providing informal comments on MMM's application, the Commission had received responses to just a few of its questions by 4 March 2021. None of the issues described above had been addressed, it was evident that FWS had not provided the majority of the Commission's questions to MMM for it to address, and a revised application also was not provided. Based on the continuing concerns and unanswered questions with regard to MMM's application, the Commission recommends that FWS deny the requested permit.

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

Sincerely,



Peter O. Thomas, Ph.D.,
Executive Director

² MMM did not collect biopsies from walrus from 2018 through 2020.