



MARINE MAMMAL COMMISSION

3 July 2025

Mr. Drew Crane, Deputy Assistant Regional Director
Ecological Services
U.S. Fish and Wildlife Service
1011 East Tudor Road
Anchorage, AK 99503-6199

Re: Permit Application No. 18108557
(U.S. Fish and Wildlife Service,
Marine Mammals Management)

Dear Mr. Crane:

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 (MMPA). U.S. Fish and Wildlife Service (FWS), Marine Mammals Management (MMM) is seeking to renew its permit to conduct research on polar bears in Alaska during a five-year period—permit 82088B authorized similar activities.

MMM proposes to conduct research on polar bears in Alaska year-round. The purpose of the research is to investigate (1) population structure and life history parameters, (2) distribution and abundance, (3) movement patterns and habitat use, and (4) behavioral response of polar bears to the presence of boats. Researchers would harass, observe/track, photograph/videotape, capture, mark¹, sample², and/or instrument³ numerous polar bears of both sexes and all age classes. MMM requests up to three polar bear mortalities⁴ per year, not to exceed six during the five-year period. Researchers would use various measures to minimize impacts on polar bears and also would be required to abide by FWS's standard permit conditions. MMM's Institutional Animal Care and Use Committee (IACUC) has reviewed and approved the research protocols.

General issues and the Commission's role

The Commission originally received this application for review on 25 March 2025. During its informal review, the Commission noticed that the application referenced various IACUC protocols in lieu of providing detailed information and that the provided IACUC protocols did not contain much of the referenced information. Although the Commission requested copies of the missing IACUC protocols, FWS provided two additional IACUC protocols on 2 April 2025 that still did not contain the information referenced in the application. As such, the Commission submitted detailed informal comments on the application as well as the numerous IACUC protocols and supplemental documents. The Commission did not receive any responses to its comments and, when the

¹ With paint, tattoos, ear tags, and PIT tags.

² Including blood, fat biopsy, milk, hair, feces, and swabs.

³ Including ear-mounted and glue-on radio transmitters, satellite and GPS collar tags, and internal biologgers.

⁴ Including unintentional or intentional mortality (i.e., euthanasia for humaneness purposes).

application was published in the *Federal Register* on 6 June 2025, it was identical to the version received by the Commission in March. The Addendum to this letter includes a list of some of the Commission's outstanding issues with MMM's application. The Commission recommends that FWS work with MMM to address these issues before issuing any permit.

The Commission is aware that FWS has experienced significant staffing changes and other difficulties during the past several months. It is possible that the consequent disruption led to the lack of response to the Commission's comments during the review process for this application. With that in mind, the Commission wanted to remind FWS of its role in the permit review process. Typically, the Commission reviews the application documents and provides informal comments and questions to FWS. FWS then works with the applicant to gather additional information and revise inconsistencies and inaccuracies. Responses to the Commission's informal comments and questions are then shared with the Commission and a revised application is posted online for public comment. The Commission then reviews the revised application and submits a formal recommendation letter. To ensure continued efficiency of the permit review process, the Commission requests and recommends that FWS continue to provide responses to its informal comments and questions and make revised applications available online for public comment. The Commission looks forward to meeting with new permitting staff in the coming weeks to discuss its role in the permit review process in more detail.

Incomplete information

This application is incomplete with respect to FWS's application instructions in many ways. The take table, IACUC protocols, and various study plans and standard operating procedures were often referenced instead of providing a completed application. More specifically, the take table itself, which was cited 15 times in the application in lieu of providing the detailed information required by FWS's application instructions, was not included in the application documents made available for public comment. Also, several IACUC protocols were cited numerous times but the protocols themselves did not contain the majority of the information referenced as being within them. For example, the IACUC protocols were referenced for additional information about capture, restraint, holding, drug protocols, methods for capturing females with cubs, intrusive sampling methods, unintentional mortalities and serious injuries, and methods of euthanasia. However, the protocols only contained information about aerial surveys, internal biologgers, and MMM's previous decision to stop pulling teeth. Some of the referenced information was notably missing from all application and supporting documents, including methods for intrusive sampling and euthanasia.

As the Commission has stated in the past, the intent of FWS's application instructions is for the applicant to provide detailed information for the various sections within the application text and for the take table to support that information. Additionally, protocols submitted for IACUC approval are part of a separate application process. Applications for both the research permit and IACUC approval should be complete and all relevant procedures and take numbers⁵ authorized by the permit also should be approved by the IACUC.⁶ Accordingly, the Commission finds this

⁵ Including takes for unintentional mortalities (and intentional mortalities via euthanasia).

⁶ The IACUC approval currently includes 100 total takes for capture and biopsy darting combined, whereas the permit application requests 75 captures and 160 takes for biopsy darting. Unintentional mortalities do not appear to be included in the IACUC protocols.

application to be incomplete and recommends that FWS require MMM to ensure that (1) all of the relevant information is provided⁷ and described in the text of the application, (2) the take tables, IACUC protocols, and study plans are used to support the information provided within the application, not in lieu of providing complete responses, and (3) MMM's IACUC protocols are updated to accurately reflect the procedures and take numbers authorized in the new permit, if issued.

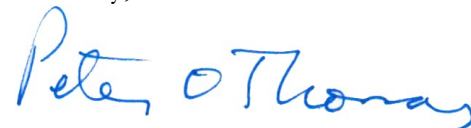
Personnel qualifications

The curriculum vitae (CVs) and qualification forms (QFs) submitted for the principal investigator (PI) and all co-investigators (CIs) provided only vague information on experience relative to the procedures that would be conducted. For example, several of the QFs listed "Capture/Handling" as the "permit activity requesting to be a PI/CI for" and specified the individual's experience as being "Capture, handling, radiocollaring, and sampling." Information on experience with specific procedures was not provided, and as such, it is unclear whether a PI/CI authorized for "capture/handling" would also be authorized to conduct everything that entails, including operating culvert traps, administering drugs, conducting remote sedation and remote tissue sampling, collecting blood, fat biopsies, and milk, marking, implanting internal instrumentation, and attaching external instrumentation. It is difficult to determine whether each PI/CI has sufficient experience with those specific procedures when capture and handling are described in such broad terms. The Commission recommends that FWS require MMM to clearly state which specific procedures each PI/CI would be authorized to conduct and provide evidence in each CV or QF demonstrating that each PI/CI has sufficient experience for each activity that person would be authorized to conduct under the permit. The Commission also recommends that FWS ensure that there are designated and qualified CIs to administer drugs and conduct euthanasia and necropsies.

The Commission recommends that FWS refrain from issuing a permit to MMM until (1) the Commission's informal comments and questions have been addressed, (2) missing and incomplete information provided in supplementary documentation is incorporated into the final application, (3) a more thorough assessment of personnel qualifications and authorized procedures has been conducted, and (4) FWS ultimately determines whether the *bona fide* and humaneness criteria under section 104 of the MMPA have been met.

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

Sincerely,



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

⁷ For example, methods for intrusive sampling and euthanasia are currently missing from the application documentation.

Addendum

Some of the Commission's concerns with MMM's permit application include the need to—

- indicate a maximum number of bearded and ringed seals that might be harassed during aerial surveys and helicopter operations;⁸
- describe how researchers would mitigate any potential adverse reactions during aerial surveys;⁹
- regarding capture and handling, (1) specify how frequently an unattended trap would be checked, how an immobilized bear would be monitored during transport, and how long a recovering bear would be left unattended in a locked trap and (2) explain why it is not necessary to monitor vital signs more frequently than every 5–15 minutes throughout the handling period;¹⁰
- regarding capture of females with cubs, (1) clarify whether there is a minimum age for sedating cubs-of-the-year, for intrusive sampling, or for other procedures and (2) describe how researchers would ensure females and cubs recover from sedation and reunite after captures.¹¹ For example, herding bears from a helicopter and/or recapturing and translocating cubs could be used if cubs get separated, but MMM should specify the methods intended to prevent them from getting separated in the first place.
- if supportive procedures are not effective in an emergency situation, describe whether researchers would provide additional drugs or whether other procedures would be employed;¹²
- provide a detailed description of remote biopsy sampling, captures via helicopter, and Southern Beaufort Sea aerial surveys. Include objectives, hypotheses, and associated methodology, relevant background information, and an explanation of how sample size/take numbers were determined;¹³
- for instrumentation, marking, and tagging, specify (1) the mass of the internal biollogger, (2) the type of paint used to mark bears, (3) use of PIT tags if they would be used¹⁴, (4) the minimum age required for marking and instrumentation, (5) whether internal biologgers would be removed from captive bears after the validation study, and (6) internal biollogger methodology with wild bears after the biologgers in captive bears have been validated;¹⁵
- specify the dart sizes used for biopsy sampling and remote sedation and how the darts would be sterilized;¹⁶
- for remote biopsy sampling and remote sedation, specify (1) the maximum pursuit time and distance for moving a female with cubs to a safer location, (2) the maximum pursuit time per

⁸ Item 2b in the application instructions; the current version of the application only states that in 2016, 191 of 912 ringed seals and 51 of 740 bearded seals encountered during Chukchi Sea helicopter captures entered the water or changed their position on the ice in response to the helicopter.

⁹ Item 6d in the application instructions.

¹⁰ Items 10a and 10b in the application instructions.

¹¹ Items 10g, 10h, and 22 in the application instructions.

¹² Item 10i in the application instructions.

¹³ Item 18 in the application instructions.

¹⁴ They are listed in the take table but not the narrative.

¹⁵ Item 20e in the application instructions.

¹⁶ Items 10h and 20f in the application instructions.

day (including when bears are not moving faster than a walk); and (3) the maximum number of attempts per day;¹⁷ and

- revise the take table to¹⁸
 - include a new row for bears that are captured in culvert traps and released because they are non-targets, if needed;
 - include a new row for hazing bears that approach capture operations while sampling is underway or while bears are recovering, if needed;
 - specify whether any authorized procedures in the capture row do not apply to cubs;
 - indicate that only adult females in a family group would be biopsy darted, consistent with the standard operating procedure;
 - specify that the aircraft could descend to a minimum altitude of 90 m not 30 m during aerial surveys, consistent with the rest of the application documentation;
 - include in the non-intrusive sampling row boat-based surveys and behavioral observation in the “Procedure/Activity” column and revise the “Details” column to reflect the total number of takes for subadults and cubs rather than breaking them out by sex¹⁹;
 - add a row to the take table for the collection of saliva, scat, and hair samples; and
 - include collar and glue-on tags in the “Procedure/Activity” column in the captive polar bear row.

¹⁷ Items 10a and 20f in the application instructions.

¹⁸ Item 21 in the application instructions.

¹⁹ MMM previously indicated that they would not be able to determine the sex of subadults or cubs from a distance of 1.6 km.