



MARINE MAMMAL COMMISSION

20 December 2018

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. 773494
(Florida Fish and Wildlife Conservation Commission)

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). The Florida Fish and Wildlife Conservation Commission (FFWCC) proposes to conduct research on West Indian manatees during a five-year period—the previous permit authorized similar activities.

FFWCC proposes to conduct research year-round on manatees throughout the southeastern United States. The purpose of the research is to investigate (1) life-history characteristics, (2) ecology, (3) migration patterns, and (4) distribution of manatees, as well as the impacts of human activities. Researchers would harass, observe, handle, restrain, measure/weigh, mark, sample, and instrument manatees¹ of any age and either sex. FFWCC would use various measures to minimize impacts on manatees and also would be required to abide by the U.S. Fish and Wildlife Service's (FWS) standard permit conditions. FFWCC received a waiver in 2013 from the Animal and Plant Health Inspection Service (APHIS) indicating that its activities, at that time, did not merit registration under the Animal Welfare Act and thus did not need Institutional Animal Care and Use Committee (IACUC) review or approval².

General issues

Based on its informal review of FFWCC's application, the Commission notes numerous deficiencies and inconsistencies. First and foremost, FFWCC did not use FWS's 2017 application instructions when it drafted its application³. Secondly, FWS apparently has not made FFWCC aware

¹ Manatee samples also could be imported and exported worldwide and could originate from wild and captive animals.

² A finding made by APHIS more than five years ago does not apply *ad infinitum*.

³ Which was submitted in April 2018.

that it did not follow the current application instructions⁴ or request that it resubmit a revised application contingent on those instructions⁵. Further, the deficiencies and inconsistencies make it difficult for the Commission, or any other reviewer, to evaluate what FFWCC is proposing. *Some* of those shortcomings include failing to—

- provide details on the proposed unmanned aircraft system (UAS), including the maximum size and mass of the UAS, whether a spotter would be present, the minimum altitude of the UAS, etc.⁶;
- provide details on the minimum age of calves to be captured, handled, sampled, marked, and instrumented and justification of those procedures must be conducted on calves, which would include neonates⁷;
- provide the (1) masses of the time-depth recorder, bioacoustic probe, and digital acoustic recording device (DTAG), (2) maximum number of devices and maximum combined mass to be used at a given time, (3) the release mechanism for DTAGs, and (4) whether old tags and belts would be removed when new ones are attached⁸;
- fully describe underwater photography procedures⁹;
- delineate specific measures it would take to minimize impacts on females with calves and to ensure that females and calves would reunite after capture and handling activities¹⁰;
- specify the types and dosages of drugs to be administered “in the event that drug therapy is deemed medically necessary”¹¹;
- request any unintentional mortalities¹² when FFWCC noted that mortalities have occurred occasionally during previous field seasons¹³;
- justify the need to biopsy sample 1,600 manatees up to 10 times per year, particularly given that the annual reports provided by FWS from 2010 and 2011¹⁴ indicate that a maximum of 3 samples were taken per individual;
- specify whether incidental capture takes would be necessary¹⁵;

⁴ The 2014 application instructions were similar to those of 2017, except they included less clearly stipulated requirements

⁵ See the [Commission’s 18 December 2018 letter](#) explaining why submission of a revised application is necessary.

⁶ See Item 20c in the 2017 application instructions.

⁷ See Item 23 in the 2017 application instructions.

⁸ See Item 20e in the 2017 application instructions.

⁹ Including whether only snorkelers would be used or pole cams could be used as well. See Item 20g in the 2017 application instructions.

¹⁰ See item 22 in the 2017 application instructions.

¹¹ Based on Item 13e of the application. Item 20a in the 2017 application instructions should be addressed accordingly.

¹² Including intentional mortalities via euthanasia for humaneness purposes.

¹³ See Items 26, 27, and 28 in the 2017 application instructions.

¹⁴ FWS should have provided more recent annual reports when it requested the Commission for its informal review.

¹⁵ Incidental captures would occur if FFWCC captures a manatee but decides to release it rather than handle it further. See Items 10 and 21 in the 2017 application instructions.

- address possible incidental harassment of bottlenose dolphins during the proposed activities;¹⁶
- adequately explain whether research would be conducted on captive animals¹⁷ and, if so, what those activities would entail¹⁸—some of the institutions listed in the application are not rehabilitation facilities and hold manatees permanently for display purposes;
- include (1) the number¹⁹, type, and origin of samples to be obtained from the various manatee species and subspecies and from dugongs and (2) country of origin from which the samples might originate²⁰;
- provide an explanation for the objectives and hypotheses associated with importing samples from the various manatee species and subspecies and from dugongs²¹;
- specify prudent mitigation measures²²;
- delineate the duties and responsibilities of the principal investigator (PI) and each (CI) and provide evidence in CVs that each person has sufficient experience to capture and handle (including mark, sample, and instrument) manatees and to conduct each of the activities that he or she would be authorized to conduct under the permit²³; and
- include an accurate take table²⁴.

The take table should (1) stipulate that swabs would be collected, (2) include a row for incidental captures and designate them as Level A harassment, (3) include the ages and sexes of the manatees to be taken, (4) stipulate that equipment removal is considered Level A harassment, not Level B harassment, and include it in the tagging row, (5) stipulate that the 1,600 proposed biopsy sampling takes are considered Level A harassment, not Level B harassment, (6) specify the maximum number

¹⁶ See Items 7a–c in the 2017 application instructions.

¹⁷ The application should specifically state whether activities would occur on permanently captive animals or temporarily captive animals that are being rehabilitated.

¹⁸ If research would be conducted on captive animals, FFWCC should expound upon items 18, 19, 20, and 33 in the 2017 application instructions. In addition, the term ‘rehab’ is used throughout the application. It is unclear whether those animals are currently in rehabilitation, have been rehabilitated and are ready for release, or were rehabilitated and currently are in the wild.

¹⁹ Including age class and sex.

²⁰ This includes whether the samples would originate from (1) live or dead animals, (2) live animals that were collected during permitted research on free-ranging or captive animals, husbandry activities on captive animals, or rehabilitation activities on temporarily captive animals, and (3) dead animals that were collected during permitted research, legal fishing operations, in a captive setting (research or public display facilities), or in the wild (from dead stranded animals). This also includes ensuring that the relevant permits are obtained under the Convention on International Trade in Endangered Species of Wild Fauna and Flora. See Items 12 and 29 in the 2017 application instructions.

²¹ See Item 18 in the 2017 application instructions.

²² Observers would only monitor a manatee’s respiration in the capture net and ensure that all animals in the net are accounted for, *when feasible*. Those measures should be implemented all of the time. If a manatee exhibits an avoidance response, FFWCC states only that the duration of vessel disturbance would be minimized, not that vessels would back off and leave the animal. In addition, if an animal reacts adversely to the presence of a UAS, the UAS’s altitude would be increased by certain increments indefinitely until photography becomes ineffective; whereas, fixed-wing aircraft would abort if the animal is still reacting adversely to its presence after three attempts to photograph it. This latter measure should be employed for UASs as well.

²³ See Item 30 in the 2017 application instructions.

²⁴ Two separate tables should be provided, one for the proposed procedures and one for the samples that would be obtained. See Items 21 and 29a–j, respectively, in the 2017 application instructions. These issues should be amended in the application text as well.

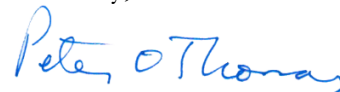
of manatees to be taken during aerial surveys²⁵, and (7) include underwater photography in the photo-id row.

Further, many of FFWCC's activities—both those that could occur on captive animals and those that are proposed for wild animals—are considered invasive procedures and require IACUC review and approval. Other entities, including those that conduct the same types of activities on manatees (i.e., Mote Marine Laboratory, U.S. Geological Survey, etc.) or on other marine mammals (i.e., Alaska Department of Fish and Game, FWS, SeaWorld, etc.), have their research protocols reviewed and approved by an IACUC prior to conducting any of the activities. If FFWCC does not have an IACUC, it can have that of one of its collaborators (e.g., Mote Marine Laboratory, USGS, SeaWorld) or of a nearby academic institution review the protocols.

Due to all these shortcomings, the Commission recommends that FWS return the application to FFWCC with instructions to (1) abide by the 2017 application instructions, (2) address the deficiencies stipulated herein, and (3) submit a revised application. Upon submission of a revised application that satisfies the requirements of FWS's 2017 permit application instructions, section 104(c)(3) of the MMPA, and applicable implementing regulations, FWS should process the revised application expeditiously and provide it to the Commission for formal comment and review when notice is published in the *Federal Register*. If FWS decides to process the application in its present state, the Commission recommends that the application be denied as not meeting the applicable requirements. Furthermore, the Commission recommends that, prior to processing any additional applications or sending them to the Commission for review, FWS ensure that *all* applicants use the 2017 application instructions and, if an applicant has not used those application instructions, require that it does so and resubmits a revised application. FWS processes between 10 and 20 marine mammal permit applications per year so it should not be difficult for FWS to determine at the time the application is submitted²⁶ whether an applicant has used the current instructions.

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

Sincerely,



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

cc: Diane Bowen, FWS
Leslie Ward-Geiger, FFWCC
Margie Barlas, FFWCC

²⁵ Noting the 'entire population' is not sufficient.

²⁶ Rather than many months later when an analyst reviews the information within the application.