



# MARINE MAMMAL COMMISSION

17 October 2019

Ms. Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910-3225

Dr. Nature McGinn, ACA Permit Officer  
Permit Office, Room 755  
Division of Polar Programs  
National Science Foundation  
2415 Eisenhower Avenue  
Alexandria, Virginia 22314

Dear Ms. Harrison and Dr. McGinn:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed BBC Worldwide America's (BBC) permit application 23117 as submitted to the National Marine Fisheries Service (NMFS) with regard to the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA). The Commission also has reviewed BBC's permit application 2020-012 as submitted to the National Science Foundation (NSF) with regard to the goals, policies and requirements of the Antarctic Conservation Act (the ACA). BBC is requesting authorization under the MMPA and ACA to conduct filming activities on Weddell seals<sup>1</sup> and killer and minke whales<sup>2</sup> in Antarctica during a two-year period. Individuals of any age class and either sex could be harassed. The filmmakers would implement various measures to minimize impacts on marine mammals and would be required to abide by NMFS's and NSF's standard permit conditions. The footage would be included in BBC's upcoming *Frozen Planet II* documentary series.

## **Disturbance of marine mammals under the ACA**

Under the MMPA, "take" of marine mammals may result from activities that have the potential to injure (Level A harassment) or disturb (Level B harassment) a marine mammal (50 C.F.R. § 216.3). In contrast, "take" of marine mammals under the ACA is defined as killing, injuring, capturing, handling, or molesting a marine mammal, and "harmful interference" is defined as disturbing a marine mammal (45 C.F.R. § 670.3). As such, BBC requested and enumerated the numbers of "takes" in its MMPA application only. However, BBC did not specify the numbers of animals that may experience "harmful interference" in the ACA application<sup>3</sup>. Based on correspondence with NSF, the Commission understands that NSF does not intend to allow BBC to conduct any activity that may result in a "take" of a marine mammal but that it would stipulate the numbers of marine mammals that may be disturbed by the proposed filming activities. The Commission agrees with that approach and recommends that NSF stipulate in the final permit the numbers of marine mammals that could be disturbed by BBC consistent with "harmful interference" under the ACA.

<sup>1</sup> Including filming on ice, underwater, and with remotely operated vehicle (ROV) and unmanned aerial systems (UASs).

<sup>2</sup> Including filming on ice and with UASs, helicopters, and stationary pole cameras.

<sup>3</sup> As required in section 8 of the application.

## Mitigation measures for Weddell seals

BBC has requested to conduct numerous filming activities on Weddell seals, with a particular focus on female-pup pairs on the ice, males fighting over underwater territories, and hauled-out injured males recovering after fights. BBC also proposed to approach seals at close distances, regardless of their sensitivity to human presence. The Commission finds BBC's close approach distances concerning, especially since the BBC filmmakers may not be able to judge when disturbance has occurred and retreat is warranted. This issue is compounded by the fact that (1) BBC's close approach distances are less than those recommended by Dr. Jay Rotella, a scientific collaborator on the permits, (2) mitigation measures are missing or vague for both applications for some of the proposed activities, and (3) BBC's proposed mitigation measures are inconsistent between the ACA and MMPA applications. The Commission understands that some of the inconsistencies are due in part to the time constraints under which NMFS and NSF are working to issue the respective permits before the start of BBC's field season. As such, BBC's responses to the Commission's informal comments on the MMPA application could not be incorporated into the ACA application. However, it is imperative that the proposed activities and mitigation measures are consistent between the MMPA and ACA applications so as to avoid confusion.

*On-ice filming of seals*—BBC stated in its ACA and MMPA applications that Dr. Rotella indicated that Weddell seals on the ice generally are comfortable with approaches to as close as 10 m on the ice. However, BBC requested a minimum approach distance of 5 m. If BBC seeks to film natural behaviors of seals and avoid disturbing them<sup>4</sup>, as it stated throughout both applications, it would be prudent to increase the minimum approach distance to 10 m for seals hauled out on the ice. BBC also intends to approach female-pup pairs, including actively nursing<sup>5</sup> and newborn pups, at a 5-m minimum distance and stated in its MMPA application that it would be “particularly careful” around female-pup pairs. However, BBC did not provide details on what measures would be implemented to ensure the filmmakers were “particularly careful” around female-pup pairs, nor did it include any mitigation measures in its ACA application. Neither application explicitly stated whether the filmmakers would retreat if their activities interfere with vital functions such as nursing or pair bonding or whether they would avoid positioning themselves between a female and her pup. In addition, BBC requested to film injured males on the ice that are recovering from territorial fights but did not specify the severity of injury that could be filmed. BBC stated in its MMPA application that it would approach injured males no closer than 10 m when filming them on the ice. In response to the Commission's informal inquiries regarding the appropriateness of the close approach distance, BBC indicated that Dr. Rotella suggested approaching injured males at 10 to 20 m and adapting based on responsiveness of the animal. Nevertheless, in its ACA application, BBC indicated that filmmakers would approach injured males to as close as 5 m. Injured animals should be afforded sufficient space to minimize any undue stress caused by the presence of the filmmakers. Based on these issues, the Commission recommends that NMFS and NSF condition their final permits to (1) specify 10 m as the minimum approach distance to any seal on the ice, including female-pup pairs and injured males, based on Dr. Rotella's recommendations and increase the

---

<sup>4</sup> Contrary to NMFS's stance that BBC should not be required to maintain a distance such that no disturbance occurs, BBC indicated that it does not intend to disturb the animals or film unnatural or disturbance behaviors. Rather, BBC is requesting authorization to *potentially* disturb them in the course of conducting filming activities, should an animal respond to the filmmakers' presence.

<sup>5</sup> In its previous MMPA permit 21486, BBC was not allowed to approach pups that were actively nursing.

approach distance if an injured male shows any signs of aggression or stress (i.e., increased vocalizations, open-mouth breathing, etc.), (2) prohibit approaches to pups that are actively nursing, (3) require that filmmakers cease their activities if there is evidence that on-ice filming is interfering with vital functions, and (4) require that filmmakers not position themselves between a female and her pup on the ice.

*Underwater filming of seals*—BBC requested to approach seals no closer than 5 m for both its divers and ROV. In its MMPA application, BBC reiterated that it will use the “head raise and look” behavior to determine when to cease underwater filming activities, but it did not stipulate any mitigation measures in its ACA application or whether and when divers or the ROV would retreat. Those measures should have been specified. In addition, neither application indicated whether divers or the ROV would avoid coming between fighting males or a seal and its breathing hole or whether activities would be aborted if fighting males appear affected by their presence. All such measures would be prudent. Accordingly, the Commission recommends that NMFS and NSF condition their final permits to (1) explicitly require that divers and/or the ROV will retreat if the “head raise and look” behavior is noted, (2) prohibit divers and the ROV from positioning themselves or itself between fighting males or a seal and its breathing hole, and (3) require that filmmakers cease their activities if there is evidence that either divers or the ROV are interfering with fighting or any other vital function.

*UAS filming of seals*—During UAS filming of Weddell seals hauled out on the ice, BBC indicated in its MMPA application that it would increase altitude and cease activities for 30 minutes if an animal reacts adversely to the UAS’s approach using the “head raise and look” behavior. The same mitigation measures would be used when flying above female-pup pairs. In its ACA application, BBC did not define what type of behavior would be used to determine when the UAS will increase altitude or leave the area. BBC only stated that the filmmakers “will be particularly careful” when targeting female-pup pairs with the UAS. The measures should be consistent between the permits. Further, mitigation measures were not stipulated in either application for situations in which the UAS is flown above an injured male or in which the UAS appears to be interfering with nursing or other vital functions. Relevant measures should have been specified in both applications. Therefore, the Commission recommends that NMFS and NSF condition their final permits to (1) require that the filmmakers increase the UAS’s altitude if an animal exhibits the “head raise and look” behavior or if an injured male shows any signs of aggression or stress (i.e., increased vocalizations, open-mouth breathing, etc.) and if the animal still react to the UAS at a higher altitude, cease activities for at least 30 minutes and (2) require that the filmmakers cease their activities if there is evidence that the UAS is interfering with nursing, pair-bonding, or other vital functions.

### **Additional inconsistencies between the MMPA and ACA applications**

In addition to the inconsistencies regarding mitigation measures associated with filming seals, there are inconsistencies regarding the filming of killer and minke whales and the personnel who would serve as UAS pilots. BBC stated in its MMPA application that UAS filming of killer and minke whales would be aborted if the filmmakers observe certain types of “negative” behaviors (e.g., tail slaps or head lurches), but in its ACA application, BBC described only that the minimum altitude of the UAS would be achieved “slowly,” with no additional mitigation measures stipulated. The Commission recommends that NMFS and NSF condition their final permits to require BBC to abort any UAS filming if any killer or minke whale exhibits any adverse behavior (e.g., tail or chin

Ms. Jolie Harrison and Dr. Nature McGinn

17 October 2019

Page 4

slaps, head lurches, terminal dives). Additionally, in correspondence with the Commission, BBC indicated that it removed Mr. Meyrick, one of its UAS pilots, from its MMPA application due to his lack of experience flying UAS over marine mammals. However, this has not been clarified in the ACA application. The Commission recommends that NSF specify that Mr. Meyrick would not be authorized to conduct UAS operations over marine mammals under the ACA permit.

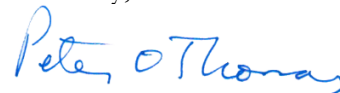
### **Role of scientific experts**

In both its MMPA and ACA applications, BBC identified Dr. Rotella as a scientific collaborator for its filming activities and referenced his guidance regarding appropriate approach distances that should minimize disturbance to Weddell seals. BBC stated that Dr. Rotella plans to brief the filmmakers upon their arrival about best practices and protocols for working around Weddell seals and also would be in the field conducting his own research on Weddell seals in the vicinity of the filmmakers. However, both applications explicitly stated that Dr. Rotella would not accompany the filmmakers into the field for any of the filming activities on Weddell seals. The Commission views this as an issue for several reasons.

First, it is standard practice for photographers/filmmakers working in Antarctica to be accompanied for at least one to two days by an expert on the behavior of the target species. Having an expert accompany the filmmakers for a few days allows them to learn firsthand about various types of seal behaviors that constitute disturbance and enables them to identify behaviors that would necessitate a retreat. This becomes especially important when filmmakers seek to conduct on-ice filming at close distances of female-pup pairs and injured males that may be particularly sensitive to human disturbance, as BBC has requested in both applications. Additionally, an expert can help the filmmakers identify seals that are suitable for filming, which is most easily accomplished if the expert is present in the field. Second, in BBC's previous MMPA permit application 21486, it requested to conduct similar filming activities on Weddell seals in Antarctica and stated explicitly that Dr. Rotella would be present for a few days of filming. It is unclear why similar arrangements were not proposed for BBC's currently proposed activities. Finally, based on the lack of mitigation measures stipulated in the applications and the inconsistencies between Dr. Rotella's recommended approach distances and the proposed approach distances, it is clear that BBC would benefit from Dr. Rotella's advice in the field regarding approaching Weddell seals and conducting the various filming activities. Therefore, the Commission recommends that NMFS and NSF condition their final permits to require Dr. Rotella to accompany BBC into the field during Weddell seal on-ice filming activities for at least one day.

The Commission believes that the proposed activities are consistent with the purposes and policies of the MMPA and ACA. Please contact me if you have any questions regarding the Commission's recommendations.

Sincerely,



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