



# MARINE MAMMAL COMMISSION

31 August 2011

Mr. Timothy J. Van Norman  
Chief, Branch of Permits  
Division of Management Authority  
Fish and Wildlife Service  
4401 North Fairfax Drive  
Arlington, VA 22203

Re: Permit Application No. PRT-37808A  
(Sea to Shore Alliance)

Dear Mr. Van Norman:

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 and Endangered Species Act. Sea to Shore Alliance is requesting authorization to conduct research on West Indian manatees in the southeastern United States and to export/import samples collected from West African manatees during a five-year period. The proposed activities currently are authorized under permit MA107933, which was issued to EcoHealth Alliance, Inc. (formerly Wildlife Trust). The EcoHealth Alliance's Florida office is closing and its researchers elected to join Sea to Shore Alliance.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that the Fish and Wildlife Service issue the requested permit, provided that the Service—

- conditions the permit to require the Alliance to submit documentation demonstrating that all samples to be imported were taken in accordance with the laws of the country of origin and were not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws;
- requires the Alliance to obtain all necessary permits under the Convention on International Trade in Endangered Species of Wild Fauna and Flora before exporting or importing any manatee part;
- conditions the permit to (1) allow two unintentional serious injuries or deaths during the five-year period but (2) require suspension of research activities, pending review by the Service, if any death or serious injury occurs;
- takes steps to ensure that activities to be conducted under this permit and those of other permit holders who might be conducting manatee research in the same areas are coordinated and, as possible, data and samples shared to avoid duplicative research and unnecessary harassment of animals; and
- advises the applicant of the need to have the proposed activities reviewed and approved by an Institutional Animal Care and Use Committee before initiating the proposed activities.

## RATIONALE

The Sea to Shore Alliance proposes to conduct research on West Indian manatees within U.S. territorial waters in the Atlantic Ocean and Gulf of Mexico and to import samples collected from West African manatees in various African countries. The proposed research would continue an on-going research project to study manatee abundance, movement patterns, survival rates, site fidelity, reproductive behavior, genetic composition, and foraging ecology.

The Alliance is seeking authorization to harass, capture, handle, restrain, measure, weigh, sample, perform ultrasound on, mark, and attach instruments to various numbers of West Indian manatees (Table 1). The applicant would capture animals in nets and transport them to a boat or to land. The Alliance would collect morphometric data, skin, blood, milk, urine, feces, and tissues exhibiting lesions from each manatee. Skin samples would be collected by scraping the skin or notching the manatee's fluke with a tool developed to notch the ears of cattle. Skin samples also could be collected from unrestrained, free-ranging manatees using these same methods. Each captured manatee would be marked with two passive integrated transponders (PIT tags), and a subset would be freeze-branded with two brands.

Table 1. Requested annual takes by activity for West Indian manatees.

Activity	Number of manatees per year
Capture, restrain, measure/weigh, sample, and ultrasound	30
PIT tag	50
Collect skin samples	50
Freeze-brand	30
Attach tag assembly	30
Harass incidentally during live captures, re-tagging, and tag assembly removal	100
Harass incidentally during photo-identification, tracking, tag exchanges, and equipment removal	800
Harass incidentally during aerial surveys	2,000

Researchers would attach a tag assembly on up to 30 manatees per year using a peduncle belt with a flexible nylon tether. The positively-buoyant tag assembly could include VHF radio, GPS, platform transmitter terminal, or multi-sensory digital tags or time-depth recorders. Those assemblies are fabricated with a built-in safety device that allows for detachment if the animal gets entangled in fishing nets or other hazards. Researchers would use snorkel gear to approach manatees within 1 m to attach, adjust, or exchange tags, remove assemblies, or assess the body condition of the individual. Researchers would use extreme caution when approaching manatees by snorkeling up to the animals as silently as possible. Special care would be given when handling pregnant and small animals, including mother-calf pairs. Possible modifications to existing tagging methods also may be tested on captive manatees to improve attachments and release mechanisms. Those tests may be

conducted at, and coordinated with, Miami Seaquarium, Mote Marine Laboratory, Lowry Park Zoo, SeaWorld of Florida, Cincinnati Zoo, and Columbus Zoo.

The Alliance also seeks authorization to observe, photograph, and videotape 800 manatees per year. Researchers under this permit would observe, photograph, and videotape manatees from above the water, in the water, and from land. In-water research would be conducted by a single researcher using snorkel gear. Boat tracking and snorkeling activities would be kept to a minimum around free-ranging manatees. Researchers would avoid easily disturbed individual manatees during photography and videotaping sessions. In addition, the Alliance may conduct aerial surveys in fixed-wing aircraft at an altitude of 213 m or higher up to twice per month. It would use the same methodology used by the Florida Fish and Wildlife Conservation Commission to minimize disturbance of manatees during aerial surveys.

For West African manatees, the applicant seeks authorization to import into the United States samples collected in 22 West African countries. Those samples would include blood, urine, feces, milk, swabs, tears, hair, and whiskers collected from up to 30 live West African manatees and tail notch samples collected from up to 50 live West African manatees. The Alliance also is requesting authorization to import samples (e.g., bone and tissue for genetic and stable isotope analysis and ear bones for age determination studies) from an unspecified number of manatee carcasses on an opportunistic basis. The applicant states that samples from live manatees would be collected during capture or rescue projects in multiple West African countries, where the applicant is a collaborator. However, it is not clear whether samples from illegally hunted manatees would be collected when carcasses are salvaged. In this regard, section 102(c) of the Marine Mammal Protection Act prohibits the importation of any marine mammal taken in violation of the laws of the country of origin or in violation of the Marine Mammal Protection Act. The Marine Mammal Commission therefore recommends that the Fish and Wildlife Service condition the permit to require the Alliance to submit documentation demonstrating that all samples to be imported were taken in accordance with the laws of the country of origin and were not taken in violation of the Marine Mammal Protection Act or other applicable U.S. laws. In addition, the Marine Mammal Commission recommends that the Service require the Alliance to obtain all necessary permits under the Convention on International Trade in Endangered Species of Wild Fauna and Flora before exporting or importing any manatee part.

It is possible that a manatee that is captured may have an underlying medical condition of which the researchers are unaware and that the animal's compromised health may cause or contribute to its accidental death or injury during capture, restraint, or sampling. The Alliance has not requested authorization for any unintentional injuries or deaths in the course of conducting the proposed research activities. The Commission notes, however, that the Service has authorized a small number of unintentional injuries and deaths under other permit holder's existing and previous permits. As such, the Marine Mammal Commission recommends that the Fish and Wildlife Service condition the permit to (1) allow two unintentional serious injuries or deaths during the five-year period but (2) require suspension of research activities, pending review by the Service, if any death or serious injury occurs.

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In the United States, various permit holders are conducting similar research on manatees at the same time and potentially in the same general locations as the applicant. The Marine Mammal Commission recommends that the Fish and Wildlife Service take steps to ensure that activities to be conducted under this permit and those of other permit holders who might be conducting manatee research in the same areas are coordinated and, as possible, data and samples shared to avoid duplicative research and unnecessary harassment of animals. The proposed activities also have not been reviewed or approved by an Institutional Animal Care and Use Committee, in accordance with section 2.31 of the Animal and Plant Health Inspection Service's Animal Welfare Act regulations. The Commission understands that the Alliance does not have its own Institutional Animal Care and Use Committee; however, some collaborators (i.e., University of Florida, U.S. Geological Survey, Mote Marine Laboratory) do have such committees. Because it considers some of the proposed activities to be invasive, the Marine Mammal Commission recommends that the Fish and Wildlife Service advise the applicant of the need to have the proposed activities reviewed and approved by an Institutional Animal Care and Use Committee before initiating the proposed activities.

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 and the Endangered Species Act.

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

Sincerely,



Timothy J. Ragen, Ph.D.  
Executive Director