



JOB DESCRIPTION

Position:	Ocean Giants Program Postdoctoral Researcher/Fellow
Reports to:	Director, Ocean Giants Program
Location:	Centre for Global Conservation, Bronx Zoo, Bronx, New York
Country Program/Sector:	New York
Position Type:	Full Time, 2 Years

Job Summary:

The Wildlife Conservation Society's Ocean Giant Program is seeking a Postdoctoral level researcher to work primarily on an acoustic monitoring project in the New York Bight. The primary focus of the project is detection, classification and potentially localization of cetacean vocalizations, as well as characterization of ambient noise using archival and near-real time recording technology. The data sets will include both historic and planned recordings from near-real time acoustic monitoring buoys deployed as part of a project to detect and alert in near real-time the presence of the four key species of large whales present in the New York Bight (North Atlantic Right Whale, humpback whale, fin whale and sei whale). Analysis of the archival data as well as other acoustic data sets collected from recorders placed elsewhere in the New York Bight will involve both manual and automated methods for documenting all vocalizing marine mammal species.

The successful candidate will be expected to work independently under the supervision of the Ocean Giants Director and Ocean Giants Associate Marine Conservation Scientist and will be expected to organize and process acoustic data and conduct analyses to satisfy the project goals. Data processing will involve some manual processing along with testing and running automated detectors for species present in the New York Bight, and the development of automated detectors if required. The successful applicant will be expected to both lead and contribute to report writing and publications. Additional opportunities as part of the Ocean Giants Program team may include; 1) assisting with field work activities in the New York Bight collecting marine mammal sightings, photo ID, genetic and tag data 2) contribute to policy, education and advocacy initiatives, 3) work actively on current or planned projects on ocean noise, eDNA and synthesis of multiple types of data.

The postdoctoral research position will require individuals that are skilled at analysis of large acoustic data sets, spatial analyses and strong data-management, analytical and writing skills with a demonstrated ability to lead and finish relevant projects with a good publication track record. Additional beneficial skills that will be viewed favorably include advanced mathematical modeling (e.g., habitat modeling, mark-recapture demographic modeling), ability to work with and integrate acoustic data with other data types, and extensive marine mammal field work experience. Candidates are expected to have excellent communication skills and the ability to work positively in a team environment and under difficult conditions when in the field. The position is currently funded for 2.5 years, with the option of continuation given satisfactory performance and the acquisition of further funding.

Major Responsibilities:

- Organizing and processing acoustic data (manual processing along with designing, testing and running automated detectors for species present in the New York Bight)
- Characterization and analysis of ambient noise
- Conduct acoustic analyses to satisfy the project goals.
- Report writing and publications.

Additional opportunities as part of the Ocean Giants Program team may include;

- Assisting with field work activities in the New York Bight collecting marine mammal sightings, photo ID, genetic and tag data
- Contributing to policy, education and advocacy initiatives
- Work actively on current or planned projects on ocean noise, eDNA and synthesis and integration of multiple types of data.
- Familiarity with field deployment of acoustic recording gear and/or telemetry and other assessment methods.

Minimum Requirements:

The successful applicant is expected to have:

- A PhD or the equivalent in experience in relevant fields (marine bioacoustics, spatial modeling). The following experience is highly desirable and should be addressed in the cover letter (this is a non-prioritized list and applicants will be assessed on the specific subset of skills from this list for which they have relevant experience).
 - Working with large datasets of long-term acoustic data and spatially explicit data
 - Familiarity with cetacean vocalizations and classification of detected vocalizations to species or taxon group
 - Fluency in the use of Bioacoustic analysis software (such as Raven, PAMGuard, Ishmael, etc.)
 - Programming skills in R or MATLAB and other statistical approaches allowing development of stand alone analysis tools
 - Automated detection of cetacean vocalizations in large datasets
 - Field work skills
 - Demonstrated ability to write scientifically and to publish in peer-reviewed journals
 - Localization of sound sources using an array of recording elements
 - Characterization of ambient noise using established metrics and procedures
 - Demonstrated ability to write successful funding proposals for competitive grant opportunities.
 - Demonstrate familiarity with current conservation concerns for cetaceans

Application and Review Procedure

Please send a CV, detailed cover letter describing specific experience in the skills listed above or other relevant skills not mentioned, and contact information for two references, to globalrecruitment@wcs.org. Candidates must also apply online via the WCS career portal by searching job title at: <http://www.wcs.org/about-us/careers>.