

REQUEST FOR PROPOSALS FOR FIELD RESEARCH:

EARTHWATCH BOSTON URBAN RESILIENCY PROGRAM

Today the majority of the human global population lives in urban areas, with a projected growth of 1.8 percent annually. In 2015, the population in Boston, Massachusetts had reached 670,000, embedded within a metropolitan area population of 4.6 million people. Sustainability of urban communities and urban ecosystems in a world experiencing rapid change and unprecedented environmental degradation represents one of the biggest challenges we face in the Anthropocene epoch.

The Earthwatch Boston Urban Resiliency Program supports research to increase the city of Boston's resiliency to global change. Specifically, we are seeking research proposals from scientists for projects that will:

- Increase scientific knowledge and public awareness of environmental challenges to urban resiliency, while providing locally relevant solutions;
- Increase partnerships with grassroots organizations and governmental and non-governmental organizations (NGOs) at local and international levels; and
- Inform Boston urban climate-ready management plans and environmental policies.

All proposed projects must enable citizen-science participation. Because meeting these challenges requires contributions from many research fields and leveraging the power of data, we are particularly interested in interdisciplinary proposals and those that involve open-source, shared data. We strongly welcome proposals for projects that will improve human livelihoods and support underserved communities and under-represented cultural and ethnic groups

FOCAL BOSTON URBAN RESILIENCY PROGRAM RESEARCH TOPICS:

We invite proposals by qualified scientists on a broad range of urban field research to take place in the Boston metropolitan area focusing on:

- Anthropogenic impacts on land-use and land-cover change in Boston in relation to ecosystem function;
- Nature's infrastructure, including use of native seeds and plants in increasing urban resiliency to perturbation;
- Climate change impacts on biogeochemical processes, habitat, water availability, flooding (including sea-level rise), maintenance of species diversity, epidemiology, and carbon sequestration;
- Big data and collaboration among organizations in delivering citizen science;
- Development of tools to monitor interactions between humans and urban ecosystems, including innovative data collection (e.g., apps), mapping, and analysis approaches;
- Integration of ecological research with local K-12 STEM education, citizen science, and Traditional Ecological Knowledge programs; and
- Ecological restoration, with a focus on repairing the damage humans have done to urban ecosystems.

**PRE-PROPOSALS FOR PROJECTS STARTING IN 2019 WILL BE
ACCEPTED THROUGH 11:59 PM (EDT) SUNDAY, JUNE 11, 2017**

Please direct inquiries to: research@earthwatch.org

HARNESSING THE POWER OF CITIZEN SCIENCE TO ADDRESS GLOBAL CHANGE:

For over 45 years, Earthwatch has funded scientists working with citizen-scientist volunteers to increase our understanding of ecosystems, find sustainable solutions to global change, and support scientific freedom. We support projects that produce rigorous, relevant, and impactful science. Incorporating participants in fieldwork increases the broader impacts of the research we fund. Citizen scientists assist in gathering field data and return home with a deeper awareness of science and greater commitment to addressing environmental and conservation challenges.

To fit our citizen-science model, all proposed projects must:

- Have a 3-year or longer duration (longer-term research may receive priority support);
- Incorporate field-based research;
- Have data gathered primarily by citizen-scientist participants recruited by Earthwatch;
- Field 4 to 10 teams per year, each accommodating anywhere from 3 to 30 volunteers per team as needed for data collection
- Have short (1-3 day) duration teams;
- For 2-3 day teams, provide reputable housing for non-resident volunteers within a 45-minute drive from the research site;
- Be run in English, with all communications and supporting documents in English;
- Educate each team of Earthwatch volunteers about the project's science and its relevance; and
- Share project data with practitioner managers and if possible contribute to open-source datasets to maximize the impacts of the project.

GRANTS:

Annual grants cover project field expenses including: equipment, research permits, scientist transportation to the field, support staff, and food and housing while in the field. Grants do not cover scientist salaries, student tuition, overhead, or expensive equipment.

Typical annual budgets for projects with short-duration teams range between US \$10,000 – \$50,000 annually, with most of that covering volunteer and staff expenses while in the field. Final grants received are based on the number of participants. Research projects are tenable for three years and may be eligible for funding beyond that period. All projects are subject to an annual performance review.

PRINCIPAL INVESTIGATOR (PI) REQUIREMENTS:

All pre-proposals must be submitted by the PI. All PIs must have a PhD and an affiliation with a university, government agency, or science-focused NGO. We strongly encourage graduate student participation on projects and are particularly interested in helping support early-career scientists and scientists local to the research nation.

SUBMITTING A PRE-PROPOSAL:

All pre-proposals and supporting documents must be in English. Earthwatch will select pre-proposals for development into full research proposals. Criteria for selection are: quality and relevance of the project proposed, PI qualifications, and goodness of fit for citizen science. To submit a pre-proposal, visit <http://earthwatch.org/research-funding/apply-for-funding>.

**PRE-PROPOSALS FOR PROJECTS STARTING IN 2019 WILL BE
ACCEPTED THROUGH 11:59 PM (EDT) SUNDAY, JUNE 11, 2017**

Please direct inquiries to: research@earthwatch.org