

REQUEST FOR PRE-PROPOSALS FOR FIELD RESEARCH: ***ECOHEALTH ACTION***

To improve human health, it is crucial that we restore ecosystem health. Many of the earth's ecosystems are experiencing unprecedented and extensive environmental degradation and damage. These changes are occurring rapidly, driven by habitat loss caused by human activities, a human population that currently numbers 7.6 billion and will reach 8 billion by 2025, and natural disturbances such as increasingly severe climatic events and subsequent wildfires, floods, and landslides. Habitat loss is causing biodiversity to plummet globally, leading to local extirpation of species as well as regional extinctions. This decline in biodiversity is causing a decline in ecosystem services (clean air and water, fertile soil, sustainable food production) and a corresponding decline in human health.

EcoHealth is a field of research created to address this global challenge that focuses on how changes in ecosystems affect human health. An interdisciplinary field, EcoHealth looks at how changes in ecological, physical, social, and economic environments impact human health and wellbeing. Ecological restoration, defined as the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed is integral to EcoHealth. To succeed, EcoHealth projects must incorporate best practices in ecological restoration and related activities, and foster collaboration, communication, and education among local communities, practitioners (scientists), managers, and government agencies. In Indigenous communities, it must incorporate *Traditional Ecological Knowledge*, defined as a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.

We are seeking pre-proposals from scientists for EcoHealth projects that will restore degraded ecosystems and improve human health and wellbeing by:

- Increasing scientific knowledge and public awareness of environmental challenges, while providing locally relevant solutions;
- Increasing partnerships with local people, communities, and governmental and non-governmental organizations (NGOs) at local and international levels; and
- Informing management plans and environmental policies.

All pre-proposals must be for hypothesis-driven science with quantifiable goals, have measurable, direct impacts, an overarching research theme directly related to global change and human health and wellbeing, and enable citizen scientist and community member participation. Projects must meet all permission and permitting requirements when humans are used as research subjects. For ecological restoration, projects must include a reference site, assessment, restoration, monitoring, and adaptive management. We strongly welcome pre-proposals aligned with the UN Sustainable Development Goals that will improve human livelihoods and support scientists in emerging nations.

FOCAL *ECOHEALTH* ACTION RESEARCH TOPICS:

We invite pre-proposals for field-based research by qualified scientists on the following solution-focused topics and their link to human health in terrestrial and aquatic ecosystems:

- Climate-change impact mitigation;
- Pollution reduction (in water, soil, and air) including plastics and other refuse;
- The link between EcoHealth and urban ecosystem health;
- The link between proposed research and human health, with measurable goals and impacts;
- Native plant restoration and eradication of non-native species;
- Restoration of agro-forestry systems;
- Restoration of pollinators and ecosystem engineers;
- Biodiversity conservation, including native species reintroductions;
- Human engagement in ecological restoration field-based activities and EcoHealth.

HARNESSING THE POWER OF CITIZEN SCIENCE TO TAKE ACTION TO ADDRESS GLOBAL CHANGE:

Since 1971, 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. Project we fund produce rigorous, relevant, and impactful science. Incorporating participants in fieldwork increases the broader impacts of the research we fund, by giving citizen scientists a deeper awareness of science and greater commitment to conservation.

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

- Have quantifiable goals and measurable impacts of action taken on the project;
- 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, with 4-15 volunteers per team as needed for data collection;
- Have short (1-3 day) and/or long (7-14 day) duration teams (projects that enable both short and long duration teams will receive priority support);
- For 2-day + teams, provide reputable housing for volunteers within a 45-minute drive from site;
- For longer-duration teams, field adult, high school and college student, teacher, and corporate groups;
- 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;
- Share project data with land managers and if possible contribute to open-source datasets.

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 capital equipment.**

Typical annual budgets for projects with long-duration teams range between US \$20,000 – \$80,000, with most of that covering volunteer and staff expenses while in the field. Final grants are provided on a per-capita basis based on the number of participants. Research projects are tenable for three years, subject to annual performance review, and may be eligible for renewal beyond that period.

PRINCIPAL INVESTIGATOR (PI) REQUIREMENTS:

All pre-proposals must be submitted by the PI. All PIs must have a PhD in the field of the proposed research 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. Due to safety concerns, we are unable to support projects in the following areas: **Earthwatch No Go List**. To submit a pre-proposal, visit <http://earthwatch.org/research-funding/apply-for-funding>.

**PRE-PROPOSALS FOR PROJECTS STARTING IN 2020 WILL BE
ACCEPTED THROUGH 11:59 PM (EDT) SUNDAY, JUNE 10, 2018**

Please direct inquiries to: research@earthwatch.org