

## REQUEST FOR PRE-PROPOSALS FOR FIELD RESEARCH:

# ***TRADITIONAL ECOLOGICAL KNOWLEDGE ACTION***

Indigenous people have tenure rights to a quarter of the world's land surface. Research partnerships with Indigenous scientists, Indigenous communities, and governments have the potential to yield substantial conservation benefits. Colonialism, where non-Indigenous people claimed Indigenous lands and developed and exploited them for financial gain, resulted in vast ecological degradation globally. Traditional Ecological Knowledge (TEK) is defined as knowledge and practices passed orally from generation to generation informed by strong cultural memories, sensitivity to change, and values that include reciprocity. De-colonizing science by incorporating the cumulative body of knowledge and beliefs that is TEK into science-based action to restore lands and the flora and fauna they contain is essential to heal the damage done ecologically and socially.

The Earthwatch *Traditional Ecological Knowledge* RFP invites pre-proposals for research from Indigenous scientists for projects that will take measurable action to address global change in agricultural and forest ecosystems by:

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

All pre-proposals must have an overarching research theme directly related to taking action to address degradation and loss of biodiversity and be based on hypothesis-driven science with quantifiable goals. Because meeting these challenges requires a whole-ecosystem approach and innovation, we are specifically interested in interdisciplinary, solution-based projects. Examples include agro-forestry, defined as agriculture that incorporates the cultivation and conservation of trees (e.g., shade-grown coffee). We strongly welcome pre-proposals aligned with the UN Sustainable Development Goals that will improve human livelihoods and support Indigenous scientists in emerging nations. We seek projects in South America, Europe, Africa, Asia, and North America.

### **FOCAL *TRADITIONAL ECOLOGICAL KNOWLEDGE ACTION* RESEARCH TOPICS:**

We invite pre-proposals for field-based research led by Indigenous scientists on the following topics:

- Climate-change impacts in agriculture and forestry systems on water availability and quality, nutrient flow, maintenance of species diversity, and carbon sequestration;
- Restoring native species of plants and animals that are of high cultural value, such as bison;
- Food-web relationships driven by pollinators, apex predators, and herbivores, and their effects on ecosystem productivity, resiliency, and biodiversity;
- Native seed programs and invasive species control;
- Climate-smart agriculture (food security and climate change);
- Soil conservation and health, soil carbon restoration, and soil erosion control;
- Human-wildlife coexistence, including reduction of wildlife damage to crops and forests, and noninvasive pest control; and
- Ecological restoration, with a focus on repairing the damage humans have done to ecosystems through colonialism.

**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 and find sustainable solutions to global change. Projects we fund produce rigorous, relevant, and impactful science. Incorporating citizen scientists in fieldwork increases the broader impacts of the research we fund, by increasing their science awareness and conservation commitment.

**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 approx. 4-10 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 teams > 1 day, provide reputable housing for volunteers within a 45-minute drive from site;
- Field adult, high school and college student, teacher, and corporate groups;
- Be run in English, with all communications by field staff and supporting documents in English;
- Educate volunteers about the project's science and its relevance to global priorities;
- Engage with, provide outreach to, contribute to conservation actions, or otherwise collaborate with local community stakeholders;
- Share project data with stakeholders, and if possible contribute to open-source datasets;
- Partner with collaborators and receive support from at least one other source of funding.

**GRANTS:** Earthwatch funding is intended to be supplemental to other sources of funding. 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.** 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, who is also expected to be the primary leader in the field. All PIs must have a PhD in the area of proposed research and a university, government agency, or science-focused NGO affiliation. We 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 2021 WILL BE  
ACCEPTED THROUGH 11:59 P.M. (EDT) SUNDAY, JUNE 9, 2019**

Please direct inquiries to: [research@earthwatch.org](mailto:research@earthwatch.org)