

REQUEST FOR PROPOSALS FOR FIELD RESEARCH:

EARTHWATCH PALEOBIOLOGY, ARCHAEOLOGY, AND GEOLOGY PROGRAM

During this time of rapid global change, paleobiology, archaeology, and geology provide essential historical ecological context for biological conservation, remediation, and restoration. Understanding the earth's pre-Holocene Epoch climate systems can help us understand the massive global human-caused changes we are experiencing today (e.g., climate change, extinction). Archaeology, the study of human history and prehistory through the excavation of sites and the analysis of artifacts and other physical remains, can help us learn more about the present and future, because this discipline provides information about how the world and human relationships with the natural world have changed. Learning about how past cultures lived will enable us to understand better how human actions today may drive global change and what we can do to mitigate the impacts of global warming. Geoscience can help us understand the legacy of greenhouse gases from previous epochs and understand climate change today. Additionally, geoscience can increase awareness of energy availability, freshwater access, sustainable agriculture, and maintaining biodiversity to prepare for the future.

We are seeking proposals from scientists for paleobiology, archaeology, and geological studies that are linked to today's world by:

- Increasing scientific knowledge and public awareness of past environmental challenges to species and habitats in a manner that can help provide relevant solutions to current conservation problems;
- Increasing partnerships with grassroots organizations, as well as with governmental and non-governmental organizations (NGOs) at local and international levels; and
- Informing management plans and environmental policies.

All proposed projects must have an overarching research theme that is vitally related to global change, and must enable participation of citizen scientists and community members. We strongly welcome proposals for project that will improve the livelihoods of human communities and will help develop scientists in emerging nations.

FOCAL PALEOBIOLOGY, ARCHAEOLOGY, AND GEOLOGY RESEARCH PROGRAM TOPICS:

We invite proposals for field-based research from qualified scientists on the following topics:

- Paleontology studies of biodiversity conservation and extinction in geologic time including Pleistocene extinctions;
- Changing aspects of life, ecology, environments, and biogeography in geologic time, based on fossil organisms;
- Paleolimnology studies that examine the paleoenvironments of inland bodies of water;
- Paleobotany, including research utilizing data from pollen cores and other plant remains to reconstruct past environments;
- Archaeological research that examines prehistoric Holocene change and how it affects past societies with regard to natural resources and sustainability;
- Geophysical marine process, including coastal studies, geology, and geophysics of ocean basins;
- Stratigraphy, structural geology and tectonics; and
- Paleoclimatology, that examines climatic conditions, and their causes and effects, in the geologic past, using evidence found in glacial deposits, fossils, and sediments.

**PRE-PROPOSALS FOR PROJECTS STARTING IN 2018 WILL BE
ACCEPTED THROUGH 11:59 PM (EDT) JUNE 12, 2016**

Please direct inquiries to: research@earthwatch.org

HARNESSING THE POWER OF CITIZEN SCIENCE TO ADDRESS GLOBAL CHANGE:

For 45 years, in order to find sustainable solutions to global change, Earthwatch has sent scientists into the field assisted by citizen-scientist volunteers. Collectively, our goal is to support projects that produce rigorous, relevant and impactful science. Participation by volunteers increases the broader impacts of the research we support. Citizen scientists return home with a deeper awareness of what is at stake and greater commitment to address 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 volunteers recruited by Earthwatch;
- Field 4 to 10 teams per year that span 7 to 14 days, each accommodating 4 to 20 volunteers per team as needed for data collection;
- Provide housing for volunteers within a reasonable distance from the research site;
- Be open to graduate, college, and/or high school student participation;
- 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 managers and if possible contribute to open-source datasets to maximize the impacts of the project.

GRANTS:

Annual grants cover project expenses while in the field including: equipment (limited), tools, and supplies; research permits; scientist transport to the field; support staff; food and housing for principal investigators, staff, and Earthwatch volunteers. Grants do not cover scientist salaries, student tuition, overhead, capital equipment, or post-fielding data analysis.

For successful proposals, the principal investigator (PI) will negotiate a budget in partnership with Earthwatch. Typical annual budgets average between US \$20,000–\$80,000, with approximately half of the total budget covering volunteer expenses while on the project. Final grants received are based on the number of volunteers participating. Successful proposals are funded for three years, subject to passing an annual performance review. Funding is potentially renewable beyond that period, upon submission of a research renewal proposal.

PRINCIPAL INVESTIGATOR REQUIREMENTS:

All proposals must be submitted by the PI. All PIs must have a PhD and an affiliation with a university, government agency, or NGO. We strongly encourage graduate student participation in projects as co-PIs as permitted by their universities. We particularly are interested in helping support emerging scientists from developing nations.

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 earthwatch.org/scientific-research/scientist-opportunities/working-with-earthwatch.

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