

Facilitating Pro-Environmental Behavior: Leveraging Nature-based Tourism into Everyday Stewardship

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Motivating and sustaining pro-environmental behavior, especially in high-consumption societies like our own, is a critical challenge for conservation science. Stanford University researchers from Education, Psychology, Anthropology, and the Persuasive Technology Laboratory are attending to this challenge through an interdisciplinary study to foster pro-environmental behavior following nature-based tourism experiences. Despite its growing popularity, nature-based tourism remains underused in achieving environmental stewardship.

Visitor experiences in places such as Galapagos, which are powerful and potentially transformative, are believed to create short-term spikes in cognitive, affective, and behavioral outcomes related to conservation and environment and science learning (e.g., Powell, 2005; Powell and Ham, 2008). These spikes derive from experiencing wildlife, majestic scenery, and natural history firsthand, thus creating powerful, personal connections. One charge for nature-based tourism is to extend those spikes in interest and meaning to the vastly different context of visitors' home places, maintaining the heightened interest in environmental issues and translating it into ongoing stewardship behavior.

The study begins with a small-scale pilot intervention in partnership with California's Año Nuevo State Park, known for its marine mammal experience, followed by a larger-scale intervention in the Galapagos Islands, a quintessential ecotourism destination. Capitalizing on the untapped post-trip spike in motivation shown by visitors to both sites, we are developing and testing technology-based platforms to translate stimulated interest in environment, ecology, and natural history into specific environmental behaviors. These behaviors, selected through a review of environmental behavior research and through a behavior design process, relate to personal, community, and national/international action. Our research examines the following: *What mechanisms are most effective for extending the learning and motivation that occur during the immersive experience of a nature-based tour and for transforming short-term gains in environmental knowledge, attitudes, and awareness into informed stewardship in the long-term?*

The research team is using a quasi-experimental design to assess visitors before, immediately after, and three months following the trip to examine for differential impacts related to post-trip follow-up interventions given to each of the groups. The technology interventions include mobile and web-based platforms that encourage visitors to take pro-environmental action that relates to their park visit. This study's findings will help transform the typical nature-based tourism experience into a platform for motivating and sustaining pro-environmental behaviors among the more than 70 million people annually who participate in nature-based tourism experiences worldwide.

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