

# Terevaka.net Archaeological Outreach 2013 field report: Approaching sustainability

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## Introduction

Over the past ten years, the Terevaka.net Archaeological Outreach (TAO) program has offered educational opportunities to more than eighty local high school students on Rapa Nui. After completing their first intensive educational program with TAO, approximately half of these students have returned the following year to continue to expand their knowledge. Three of our alumni have now pursued and completed university degrees in conservation or archaeology.

The goals of the TAO program have remained the same since our inception in 2003. First, our work aims to utilize archaeology as a foundation for education and opportunity within Rapa Nui's island community. Second, our projects promote awareness of and expertise in archaeology and cultural conservation. And third, we document, study, and conserve the remarkable treasures of the past that remain on Rapa Nui today.

For the first time in ten years, our program included students from all three high schools on the island (Colegio Hermano Eugenio Eyraud, Colegio San Sebastián de Akivi, and La Aldea Educativa). Our ten local students voluntarily gave up their two-week winter vacation from school to participate in the intensive archaeological outreach experience.

Explora Rapa Nui, a hotel dedicated to the concept of sustainable tourism on the island, also played a major role in the educational program for the first time in 2013. Explora provided all lodging, meals, and transportation for our students and instructors. Explora guides also played a critical role in the program by providing cultural expertise in lectures and field trips for our students.

Over the course of ten years, the TAO initiative has focused on a variety of projects in order to continually address topics that are of critical interest to the island community: archaeological survey, three-dimensional modeling of sites and artifacts, documentary film-making, lichenometry studies, ethnographic studies, and archival research on archaeological excavations

(Rutherford et al. 2008; Shepardson 2006, 2010; Shepardson & Torres Hochstetter 2009; Shepardson et al. 2004, 2009, 2010, 2011, 2012; Torres Hochstetter & Shepardson 2005).

One of the primary challenges in the development of our program, and our selection of research foci, is to integrate the various interests of education, conservation, research, and tourism in a sustainable manner. Our work in July of 2013 has catalyzed a new collaborative program design that moves us much closer to long-term sustainability on the island.

## Education

The educational component of the TAO program continues to grow each year. Our approach to education includes field experience and classroom learning. Students receive field training for the purposes of archaeological site documentation. They become proficient with global positioning system (GPS) technology, scaled drawings, and both quantitative and qualitative site descriptions. The students also work with a number of computer programs to facilitate our investigations.

Throughout the two-week experience, students attend a variety of field trips to learn about the history and prehistory of some of the most famous tourist sites, as well as lesser-known sites on the island (see Figure 1). These field trips include presentations by professional tour guides, park rangers, archaeologists, and respected elders from the island community.

This year, students attended daily lectures at the Explora Rapa Nui Hotel on a variety of topics ranging from contextual Pacific Island prehistory, to archaeological research on Rapa Nui, to the tumultuous history of the island that followed European contact. Explora also hosted lectures by specialists in conservation and ecological sustainability.

At the local Museo Antropológico Padre Sebastián Englert, students conducted archival research and learned about cultural resources that are available to the public in the William Mulloy Library. Students walk

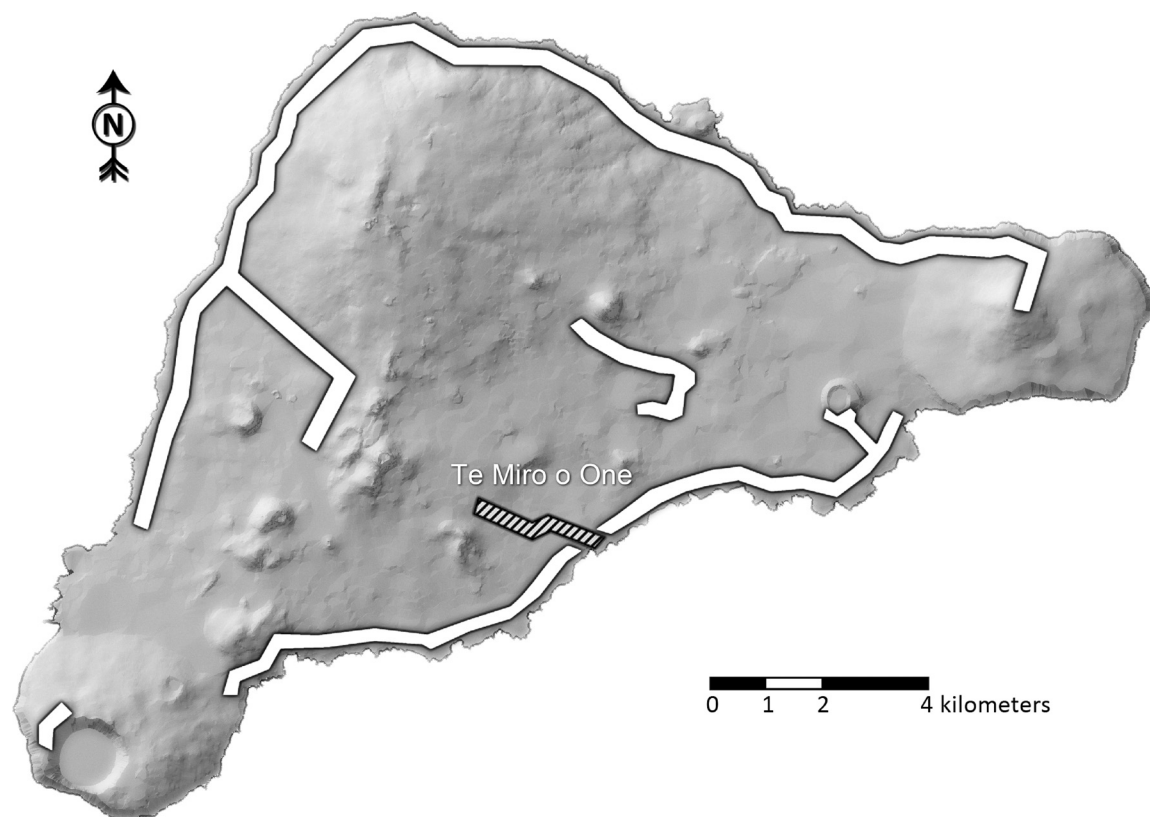


Figure 1. Areas in white indicate regions of the island that students visited during field trips. Hashed area indicates the Te Miro o One region surveyed and studied by students during the two-week project.

away from the program with two weeks of unforgettable experiences, but they also create an extensive booklet of organized information to which they can refer in the future. The personalized booklets help to ensure that each and every graduate of the program has an in-depth understanding of key issues in cultural conservation, archaeological research, and island ecology.

## Conservation

This year, TAO focused our efforts on creating a digital, online database of sites of archaeological interest along one of the existing hiking excursions used daily by guides and travelers from Explora. Students recorded site locations and dimensions, site and artifact types, and amassed a number of photographs and short videos to comprehensively document each location (see Figure 1).

The work conducted by TAO students this year contributes to conservation of these sites in a number of ways. First, students took care to record factors (e.g., livestock, invasive plants) that could be endangering each individual site. Second, the photographs, scale drawings, and videos created by the students help to

provide a digital record of each site to monitor changes or possible destruction of individual sites in the years to come. And third, the fact that students worked closely with professional guides from Explora helps to ensure that *all* guides are aware of *all* of the documented sites along this particular hiking route. As guides visit these sites on a daily basis, we entrust them with the responsibility to act as stewards for these sites. Their constant vigilance may offer a tremendous benefit of protection for some of the less-frequently visited archaeological remains around the island.

## Research

Conducting an island-wide archaeological survey has long been a dream of many archaeologists on Rapa Nui. Reaching back to the 1970s and 1980s, archaeologists have attempted to create the framework for such ambitious research projects (Cristino et al. 1981). However, the past few decades have suggested that for any single research team, whether Chilean or international, an island-wide survey simply is not feasible. The time, funding, and data organization requirements are simply too challenging.

The implications of previous attempts to design research at the landscape scale on Rapa Nui are three-fold. First, an extremely powerful system for data organization and data storage must be implemented in order for this type of work to be efficient and useful for a variety of conservation, research, and touristic purposes. Second, international efforts (or even research teams from Chile) are not likely to complete such a project in any practical time span. Third, the opportunity for peer-review and open-access in the development of any such large-scale data collection efforts is critical in terms of quality control. Without peer review and constant revision, the conservation and scientific communities are unlikely to have real faith in the data collected.

TAO implements a system of data collection and data sharing that directly addresses all three of the aforementioned critical points in an island-wide research effort. Even more, the research design of TAO presents a timely, relatively inexpensive, and sustainable approach to such a massive project. There is little doubt that island residents, and especially experienced tour guides, visit the archaeological sites of the island more than any research archaeologists. The TAO approach to island-wide survey allows these island residents to contribute directly toward a geographic information systems (GIS) archaeological database. By offering educational opportunities for tour guides and high school students in site documentation, digital photography, and GPS, we create a team of *de facto* research archaeologists.

TAO has now implemented a Google Maps approach to the island-wide survey project, based on a method developed by TAO in a 2009 project (see Figure 2 and Shepardson et al. 2009). Day-to-day

observations and recordings made by tour guides and other island residents can be uploaded to a comprehensive online database and sorted by location, site type, and other qualities. The interactive Google Map will be accessible to qualified tour guides and archived in the local museum on the island.

While the data collection process in a crowd-sourcing approach may not be systematic, we can look to our end goal as justification. That is, the island itself provides an enclosed survey area, and there is certainly hope (using cutting-edge technology and innovative research design) that given enough time, our growing team of island archaeologists can achieve comprehensive coverage of the island. At that point, the issue of walking systematic transects for spatial survey becomes mostly irrelevant. Furthermore, for many important research and conservation topics, location and site type (rather than systematic measurements of each individual site) are sufficient information to draw broad conclusions, or at the very least, form testable hypotheses.

## Tourism and Economic Development

For several decades, Rapa Nui has depended heavily in its economy on both domestic and international tourism. In the past five or ten years, the number of tourists and the number of tourism operations on the island have both increased dramatically. Developing a sustainable approach to education, conservation, and research on the island depends, therefore, on our ability to link these facets of the TAO program to tourism. Specifically, for the tourism industry to be directly invested in education, conservation, and research, there must exist a rather immediate payoff for tour companies to support initiatives like TAO.

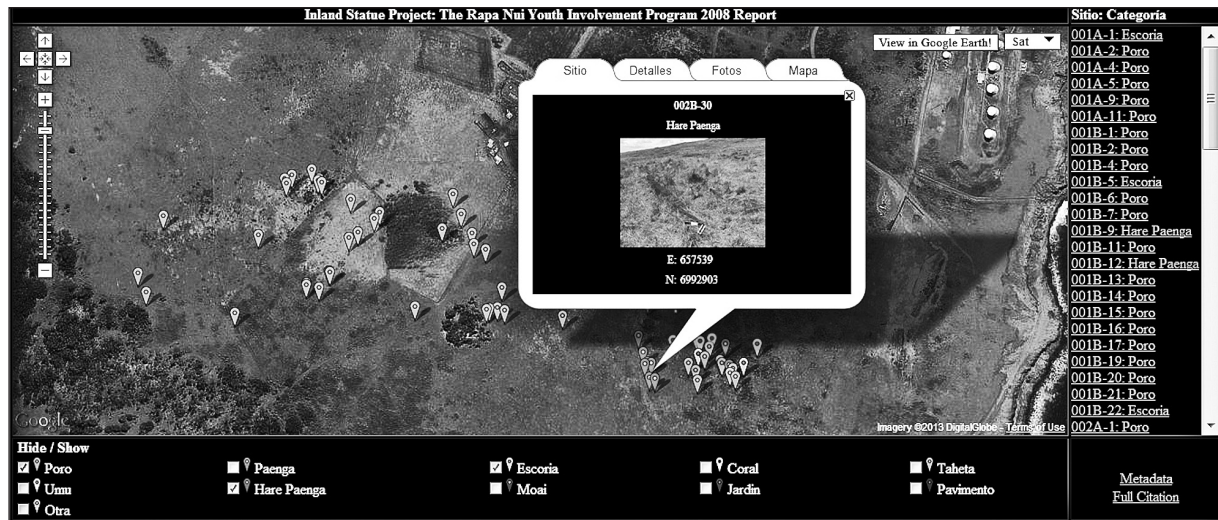


Figure 2. A screenshot from the interactive Google Maps approach to large-scale archaeological survey on the island developed during the TAO 2009 project.

Explora Rapa Nui has played an invaluable role in the evolution of our program, and more generally in archaeological conservation and research, through the support offered to TAO in the 2013 program. The students of TAO, and their 2013 project, have already begun to repay Explora in this collaborative effort. The information collected by high school students, and the online database they have already begun to assemble, serves as a wealth of information for both guides and travelers at Explora. Guides become better acquainted with archaeological and other cultural sites along hiking excursions, guides can customize excursions based on traveler interests, and Explora can even begin to develop new themed excursions by connecting points of interest, all by referring to the online database created by local high school students.

In a more general sense, the database launched by the 2013 TAO project offers a glimpse of how some of the currently overwhelming impacts of tourism on the island might be diffused. The accessibility of the database by tour guides working on the island allows virtually any tour company on the island to design interesting excursions that may travel “off the beaten path”. This could potentially lead to an explosion of opportunities for tourism to take a more ecologically sensitive (e.g., hiking, horseback, bicycle) approach to sightseeing on the island.

Even more, Explora saw an immediate interest in travelers to take part in the site documentation process, and to work side-by-side with the local high school

students in entirely non-invasive investigations. The project offered travelers a unique experience not only to enjoy the archaeological remains of the island, but also to develop an intimate connection and responsibility for the conservation of these sites. In a sense, by including travelers in the daily documentation process, TAO encourages a system where an endless stream of travelers can have a much more positive impact on the island and perhaps even take part in *designing* future excursions for travelers.

## Conclusion

The experimental and collaborative nature of the 2013 project jointly operated by Terevaka.net Archaeological Outreach and Explora Rapa Nui has offered both immediate and long-term solutions to the problems at the heart of the island’s development. The willingness of Explora to work closely with the Rapa Nui community provides an important model that other tour companies will soon follow. Together, TAO and Explora have solidified a framework for one aspect of the island’s sustainable development (see Figure 3).

Over the past ten years, the persistence and flexibility of TAO in meeting the needs of the local community, in terms of education and conservation, has led to yet another graduating class of empowered young islanders who will continue to shape the future of cultural conservation on Rapa Nui.

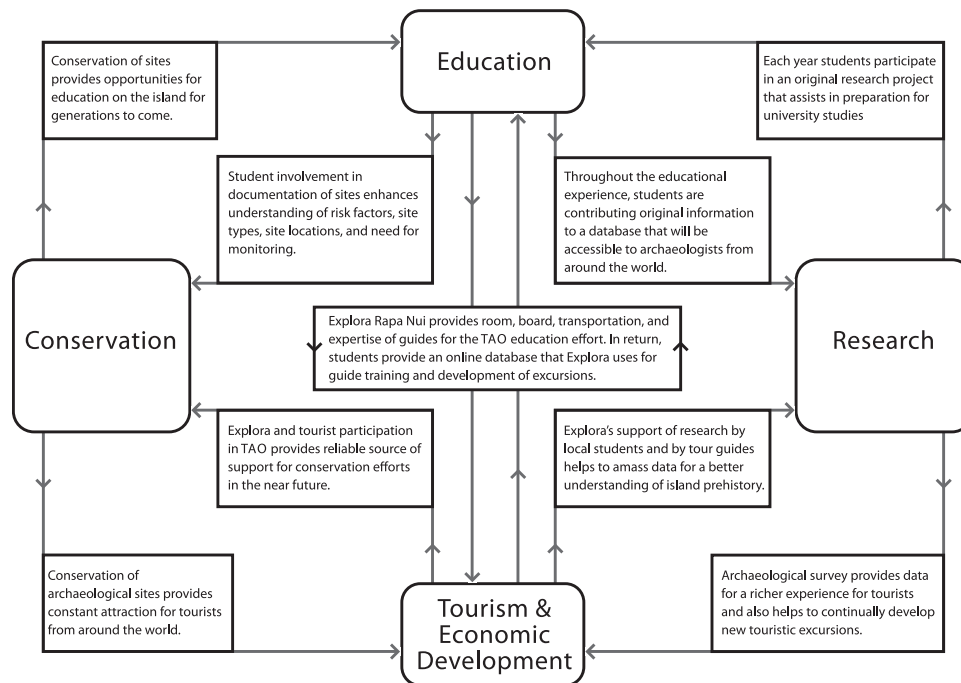


Figure 3. A diagram representing feedback amongst education, conservation, research, and tourism in the experimental framework developed by the 2013 TAO project.





Figure 4. TAO instructor Kent Redell assisting local high school students in a map and scale drawings of an archaeological site near Explora Rapa Nui.



Figure 5. TAO students take a break at Ahu Maitaki Te Moa on the two-day hike along the north coast of the island.



Figure 6. TAO students taking a break from field survey south of Explora.

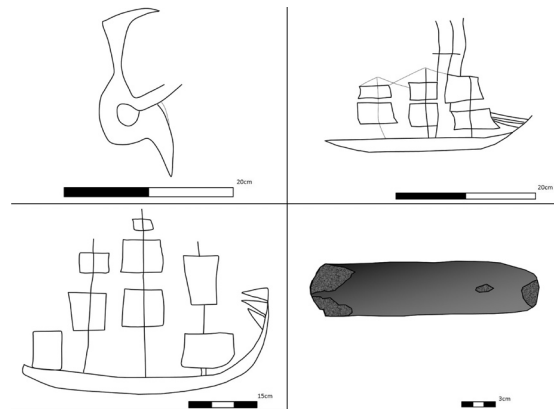


Figure 7. Students' scale drawings of incised petroglyphs and a *toki* (adze) documented near Explora.

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