

# Terevaka Archaeological Outreach (TAO) 2015 field report: Archaeology, conservation, and toponymy

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## Introduction

Terevaka Archaeological Outreach (TAO) is a volunteer program that has provided educational opportunities for youths local to the Rapa Nui community since 2003. The long-term goals of TAO are: (1) to offer experiential learning opportunities specific to cultural and natural resources that surround the local community; (2) to promote awareness and expertise in conservation measures and sustainable development; and (3) to document and study both cultural and natural phenomena of the past today.

TAO has now provided educational opportunities to approximately 115 local high school students. Our alumni have gained inspiration to complete university degrees in fields such as archaeology, conservation, history, and cultural anthropology. Several of these students now hold official positions in governmental, private, and educational organizations on the island that will be of critical importance in the island's near and distant future.

In many ways, the three central goals of TAO are inextricably linked. However, consolidating our objectives in a cohesive manner in the confines of a two-week intensive instructional period has become an increasingly challenging prospect – especially given the varied and diversified interests amongst island authorities (e.g., Secretaría Técnica de Patrimonio Rapa Nui, Consejo de Monumentos Nacionales de Chile, Corporación Nacional Forestal, Parlamento Rapa Nui, Corporación Nacional de Desarrollo Indígena Isla de Pascua, Museo Antropológico Padre Sebastián Englert, etc.).

Additionally, over the course of twelve years of educational outreach, TAO has designed projects that are completely non-invasive, requiring minimal contact with the island's fragile cultural and natural resources. Our projects in the past have ranged from archaeological survey, to lichenometry, photogrammetry, documentary filmmaking, and archival research (Rutherford et al. 2008; Shepardson 2006, 2010; Shepardson & Torres Hochstetter 2009; Shepardson et al. 2004, 2009, 2010, 2011, 2012, 2013, 2014; Torres Hochstetter & Shepardson 2005). The results of TAO projects have been made publicly available via the Internet ([www.terevaka.net](http://www.terevaka.net)).

To complement our usual focus on the island's archaeological heritage, in July of 2015, TAO launched a pilot program related to sustainable development in the context of the island's natural resources. (See “Terevaka Archaeological Outreach (TAO) 2015 field report: Engineering and renewable energy” in this edition of the *Rapa Nui Journal*). The 14 local high school students who enrolled in TAO 2015 were able to choose whether to specialize in either the archaeology/conservation curriculum or the engineering/renewable-energies curriculum. Ultimately, seven students chose to concentrate in archaeology, and seven pursued engineering.

## Island Toponymy Project

During July of 2015, local students who chose to focus on archaeology/conservation undertook a project to launch a publicly accessible and editable digital database of place names on the island. As a starting point, students consulted modern maps, a small toponymy manuscript published in the late 20th century (Duque 1982), a rare toponymy study published in book format in the mid-20th century (Charlin 1947), and an inventory of island *ahu* published in the late-19th century by Thomson (1889).

The student toponymy project was contextualized by a variety of supporting activities. Several local and foreign experts offered presentations specifically for the TAO students within the two-week program. Mahanua Wilkins (Corporación Nacional de Desarrollo Indígena Isla de Pascua) presented an overview of the island's natural history. Hañarau Ika (Universidad Andrés Bello) provided students with an overview of how TAO helped to prepare him for his undergraduate studies in eco-tourism at his university in Santiago. Sebastián Pakarati (Manu Project) presented his recent work in conservation of both marine and terrestrial bird species around the island. Paula Valenzuela and Francisco Torres Hochstetter (Museo Antropológico Padre Sebastián Englert) presented their work on conservation and geology, respectively. Cristián Moreno Pakarati (Ahirenga Historical Research) offered a synopsis of his research regarding 19th and 20th century social and political maps of the island. And Merahi Atam (Secretaría Técnica de Patrimonio

Rapa Nui) motivated TAO students with her own story of how her participation as a student in the program more than a decade ago helped her to identify her interests in archaeology and launch her professional career in indigenous anthropology.

In 2015, TAO students also had the opportunity to visit dozens of archaeological sites around the island with expert guides (see Figure 1). Every one of the students ended up visiting regions of the island that they had never seen before. Our guides helped to relay scientific archaeological information about the sites visited and also shared many of the oral traditions associated with different sites or regions.

The first step in the digital toponymy database project was to enter cross-referenced information from the original texts into spreadsheet format. During this process, students gained experience with Microsoft Excel, maps, and geographic coordinate transformations.

The second step in the project was to translate the texts. Modern maps typically offer place names in Rapanui. Duque (1982) and Charlin (1947) recorded place names in Rapanui and offered one or more possible translations from Rapanui to Spanish. Additionally, Charlin included a brief description of places and the origin of their names in most cases. In the digital database created by TAO students, place names appear in Rapanui, Spanish, and English. The students also categorized place names into categories: (1) hill; (2) area; (3) ahu; (4) bay; (5) point; (6) islet; (7) outcrop; (8) harbor; (9) ravine; (10) lake; (11) cave; (12) settlement; (13) road; and (14) beach.

The third step in creating a digital database involved a field component. Students hiked to various places referenced in the different archival sources and attempted to record precise geographic coordinates for each place using global positioning system

(GPS) technology. TAO students also used digital photography to document places and names that were successfully cross-referenced between archival texts and fieldwork.

The final step of the project was to convert the digital spreadsheet to an interactive website. Advanced Excel programming used the spreadsheet data to generate HTML and XML files for multimedia Google Map publication ([www.terevaka.net/toponimia](http://www.terevaka.net/toponimia), see Figure 2).

The toponymy project is a massive undertaking. Charlin's (1947) work alone includes over 500 place names. And there are substantial differences between the work of Charlin, Thomson, Duque, and modern cartographers. Students of TAO therefore created a system that provides a foundation, rather than an exhaustive database, for collaborative efforts by future researchers. The interactive website also provides a link where viewers/researchers can suggest edits or additional entries (or even original archival sources) to the database (Figure 2). By doing so, TAO invites the entire Rapa Nui community, as well as the global community, to take part in this growing grassroots and open-source approach to a better understanding of the island's prehistory and culture.

The toponymy project provided an ideal educational opportunity for local island students, as it required new experiences with research and record-keeping in both traditional and high-tech formats (i.e., paper manuscripts, oral tradition, PDF documents, Excel spreadsheets, GPS units, digital photography). Over the course of the project, the students learned many obscure place names on the island that have either been forgotten by, or remain unknown to, most island residents today. The students also seemed to gain a greater appreciation for the importance of organizing and archiving information for the future, regardless of whether our interests in the information stem from a research perspective or a more familiar perspective.

## Future Directions

TAO 2015 was a great success. Students, family, friends, and staff were extremely proud of what was accomplished within an intensive two-week educational program. The toponymy project will remain as a focus of TAO for years to come, as long as there are original sources that might expand upon our initial efforts. With additional data entry, the database could become very useful in determining how and why place names changed over time on the island.

As TAO begins to plan for the 2016 program, we once again encourage support from readers of the *Rapa Nui Journal* and friends of the Easter Island Foundation. TAO is funded entirely by

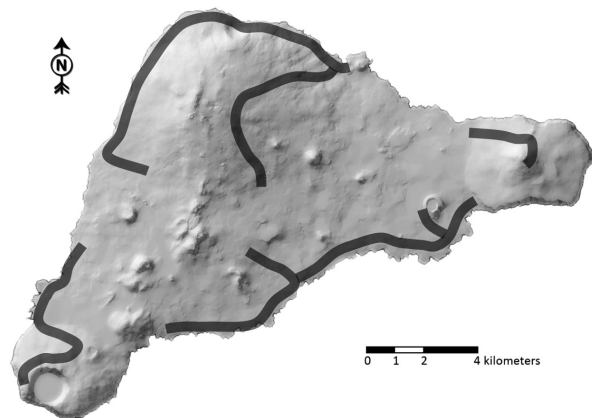


Figure 1. Shaded areas on the map indicating areas that students visited with expert guides during TAO 2015.

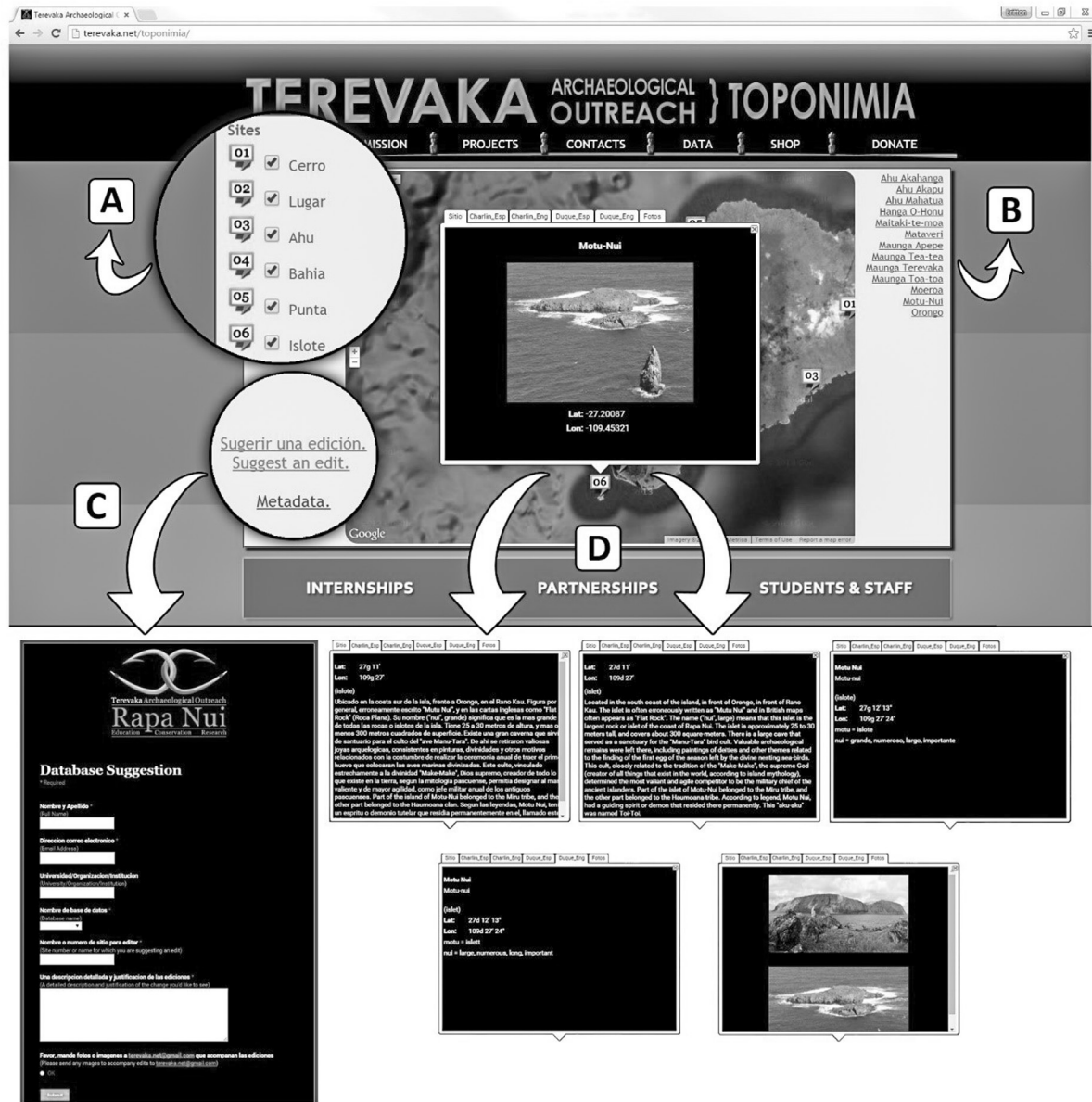


Figure 2. Publicly-accessible, interactive web page created by students of TAO 2015: (A) users can focus on one or more categories of place types by selecting the checkboxes to hide or show layers of information; (B) all place names displayed on the interactive Google Map are listed alphabetically on the right hand side of the interactive map; (C) users are free to suggest edits or send additional images for inclusion in the database using the “Suggest an edit” link; and (D) users can click each marker on the Google Map to display a tabbed pop-up window that includes geographic coordinates, descriptions, translations, and images of each location.

donations to Terevaka, a USA-based 501(c)(3) non-profit organization. As our program and curriculum continue to grow, we hope to purchase additional technology that will keep our on-island education, our conservation efforts, and our contribution to research at the cutting-edge. To support our grassroots approach to education, conservation, and research, please make a tax-deductible donation to Terevaka or see [www.terevaka.net](http://www.terevaka.net) for more information.

## Acknowledgments

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Figure 3. TAO students at Ahu Maitaki te Moa on the northwest coast of the island.



Figure 4. TAO 2015 staff. Back row (left to right): Marilla Lamb, Matt Petney, Britton Shepardson. Front row (left to right): Ariki Nahoe, Madison Ledesma, Erin Mullin, Julia Godinez, Sara Sanford, Dylan Shepardson.



Figure 5. TAO student Catalina González identifying a large pair of tangata manu petroglyphs on the north coast of the island using a non-invasive approach of pouring clean water on the petroglyphs to distinguish them.



Figure 6. TAO students attending a tour at 'Orongo guided by local expert Nicolás Soler.



Figure 7. TAO 2015 students (left to right): Yumi Ika, Tiare Pakarati, Ma'eha te Ra'a.



Figure 8. TAO students attending a tour at Ahu Akivi guided by local expert Rangiroa Mauricio Tuki.