RAIVAVAE ARCHAEOLOGICAL PROJECT EXPEDITION REPORT

June 2006 By Lynn Danaher



RAIVAVAE, AUSTRAL ISLANDS FRENCH POLYNESIA

Expedition Team Members:

Rodrigo Alexandra Lynn Edmundo



Edmundo Edwards Field Archaeologist Great Storyteller Team Leader



Alexandra Edwards Creative Script Writer Talented Video Operator



Rodrigo Navarre Valued Interpreter Photographer Field Assistant



Lynn Danaher Prodigious Photographer Logistics, Creative Cook



Funded by the Eastern Pacific Research Foundation, The Pacific Islands Research Institute & Private Donations

An Explorers Club Flag Expedition



I did not believe that there was still a place in all of Polynesia that was as natural, unspoiled and stunningly beautiful as Raivavae. This is an island of contrasts and simplicity. Raivavae is one of 5 of the Austral Islands, stunningly picturesque, located just south of the Tropic of Capricorn at 23*52' S latitude and 147*40' W longitude, The weather is ideal. It is a high island of eroded volcanic basalt, 5-7 million years old, surrounded by a fringing reef; the farthest south in French Polynesia. The surrounding reef with its numerous uninhabited Motus (small islands) creates a beautiful shallow lagoon with varied hues of iridescent blues. It's highest point; Mt. Hiro tops out at 438 meters or 1,423 feet.



Raivavae has a very everyone gets around though there are a few on the island. There is the entire island, 1/3 sand. The people lifestyle; subsistence and fishing the outer outrigger canoes much generations. There are postcards or tee-shirt small grocery stores houses. Tourists are the local islanders still friendly wave each

The people are appearance. They are yet remain shy and people still speak the the Tahitian language French. Even one of landlord, Terangi, a the local dialect much few of the younger English, they are now



slow pace, most by bicycles or on foot, surprisingly nice cars a road that encircles still unpaved coral and maintain an almost farming taro, bananas handmade reef in like they have for no restaurants, bars, shops, only a very few and pensions or guest still rare on Raivavae; offer a "Iogana" and a time we passed one. typically Polynesian in friendly, smile easily, reserved. The older Raivavae version of and are not fluent in our local guides, and contemporary, spoke better than French. A people speak halting taught it in the schools.

The local islanders live a fairly traditional life similar to their ancestors but are modern and naïve at the same time. They drive new cars, live in concrete houses with running hot and cold water, electricity and satellite TV. At the same time they tend traditional gardens of Taro, Bananas, Sweet Potatoes and Breadfruit. Their diet consists of traditional and imported foods from around the world.

Each tiny general store has a selection of canned and packaged foods including the ever present and popular spam and corned beef. There are virtually no fresh produce for sale in the stores except for the occasional carrot or onion as everything is grown by most of the families and shared with all of those within their community. We were able to purchase some freshly grown cucumbers and bok choy from a Frenchman that had retired to Raivavae some 30 years previously.

He had served in the French Military assigned to the nuclear testing that was preformed on Muuroa. He was a classic South Seas dreamer and had been in the process of building a sailboat to sail around the world ever since he arrived to Raivavae. His boat sat in his yard perpetually under construction; he was beginning to replace rot that had formed since he began building. I doubt that his boat will ever reach the ocean or sail upon it. He lived with a local woman that was actually the gardener of the vegetables we purchased. She was a sullen and a strangely thin woman; it appeared their arrangement was not a joyous one. But, I suspect his dream gives him purpose, something to do with all his time and a perceived escape route from a dreary relationship, and the monotony of the sameness of life on a small island.



Our Local Bok Choy and Cucumber connection, the French Dreamer

In the early 1800's whaling became an important economic activity in Polynesia. By the mid 1800's there were over 900 whaling ships plying the pacific waters from the San Juan Fernandez Islands in the east to Norfolk Island in the west and from Hawaii in the north to the Australs in the south. During this period sandalwood was also harvested extensively off the islands and sold in the lucrative trade with China.

In 1819 Pomare II the supreme chief of Tahiti visited Raivavae and Tubuai as he wanted to quell the constant fighting that was occurring on the islands. Pomare II also brought the Christian faith as he was a recent and devote convert from the pagan beliefs of his ancestors. Pomare II succeeded in settling the disputes between the warring factions and converted most of the local islanders on both Tubai and Raivave to Christianity.

In 1839, disease of an undetermined type wreaked havoc on Raivavae. It was thought to be either the flu, or small pox of a combination thereof; neither of which the people of Raivavae had any resistance. The sickness on Raivavae followed the same pattern as most of the others islands of the Pacific. It is estimated that over 75% of the population died during this period. Much of the traditional beliefs, ways of conduct and skills were permanently lost.

The survivors became devoted to their new Christian faith and abandoned their Marae's along with their traditional functions; to build large churches with alters to their new found God, Jesus Christ. Today there are 3 large and well maintained churches on the island and 2 more under construction. The 3 primary churches or temples as they are called on Raivavae, are located in each of the primary villages Mahanatoa, Rairua and this beautiful example located in the village of Anatonu.



One of these churches could hold most of the entire population. The churches replaced the Marae's as the social center for the island. The Churches remain the focal point for all gatherings and community events. The Mormons have made a few inroads, we saw their missionaries regularly riding their bikes around the island as they visited families. The Seventh Day Adventist has a small but

growing following, with a gathering place under a large canopy. The primary faith remains the one taught by the London Missionary Society. There is a strong tradition of this Protestant religion. Going to church on Sunday is the main event of the week and everyone dresses up in their finery.

The women wear, the most amazing hats, handmade of various colors, Most of the men, especially the church elders where a shirt and tie.

The temples are all beautifully maintained and each village takes great pride in how freshly painted and decorated their temple appears. There is one more temple under construction in Vaiuru, which is located right on the waterfront over looking Rairua bay. Each temple holds around 300-500 people, so there is



much more room in the 3 completed temples than all of the 900 or so residents of Raivavae could fill. Probably one of the reasons the temple in Vaiuru remains unfinished.

Almost every weekend we were on Raivavae one of the temples had a communal feast of traditional foods to raise money to enlarge or maintain their church. We had the good fortune to observe these preparations on a few occasions. It was fascinating to see these islanders prepare the food using the customs and tools of their ancient past. There was lots of pounding with museum quality poi pounders, (probably hundreds of years old) of both Ti to extract the juice to make a beverage and Taro to make their staple poi. Of course we got to sample all their foods while observing, photographing and filming the communal process. They were delighted to share the time with us, plus got a lot of enjoyment from our curiosity along with our willingness to try all their strange but delicious fare. Once the Ti root was baked overnight in the typical earth oven of Polynesia, it was peeled and pounded to a fleshy pulp. The pulp was placed in mesh bags and the juice was extracted by twisting the bags with a pair of sticks through the top and bottom of the bags in opposing directions like a Spanish windlass. The method was very effective as it was surprising how much of the brown sweet smoky flavored juice was extracted.



The purpose of the juice was to make a traditional beverage to send away to relatives in Tahiti to sell and raise money for the benefit of their congregation and temple maintenance. We also observed the making of Poi from Taro root and the butchering of a pig to make their traditional Puafafa, which is the young leaves of the Taro cooked in and with the pua or pork. The Puafafa was probably my personal favorite dish. The Raivavae version of Poi is very different from any I had sampled before. The preliminary preparation was similar to the Ti, baked, peeled, and pounded to a smooth pulp.



Then the pounded Poi pulp was kneaded and kneaded, all done with flourish of capturing air and kneading some more, until the final product was a fluffy cream

colored (they used a white Taro, not the purple type one finds in Hawaii) wad doughy of substance. It was then wrapped in multiple layers of Ti leaves and tied at the top in a neat and tidy package.

> We purchased

one of course and took it home. We left it for the prescribed time of 2 days as it swelled inside the Ti envelope. When we finally feasted on it, it was delicious, like a half baked loaf of bread with a distinct and pleasing earthly flavor.



As a result of the islands history of fevers, population decimation and conversion to Christianity, both the oral and ceremonial spiritual traditions were virtually lost, the pagan ceremonial sites were abandoned, purposely destroyed and then ignored for decades. When Edwards arrived on Raivavae in the late 1980's he was able to locate with the assistance of local guides over 600 archaeological remains. We relocated several of the sites and 4 new ones that he had not recorded. One of sites we found a portion of an ancient Tiki, the torso or mid-section.

The huge upright stones that line the entry of paved stones to the Marae or encircle the Marae itself were originally placed in shallow holes less than a foot deep. Because of their immense size and shallow foundation they were easy to topple. The Marae Tiki's were broken or defaced and the upright stones were pushed over, in many cases at the encouragement of the missionaries to further severe the islander's ties with their beliefs of the past.

When Edwards arrived in the late 80's to complete his survey many of the Marae were easily found and one was restored at his direction. Today in 2006, the Marae that we relocated were overgrown and untended, several had been taken apart and the stones used in construction of roads, bridges or building of foundations for modern homes.



One Marae we located, a home had been constructed in the middle and another 2 were being used as a pig sty. Yet another had a shed built right over the top of one of the largest uprights so that the shed walls encircled the stone. One of the more significant Marae Pomaovao surveyed by Edwards in 1986 had a wide paved entry that went all the way to the shore of the lagoon. It is located conveniently next to the airport, but is completely overgrown. The new airport was built in 2000 so is very recent modern addition. Many of the immense stones of Marae Pomaovao are tipped over with huge trees are growing up through the inner courtyard of the Marae.

We spent 2 days clearing the entry and inner court yard but were only able to clear less than ½ of the courtyard in the time allowed and tools available.

The entire inner court yard was covered with vines and wild squash. We were delighted to supplement



our diet with the squash and the surplus w fed to our neighbors' appreciative pigs.



Another significant site; Marae Unurau also had a long paved entry with uprights that went all the way to the shore of the lagoon. We also completed a fair amount of clearing of the Marae Unurau, exposing most of the inner court yard, guard house and Ahu. When Edwards was here in the 80's the paved entry like Pomaovao, went all the way out into the lagoon like a dock. Now there are two houses built one behind the other, on the shore of the lagoon, over the ancient pathway. At the shore of the lagoon there is an extended area covered with concrete, which is in line with the entry pathway to the Marae behind the houses. We assumed it was probably the covered remains of the ancient dock.





We have a long way to go before we can really begin to excavate or restore any of the sites as all are located on private land. There is a suspicion by the land owners that if the Marae are preserved and restored they will lose the use of the land to farm and tend their pigs. Also, in the past the Marae and surrounding area were used as mass graveyards during the fevers decimated the population, that excavation at any sites are impractical at this time because of the complications of what to do with bones found as well as the fears and superstitions of the local population. Because of the deficiency of historical information available to the local islanders there is a lack of understanding and appreciation of their heritage. We realized that in order for us to complete any real thorough excavations of early sites or restoration of any of the Marae we needed to educate the islanders about their past and hopefully instill some pride in their old traditions and history.

To this end we decided to form an organization, the Pacific Islands Research Institute, (PIRI) and offer a series of volunteer programs to Raivavae in 2007 and beyond.



During our expedition, we were able to obtain a sample of soil loaded with carbon located near a promising known early habitation site. We hoped to recover enough to get a very early date of occupation. The site was located next to an ancient

irrigated but well maintained taro patch. Taro had been cultivated at this site for hundreds of years. The raised area to the left is the remains of constant occupation since the island was first settled. The primary difficultly with dating carbon from Polynesian sites is that the carbon is left from the ancient earth ovens that were used over and over again for centuries therefore mixing the recent carbon with the oldest carbon remnants.

As luck would have it one of the more interesting new sites we located was Marae Tutamae, we were given permission to excavate....from Odile, our landlord. ...it belongs to her and her father, our neighbor and he was using it as a pig sty. It was a large significant site adjacent to the shore of the lagoon located near where we were staying. We located and photographed it, we plan to do much more extensive mapping in 2007. GPS location 23*53.07 S Latitude/147*40'.36 W Longitude



Another great accomplishment of our expedition on Raivavae was to create a documentary film and photographic record of the people, their lives, existing traditions as well as their known cultural history through the archaeological sites. We recorded over 18 hours of documentary film and 4000 photographs!! To date, our documentary film about Raivavae is in post-production and we are cataloging the collection of over 4,000 photographs into an ethnographic record of present day Raivavae.

One really proud accomplishment was that Edmundo was able to give the people of Raivavae a copy of an important document he had ran across in his research. It had been taken during a very early expedition in the 20's. It was a record by the King at the time of all land claims and ownership. This document will be invaluable in settling outstanding disputes. The people of Raivavae were very appreciative.

With the help of local guides we did locate another 4 new sites, one located in the Taro growing valley behind Rairua, just off the road that transects the interior of the island.

It was located on the land of one of the friends we made, LeBert Flores Mata. He encouraged us to map the site and see the Tiki torso he had found while clearing his land. What was identifiable as a site was a small



as yet unrecorded Tiki torso, carved from the typical red scoria stone that most Tiki's were made from. We mapped and photographed the site and Tiki in detail. The site and Tiki were located at

23*51.236'S/147*37.907'W.

The other three sites were located between Anatonu and Mahanatoa. One site was shown to us by a local retired Frenchman named Yves, he had found it while hiking through the dense jungle not far from his home. It was a huge site, covering a very large area with a significant Marae, several terraces and foundations. Edwards had not seen it before or recorded it during the 80's so it was an exciting find. It

was located well up the hillside away from the shore of the lagoon near the foot of the mountain.

One of the largest stone uprights was an immense slab of coral, measuring over 2 X 2 meters square and most probably weighed over 2 tons. It would have been an incredible engineering feat to have gotten it up to its current location. This further reinforced one of the more intriguing aspects of this research. The early inhabitants of Raivavae were probably



the ancestors of the Moai culture of Easter Island and their ability to move those enormous statues were in part due to the technology developed on Raivavae. We were unable to get an accurate GPS location for this upper site as there was too much interference from the huge mountain directly behind it. Edwards mapped it however and we hope to return in 2007 with a more sensitive GPS instrument.

It was heartening to know that a site as large as this one was relatively undisturbed, though in very bad condition, most of the uprights toppled, the terraces overgrown

and buried in centuries of composted leaves from the Mape trees. Only with a trained eye like Edwards could the site be accurately surveyed. There were several Mape (Tahitian Chestnut) trees throughout the site. While we were recording the site a local native woman who had been gathering Mape (called Tepora in Raivavaian, it means to seek Mape nuts), emerged out of the jungle to see what we were doing. She was suspicious at first but curious about what we were doing; she decided we were harmless when we asked her to demonstrate her skill. She was happy to demonstrate how she extracted the delicious Mape kernel from the hard outer husk skillfully using a huge machete or bush knife as they call them in Raivavae.

One interesting and important fact about the Mape tress is that there large roots provided a system of communication across the island. When you strike a root with another piece of wood the sound reverberates throughout the jungle!!!

There was another large Marae directly below, near the shore of the lagoon, directly behind some ones home. It was also a new site that Edwards had not mapped originally in the 80's. We dug test pits nearby our GPS location for the test pits was at 23*50.73'S/147*41.10W, we had hoped to find carbon could be dated. We dug less than a meter, went through sandy soil with no carbon to sterile sand. We were disappointed as we had hoped to find some evidence of old cooking fires or worked pearl shell. We were only allowed to dig 3 holes by the owner of the land, so was unable to continue. There were several very large uprights behind the house, but most were lying relatively flat as they had been toppled like so many others. One curious aspect though was just behind the house in an old shed one of the largest uprights still stood. A local boy unlocked the shed so we could see the huge stone that still stood almost upright in the dark interior. He warned us not to touch it though, because he believed it held some special power.



The third site, near Anatonu was also a significant site with Marae and several tombs. It was covered with dense jungle and almost impossible to really get a clear view to take photos. Yves went way up into the jungle in a futile attempt to locate a distinct stone wall he had seen some before. In historical times a stone wall would have been constructed to designate the division of territories. Because all the sites are located on private land we need to get permission to spend the necessary time to accurately survey them completely. We were at least able to take some photos and get a GPS fix on it's location which was 23*53.07'S/147*40.37'W.



I have to mention the bizarre 2 story house in the dense undergrowth jungle that Yves took us too. It is one of those strange enigmas you would not expect to find on Raivavae. It was obvious that sometime long ago someone built a European style home, which in its time would have been quite grand!!! But then it was abandoned and the jungle is reclaiming it. It is so old that no on we queried knew its history.

It was right out of Indiana Jones, this was like the old temple of doom!!!

As a result of this expedition Edmundo and I agreed to co-found the Pacific Islands Research Institute, to be a non-profit organization dedicated to the study, understanding and preservation of the unique cultural heritage and fragile environment of the island of the Pacific Ocean.

The 2nd phase of our expedition in 2007 will have an educational focus. We hope to achieve two important goals in both 2007 and 2008.

- 1) Promote the preservation and appreciation of the Archaeological history to the islanders of Raivavae through educational programs and exhibits. Thus creating a source of pride and understanding of their past and amazing maritime history. We plan to accomplish this through series of educational programs including slideshow lectures, and documentary film and photo exhibits. We plan to research and document the former expeditions to Raivavae, especially Stokes' 1920's expedition archived at the Bishop Museum in Honolulu, Our plan is to organize this research into an exhibition for the people of Raivavae; most of the islanders have never seen photos or records of any of the expeditions that have been carried out on their island and our exhibition would be a great opportunity to bring the past to life, especially for the descendants of Stokes' informers, as well as increase local interest and awareness about the precariousness of Raivavae archaeological sites. We also plan to share with the locals the photos and documentary we recorded in our 2006. Encourage the Hokulea, the canoe of the Polynesian Voyaging Society from Hawaii to visit Raivavae on their next voyage to French Polynesia. The former islanders of Raivavae were some of the greatest mariners in all of Polynesia and this would create a increased sense of heritage and pride.
- 2) Accurately locate and map the numerous Archaeological sites with GPS. Develop a volunteer program for students & interested individuals to assist in the mapping, begin restoration and maintenance of some of the more significant sites. These fine examples of ancient structures can become a source of island pride and understanding of there distant past. With the recent construction of the airport more and more visitors to the islands will be interested in seeing the Marae.

We plan to return in May of 2007 with the help of some enthusiastic volunteers to further document, map, survey, record and further photograph the new sites we found. We also have requested

permission to begin restoration of one of the sites and clear the other sites that are in fairly good condition. Our plan is to stay for just over a month and host 2 small groups of volunteers to assist us for 13 days each. We have arranged for food and lodging with a small lagoon front Pension, pictured here located near several sites we plan to work on and map in detail.



As I leave Raivavae after our month long sojourn/expedition I feel a tinge of sadness. I know Raivavae is on the cusp of a lot of changes and growth. The new airport completed only a



couple years ago, that enabled us to come so easily will allow many others to follow in our footsteps. There are those islanders that welcome the change and are planning small tourist facilities to accommodate the anticipated influx of visitors to this very special place. There are others that are suspect and are not sure if these changes will be good for the island. There are constraints however that cannot be overcome,

lack of a adequate public water system and the complicated land ownership issues that plague all of French Polynesia. I believe that the growth of tourism will all happen slowly over the next several years, regardless, change will come.

But, I know that there are constants on Raivavae that will not change; the soft but constant roar of the surf as the ocean swells break on the outer reef, the varied hues of iridescent blues of the lagoon and the vast palette of greens that carpet the hills and valleys, the dramatic ridgeline of the spine of mountains that divide the north and south side of the island. Hopefully the friendly smiles and eager waves of the islanders won't change either. I will miss the morning crows of the roosters that start just before the light of day, the grunting and squealing of my neighbors' pigs each morning as he goes to feed them. I will also miss my self assigned chores of feeding the white goat and huge black pig in the

field next to our house as well as the dogs from next door that have learned when to come by, for the scraps from our table. It felt like home, it was home for awhile and I look forward to returning to the friends I made, the awe inspiring natural beauty and joy



of riding my bicycle to Anatonu along a coral road!!