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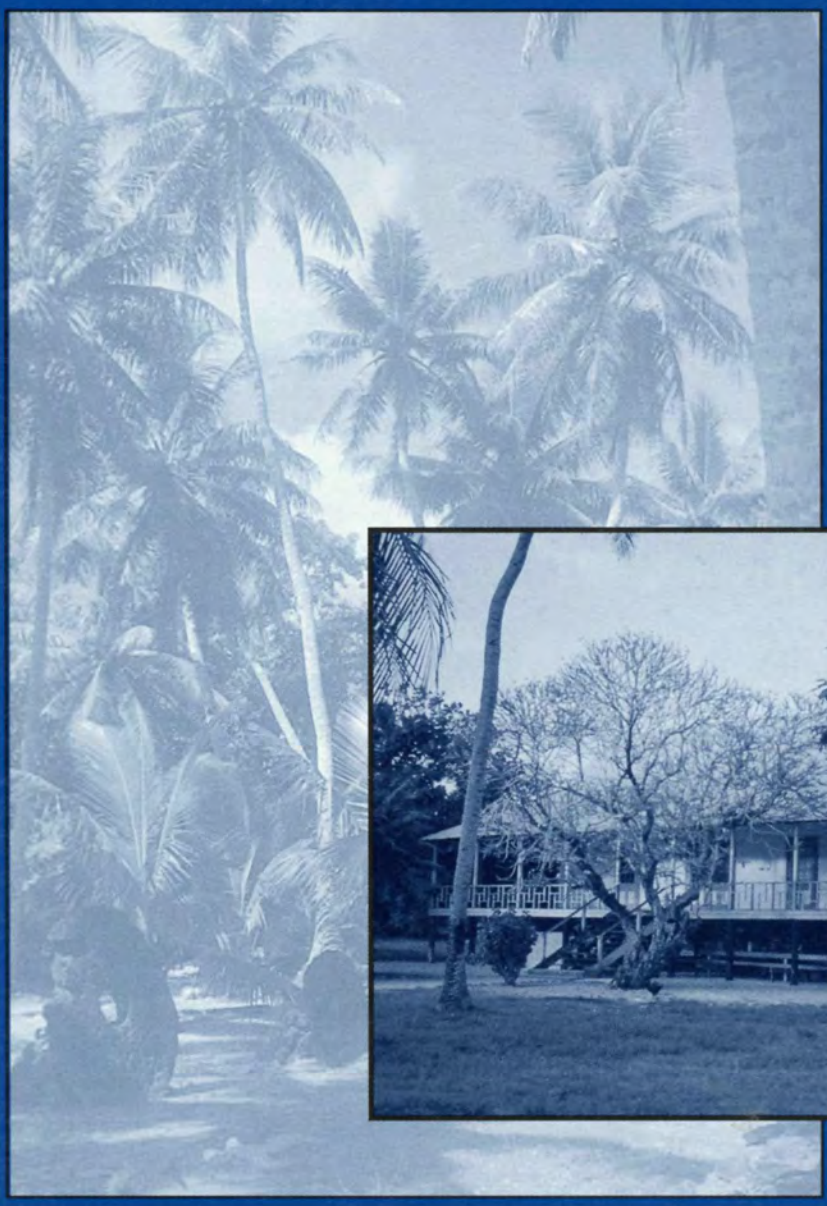

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David W. Look

Pacific Preservation

This issue of *CRM* is an overview of cultural resource management in the Pacific. Pacific preservation raises many questions: Preservation of what? For whom? Why? How? There are always conflicting priorities especially for the allocation of time, effort, and funds. Prior to such allocation, consideration must be given to determining what is significant and worthy of preservation. Each society assigns significance to cultural resources based on its respective values.

The Pacific is a large, diverse area with layers of history and influences. This issue focuses mainly on part of Polynesia (the area defined by the triangle from Hawaii to New Zealand and Easter Island; only American Samoa is included in this issue) and Micronesia (the area of the Pacific west of Hawaii stretching north of the equator to the Philippine Sea, excluding the part of Micronesia south of the equator).

How and why is the United States, and in particular the National Park Service (NPS), involved in the Pacific? The NPS administers seven parks in Hawaii, the National Park of American Samoa on Tutuila and Manu'a, War in the Pacific National Historical Park on Guam, and American Memorial Park on Saipan in the Commonwealth of the Northern Mariana Islands, and manages the Historic Preservation Fund grants for the Pacific. The NPS and other federal agencies have responsibilities in the Pacific under Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended. Jeannette Simons' article is a summary of the Navy's compliance with its Section 106 and 110 responsibilities. The U.S. Navy is also responsible for more than 350 shipwrecks and 4,200 aircraft wrecks in the Pacific. In her article, Wendy Coble covers 32 CFR 767, which requires anyone wanting to conduct research and/or recovery on U.S. Navy historic cultural resources to obtain a permit from the Navy Historical Center's Underwater Archaeology Branch.

Besides describing the preservation treatment of a World War II battery, John Enright in "Finding Help to Restore a Landmark" relates America's 100-year-history in American Samoa and Patricia Chapman gives a brief history of America's involvement in Micronesia. Chapman also describes the Micronesia Institute and the Micronesian Endowment for Historic Preservation, two non-governmental, non-profit organizations established to provide assistance. Mark Rudo gives additional information about the NPS involvement through the Trust Territory period and discusses establishing "protected" areas, rather than "traditional parks" as a way to preserve and protect cultural landscapes.

Spain, Germany, Japan, and other countries have an interest in the Pacific and have provided assistance in preservation. Spain has invited some of the Pacific historic preservation officers and staff to Madrid to discuss re-establishing cultural ties and providing assistance. Germany and Japan have funded some projects. Jon O'Neill and Dirk Spennemann's "German Colonial Heritage in Micronesia" looks at preserving the fragile remains of a very brief segment of Pacific history.

The primary duties of all historic preservation offices include survey, inventory, evaluation, registration, and preservation. In his article, Richard Williamson writes about the difficulty of surveying tiny atolls all in private ownership scattered over vast areas of ocean and the positive effect of public education to preserve the intangible past as groundwork in preserving the physical past. Other parts of the Pacific have different

Recording mapping data points at Nan Madol on Pohnpei's east coast. Using a Global Positioning System unit, Kristin Vanwert (right) takes notes while Lisa Andon holds the recording antenna and Derelisa Ardos (left) reads the instrument panel screen reporting the location. See Ayres and Eperiams article, page 48. Photo by W.S. Ayres.

End wall of Kinyear Fulat on Leluh, Kosrae, Federated States of Micronesia. Banyon trees have colonized the wall and now serve as the principal supports within the wall structure; their roots pass through the wall and have gradually undermined the structural integrity of the wall itself. See Beardsley's article, page 51. Photo by Felicia R. Beardsley.

challenges making survey difficult and maintenance almost impossible. The beautiful, lush tropical foliage of the high volcanic islands causes severe problems as portrayed in Felicia Beardsley's article.

John Enright's "The Adze Quarries of Tutuila" exemplifies what can be learned from sites and the societies that created them. Scott Russell's "Dealing with Human Remains..." addresses a most sensitive topic. The Commonwealth of the Northern Mariana Islands Standards for the Treatment of Human Remains establishes priority treatments for four classes of remains—Ancient Chamorro, Historic, World War II, and Modern.

Theft and vandalism of objects from prehistoric and historic sites are common problems. Maria Annie Flores brings home the question, "Who owns the past?" If our collective past belongs in a sense collectively to the whole society, then the deliberate removal or damage of any significant part of our heritage is a crime against all humanity. The respect for and the proper treatment of our heritage can be emphasized in public education and outreach programs. This can also be, and probably better, achieved by preserving traditional values that respect the culture and the resources produced by the culture. Cultural resources are both tangible and intangible. Micah Van der Ryn provides insights into documenting and preserving intangible aspects of culture that in turn enhance the cultural continuity and identity of a community and its tangible resources.

In addition to the National Park Service and other federal agencies, which provide training and education in the Pacific, one of our partners, the University of Oregon, has a long history of contributions. Maradel Gale and Scott Fitzpatrick give the basic tenets of the program and a sample of the products. In "An Applied Approach to Archeology in Palau," Scott Fitzpatrick and Vicky Kanai demonstrate through the Ormis Cave project how the site was surveyed, documented, and registered. This and other projects in the Pacific have compiled large sets of data. In their essay, William Ayres and Emensio Eperiam recommend establishing an electronic database to store, sort, and retrieve survey and inventory information.

Through a special HPF grant, the Guam Historic Preservation Office has established the Guam Geographic Information System Program. In his article, Victor Torres argues that the Guam GIS is critically important and well worth the effort.

In some parts of the Pacific, tourism validates the cultural and economic importance of historic preservation. Spennemann, Look, and Graham's "Heritage Eco-Tourism in Micronesia" examines the expectations of government officials for cultural and natural-based tourism. Andrew Smith brings to center stage the challenge of developing an innovative mitigation strategy, which enhances interpretation and meets local permit requirements. The result will hopefully be a safe scenic highway with access to cultural resources enriching the lives of both residents and visitors.

Although we have only scratched the surface of the subject of this issue of *CRM*, all of these articles together give insight into the current state of preservation in the Pacific. Pacific societies have survived many natural disasters and centuries of outside influences and have managed to preserve their own distinctive cultures. May it always be so.

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For copies of the Micronesia Resources Study reports and the *Rota Heritage Eco-Tourism: Findings & Recommendation*, please contact <David_W_Look@nps.gov>.

Mark O. Rudo

Cultural Landscapes and Protected Areas

New Partnership Opportunities in Micronesia

The preservation of cultural resources is the broad mission of historic preservation officers (HPOs) in the Republic of Palau, the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands. These three nations are jointly referred to as the Freely Associated States of Micronesia. "Free Association" describes their continuing relationship with the U.S. following termination of their dependent status under the former Trust Territory of the Pacific Islands (TTPI).

The United Nations formally established the U.S. trusteeship in Micronesia in 1947 after the World War II capture of the islands by the U.S. Individual "Compacts of Free Association" with the U.S. provide each of the Freely Associated States with vital access to the U.S. Historic Preservation Fund (HPF) by authority of the National Historic Preservation Act of 1966, as amended.[1]

Historic Preservation in Micronesia

Since 1974, the HPF has been the primary source of funds for government sponsored preservation work in Micronesia. It provides critical support for a variety of projects ranging from the development of national resource inventories and preservation legislation, to village-based restorations of traditional sites and the audio-visual documentation of traditional practices.

The Freely Associated States also contribute limited funding for preservation, and local communities provide much in the way of labor and resources in kind. The importance of traditional heritage and identity is reflected in the constitutions of both the FSM and Palau, while the Marshall Islands have perhaps the most comprehensive preservation legislation of the three nations.

From 1974 to 1985, the annual HPF grants administered by the U.S. National Park Service (NPS) were given to the Territorial Historic Preservation Office, which conducted archeological and historical projects throughout the TTPI. Much of that work was documented by the Micronesian Archaeological Survey report series (MAS) published by the former TTPI Historic Preservation Office and now published by the Historic Preservation Division of the Commonwealth of the Northern Mariana Islands.

The TTPI Historic Preservation Office and the National Park Service nominated 33 sites to the U.S. National Register of Historic Places, five of which were listed as U.S. National Historic Landmarks. Most of these properties, like the German-era deBrum House on Likiep Atoll in the Marshall Islands and the Japanese Artillery Road on Pohnpei in the FSM, represent colonial history. There are notable exceptions though; for example, the megalithic residential complex of Leluh on Kosrae and the carved stone monoliths of Melekeok in Palau.

From 1986 to the present, the NPS has awarded individual HPF grants to each of the Freely Associated States and has helped to develop their historic preservation offices. With one-time additional funds from Congress, NPS and the Micronesian Endowment for Historic Preservation cooperated to carry out the Micronesian Resources Study (MRS). The MRS was designed to inventory archeological and ethnographic resources and to provide training and material support to the new historic preservation offices. The 11 volume MRS report series published by NPS documented these projects.

NPS also monitors grant activities and provides limited training in archeology, ethnography and grant administration. It ensures that at least one historic preservation staff member of each nation, typically an archeologist, meets the U.S. Secretary of the Interior's professional qualification standards.[2] Palau currently has one cultural anthropologist as well as an archeologist. Under

the general supervision of their HPOs, paraprofessional staff work closely with their archeologist or cultural anthropologist. In the FSM the paraprofessional staff work independently most of the time since the archeologist must rotate among each of the four states of Kosrae, Pohnpei, Chuuk (Truk), and Yap. In addition to the FSM national historic preservation officer, each of the four FSM states has its own state HPO. National and state HPOs also cooperate with and monitor outside researchers.

Threats to cultural resources vary with their materials and geography. Singly or in combination they include but are not limited to land-altering developments; vandalism; neglect by owners; and deconstruction by natural forces such as tropical storms, oxidation, rot, and powerful tree roots and vines.

With few exceptions HPF projects and activities have not been designed to support the creation of parks or protected areas for cultural resources. Traditional culture as represented by individual archeological and ethnographic sites, and traditional practices are still the primary foci of HPOs. Recently there has been interest in trying to develop projects that document and preserve traditional cultural landscapes (explained below) and to make them accessible to tourists within a context of sustainable heritage tourism. As will be discussed, pursuit of this strategy may lead to partnership opportunities to enhance and broaden cultural resource preservation and better integrate it within the economies of local communities.

Landscape Conservation and Management

The Micronesian islands do not represent unmodified natural environments. The voyaging agriculturist ancestors of the current populations first settled Micronesia approximately 2,000 years ago and earlier. As a result, the settled islands have long been culturally managed for food and materials production and there are few untouched areas. With initial colonization:

> The modification of island ecosystems began in earnest as native forests were cleared to make way for root-crop gardens and for orchards of tree-crops [and also living spaces]. ...Under conditions of low population density it is possible for forests to regenerate but more often than not the cleared land is gardened repeatedly and a highly transformed "second growth" vegetation comes to replace the original rainforest.[3]

Later colonization by Europeans and Asians in the 19th and 20th centuries further altered the ecology of some islands by emphasizing the production of copra (dried coconut meat); logging the inland hardwood stands and coastal mangrove forests; and removing large amounts of beach sand to make concrete. World War II and pre-war militarization also affected a number of islands. Consequently, the inhabited islands exhibit a variety of culturally modified landscapes (cultural landscapes).

In documenting historically significant cultural landscapes in the U.S., the NPS typically includes the following kinds of material components: circulation networks (e.g., paths); boundary demarcations (e.g., walls, streams, and ridges); vegetation related to land use (e.g., crops and trees); buildings, structures and objects; archeological sites; and small-scale elements (e.g., rock cairn trail markers). Evident processes affecting the landscape such as land use, spatial organization, related cultural traditions and response to the natural environment are also documented.[4] This kind of scheme can be implemented at different levels of detail and need not be very intrusive into secret knowledge or histories sometimes associated with traditional culture sites.

In Micronesia, the use and management of landscapes take place within a context of agroforestry. Agroforestry may be defined as:

> ...a sustainable land-management system which increases the overall yield of the land, combines the production of crops (including tree crops) and forest plants and/or animals simultaneously or sequentially, on the same unit of land, and applies management practices that are compatible with the cultural practices of the local population.[5]

Agroforestry and fishing constitute the backbone of local subsistence economies in the Freely Associated States. Although patterns and rules of ownership are changing, traditional systems of land tenure still predominate, and are complex. For example on Yap:

> Land ownership involved multiple rights of use and one piece of land might belong to one person but be subject to the consent of another, be lived on by a third, and harvested by a fourth party. This complex system of land control resulted in considerable diversity in management while preventing widespread changes to large pieces of land.[6]

Loal Village canoe landing site, Kosrae, Federated States of Micronesia. This site is located at the edge of a mangrove forest and is part of a cultural landscape that has been altered by road construction. The site is protected and interpreted by the Kosrae Historic Preservation Office. Photo by the author.

Direct threats to landscapes stem from a variety of sources, including but not limited to overly intensive agriculture; erosion; neglect; commercial deforestation; clearing and filling of coastal mangrove forests; urbanization; and construction development projects. Indirect threats stem from the disintegration of traditional cultural relationships and practices that formerly maintained the landscapes, and the people's changing economic and cultural aspirations for the land.

The preservation and sustainability of landscapes for the purposes of food and materials production, supplying clean water, maintaining biodiversity, preventing environmental degradation and sustaining future heritage tourism are primary concerns of many local people, traditional leaders, and state and national government agencies. To help protect landscapes in the Freely Associated States, international financial and technical assistance has been provided by the U.S. Forest Service, the South Pacific Regional Environment Programme, the Nature Conservancy, and the Asian Development bank.

In particular, the establishment of "protected areas" in combination with direct, long-term community input into planning and resource management was or is being undertaken in Pohnpei (Watershed and Municipalities); Kosrae (Utwa-Walung Conservation Area); the Marshall Islands (Jaluit Atoll Conservation Area); and Palau (Ngaremeduu Conservation Area and Ngerkewid Islands Wildlife Preserve). A protected area can be generally defined as:

> An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.[7]

In the future, more such areas are likely to be established throughout the developing Pacific including Micronesia. In current theory,[8] for subsistence-based economies, protected areas that combine conservation with sustainable, locally controlled economic use are preferable to more traditional "parks." In conservation history, parks were often established by fiat and resulted in the removal of local settlements and prohibitions on using park resources.

Comparisons of these two different approaches in Fiji and the Solomon Islands show the practical value of the community based approach.[9] On Pohnpei, recent experience in the establishment of a forested watershed reserve by the state government is also instructive. Established in part to protect a diminishing watershed from the negative effects of planting *sakau* trees (a now popular cash crop used to produce a mildly narcotic beverage with deep roots in traditional culture), it was violently opposed by local communities and traditional leaders. They perceived it as a confiscation of their property and rights. The eventual resolution of the conflict was a long-term program of direct community participation in the planning and management of the Reserve and the development of alternative *sakau* planting schemes.

Bringing Historic and Landscape Preservation Together

Micronesians have created and maintained cultural landscapes for over 2,000 years. Their landscapes constitute home, heritage, and livelihood. They are strewn with thousands of traditional culture sites ranging from shell middens and abandoned taro pits to elevated stone pathways and megalithic residential complexes. Many of these sites play important roles in local history and traditional culture. This is in addition to the unique roles they play in defining the broader history and identity of Micronesian peoples.

Unfortunately, many of these sites are also lost, neglected, and in danger of destruction. Nor is it likely they will survive the demise of their associated landscapes that are being increasingly affected by the integration of Micronesia into the world economy. The establishment of formal parks that restrict land use and access for the purpose of preserving cultural resources, including cultural landscapes, does not seem to be a viable option at this time for most of Micronesia.

Community based landscape preservation initiatives in the Pacific currently focus on conserving biodiversity while accommodating the development of modern sustainable economies. The establishment of protected areas for these purposes may afford opportunities for participation by historic preservation offices.

In supporting these initiatives, historic preservation offices have much to offer:

- Organizational scheme for identifying and documenting cultural landscapes and their components (i.e., that used by NPS).
- Expertise in the identification and documentation of traditional and historic archeological sites and features that are associated with the landscapes.
- Access to previous archeological research documented by reports in the libraries of the historic preservation offices.
- Ability to propose limited archeological and ethnographic research projects funded by the HPF.

Of particular interest and benefit might be research into the historical ecology of the area that would help to explain the processes by which the natural landscape was transformed into a cultural landscape. This kind of research has been successfully undertaken in Polynesia by teams of archeologists and natural scientists.[10] In return for their contributions, historic preservation offices might enjoy some or all of the following benefits:

- Increased community recognition and support of their programs.
- Access to restricted community lands for the purposes of cultural resource inventory.
- Unified and possibly more efficient venue for historic preservation activities that now focus on individual dispersed sites rather than on groups of sites within a common cultural landscape.
- Regular preventive maintenance (e.g., clearing) of important cultural sites.
- Increased role in land-use planning and management, and more serious consideration for historic preservation by national and state governments.
- Recognition and support from regional and international environmental organizations.

Finally, in assisting with the establishment and maintenance of community based protected areas, historic preservation offices should be mindful of maintaining leadership roles in historic preservation when dealing with other agencies and outside organizations to enhance their stature and prospects for outside funding and assistance.

Notes

1 16 U.S.C. 470 Section 101(e)(6)(A).

2 Department of the Interior, National Park Service: "The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" in *Federal Register* 48:190 (1983) 44738-44740, and "The Secretary of the Interior's Historic Preservation Professional Qualification Standards" in *Federal Register* 62:119 (1997) 33708-33723.

3 Patrick Vinton Kirch, *On the Road of the Winds: An Archaeological History of the Pacific Islands before European Contact* (Berkeley, Los Angeles, London: University of California Press, 2000):59.

4 National Park Service, *National Register Bulletin 30 Guidelines for Evaluating and Documenting Rural Historic Landscapes* by Linda F. McClelland, J. Timothy Keller, Genevieve P. Keller and Robert Z. Melnick. Department of the Interior.

5 W.C. Clarke and R.R. Thaman (eds.) *Agroforestry in the Pacific Islands: Systems forSustainability* (Tokyo, New York, Paris: United Nations University Press, c1993), 10. This book provides detailed descriptions of agroforestry in Micronesia and other Pacific regions.

6 Marjorie V.C. Falanruw, "People Pressure and Management of Limited Resources on Yap." In Jeffrey A. McNeely and Kenton R. Miller (eds.) *National Parks, Conservation, and Development: the Role of Protected Areas in Sustaining Society,* (Washington: Smithsonian Institution Press, 1982), 351.

7 IUCN [World Conservation Union], *1997 United Nations List of Protected Areas* (Cambridge: IUCN, 1998):xiv.

8 Michael Wells and Katrina Brandon with Lee Hannah, *Peoples and Parks: Linking Protected Area Management with Local Communities* (Washington: The World Bank, The World Wildlife Fund, The U.S. Agency for International Development, 1992).

9 Annette Lees, "Lessons from the Pacific: Linking Traditional Ownership Development Needs and Protected Areas." In *PARKS* 4:1 (Gland: Commission on National Parks and Protected Areas, IUCN, 1994).

10 Patrick V. Kirch and Terry L. Hunt, eds. *Historical Ecology in the Pacific Islands: Prehistoric Environmental and Landscape Change* (New Haven, London: Yale University Press, 1997).

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Micah Van der Ryn

Preservation through Visual Anthropology and Training

Case Study from American Samoa

This paper describes an effort in cultural preservation through visual anthropology (specifically ethnographic video production) in American Samoa, a tiny island group in the middle of the South Pacific, which shares a common 3,000-year-old cultural history with the neighboring islands of the independent state of Samoa. Samoans (living in American Samoa, Samoa, and overseas countries) constitute one of the largest single groups of Polynesians in the world.

On the whole, Samoans pride themselves in their Samoan cultural identity and refer to their culture as a "living culture." There is a pervasive desire in both Samoas to preserve or continue the Samoan culture in the face of change. In American Samoa, which has experienced the most change in lifestyles and values, due mainly to its strong ties to and economic dependence on the U.S.A, the basic traditional social order still holds. Why? Because American Samoa's chosen status as an unincorporated and unorganized territory of the United States allows American Samoa to have its own constitution that can legally perpetuate the traditional chieftain (*matai*) system and its associated communal land tenure system. Nonetheless, American Samoa is experiencing cultural change and a loss of traditional ways and knowledge as young people, influenced by television, education, and living overseas, incorporate more American lifestyles and values.

The American Samoa Community College (ASCC) is the only institution of higher learning in American Samoa, and one of its missions is to instill and perpetuate an understanding of Samoan culture and traditions through its curriculum and activities. ASCC hired me as a trained visual anthropologist to work in its Samoan and Pacific Studies Program (SAMPAC) to develop a program of ethnography and visual anthropology that would support this mission. The program is now three and one-half years old. We have been extensively involved in three basic activities: ethnographic and oral history documentation, which has provided the raw material for the ethnographic video archive at ASCC; training students in ethnographic video production; and production of final ethnographic videos for use in the classroom and for broadcast on local television.

Saofa'i *(title investiture) of High Chief Gaoteaote at Vatia, Tutuila, American Samoa. Photo by the author.*

My intent is not to describe and evaluate this entire program of activities, but rather to offer several important insights gleaned through this work that may be helpful to those interested in using video as a tool in the field of cultural resource management and preservation.

It is pertinent first to define our terms. The term culture has

been defined in a variety of ways for the last 100 years by anthropologists, but for this article I will simply define culture as referring to the more or less shared and collective ways of thinking, behaving, communicating, and living that bind a group of people together in a common identity. The phrase "preservation of culture" is problematic because culture represents a dynamic and fluid process of patterned human interactions. Perhaps a more accurate term would be cultural continuity. However, we can talk about preservation and management of cultural resources, which in turn can enhance cultural continuity and identity in a community.

Cultural resources include objects (buildings, utilitarian everyday items, works of art, etc); places/spaces associated with cultural activities; and people, in whose minds cultural and historical knowledge is kept and through whose behavior culture is manifested. These different types of cultural resources are all interdependent. If you preserve a cultural object, but not the knowledge of its value and use, you only have partial preservation. A community may cease to perform certain rituals and ceremonies if the associated sacred places have vanished. The records (textual, visual, and auditory) kept in and of a community represent a fourth type of cultural resource. The cultural resource value of these records stems from their "ethnographicness"—their ability to reveal cultural information.

Visual Anthropology as Cultural Resource

Visual and audio records of people in their communities, conducting ceremonies, using technologies, interacting, and telling their memories and understanding of their lives are about as close as one can come to actual preservation of culture. While culture changes, these records remain fixed. These records may be a cultural resource to the communities from which they are extracted only when they are made available and promoted for such use. I will describe here two of a handful of projects we have conducted at ASCC that can help demonstrate this role. First, however, it is relevant to provide a little more background on visual anthropology.

Visual anthropology, a growing sub-field of cultural anthropology, has primarily been concerned with the use of visual media (i.e., still film, motion film, and video) documentation as a tool either in the research of a people's culture—raw footage analogous to ethnographic field notes; or in the representation, description, and interpretation of a community and their culture — ethnographic films analogous to ethnographic monographs. Whether using visual media or not, or any other methods, the anthropological emphasis has been on extracting information from a community (typically an exotic non-Western one) with which to produce something (ideas, a book, a film...) for a Western audience. The materials generated have not historically been made readily available to the communities from which they were extracted. Their potential value as a cultural resource for these communities was, therefore, not being realized. Evidently, anthropologists did not see this use as a priority.

Before my employment at ASCC, I had spent several years producing ethnographic videos and films concerning contemporary Samoan society and culture in a transnational context (Samoan islands and U.S. mainland). These videos went into educational distribution, but I was frustrated to see that they were not reaching the Samoan communities through this distribution method. So I had to make my own concerted efforts for the videos to be seen within the Samoan community, both stateside and in the islands, where they could have more of a community impact. My employment at ASCC has offered a great context to develop visual anthropology projects that become cultural resources in the community, which is where I feel they can realize their greatest social value.

There is not enough space here to describe all the various projects we have conducted, but I would like to describe briefly two projects done in 1998. Comparing and contrasting these projects will reveal the difference between documentation and documentary and their complementary roles as cultural resources.

The first project was an ethnographic field school, which was funded with a grant from the National Park Service Cultural Resource Training Initiative. This grant helped launch our whole ethnographic and visual anthropology program through the purchase of digital video equipment, the training of students, and the establishment of a Samoan ethnographic video archive using materials produced during the field school. It was a three-week field school, eight days of which were spent in the village of Vatia on Tutuila in American Samoa doing the fieldwork and documentation. The other days

Students and instructors of the 1998 American Samoa Community College Ethnographic Field School. Photo by the author.

(before and after the fieldwork) we used for initial training, and for post-production cataloging and transcribing of interviews. Eighteen students completed the training, four of which were paraprofessionals from Micronesia involved in the work of cultural and historic preservation there. The rest of the students were young Samoans at the college.

Ethnographic Documentation

One of the outcomes of the field school was a two-hour video that documents the ceremonial investiture of a high chief title of the village. This was an extremely important and rare village (as well as district) event. It involved the transfer and distribution of a huge amount of wealth—food, money, fine mats (the traditional currency of ritual exchange)—over several days of ritual gift-giving, as well as the performance of a large scale sacred *'ava* (kava) ceremony. All 18 students were involved in the documentation of this event. The documentation footage, which was shot from five different video cameras in five different positions, was later edited together so as to faithfully as possible represent what actually took place without losing any of the significant parts of ritual or oratory.

The village then invited us to show this video to a group of *matai* (chiefs) and youth in the village. About 40 people of Vatia village were able to attend the screening, which was held in the Methodist church of Vatia. In the question and answer period following the screening many of the villagers asked their chiefs about the purpose and meaning of various rituals in the ceremony. It is doubtful that such an educational discussion would ever have taken place without such a screening of the video. The screening established the context for the discussion to occur; and the video documentation reminded people of what took place, and in some cases revealed things that they had not realized were there or had taken place. This experience in turn stimulated questions and discussion about symbolic meanings of different aspects of the ritual. Screening the video in the village helped to realize the video's value as a cultural resource in a community's efforts toward cultural continuity. The cultural resource value of this video has since been realized several more times, including a year later when several of Vatia's chiefs watched and studied the video carefully as part of planning another ceremony.

We can call this type of video "documentation" because its value comes from its faithfulness in representing whole events. Furthermore, it makes no attempt to interpret or interrelate data. We cannot assume, however, that video documentation has no bias—that it is objective representation. Every angle, long shot, or close up has an implicit point of view—certain things are made more important or significant by how they are cinematically framed, and some important though minute objects or actions may elude the videographer's attention. Yet, documentation must strive to keep the integrity of single events intact, and should avoid cutting out any actions or words that participants deem to be integral to that event.

The Ethnographic Documentary

In contrast to ethnographic documentation is the ethnographic documentary, which may have a strong ethnographic theme (it is trying to depict and interpret a culture) and as such intentionally takes a point of view on the subject. The contrast is almost analogous to the contrast between observational field notes and a final ethnographic book. Footage of various people, places, and events are intercut with interviews and narration to tell a story, explore a theme, and convey a message or an interpretation from the filmmaker to an audience about a socio-cultural

subject. The ethnographic filmmaker integrates segments of ethnographic documentation to both elicit and reveal socio-cultural themes and information. The film (or video) documentary, like the video documentation, can also serve an important role in cultural continuity, but this role is realized differently as the following example will demonstrate.

One prime example of a documentary that we produced as a cultural resource at ASCC was our 1998 production of *Malae: Sacred Ground.* This video was collaboratively co-produced at ASCC by the Office of Forestry, Division of Agriculture, Human and Natural Resources (Land Grant) at ASCC and the SAMPAC program. My role was as a production supervisor. Local people trained in broadcast journalism were hired to help write, shoot, and edit the video. (The fact that they were Samoans conversant in their culture helped to balance the fact that they were not specifically trained in the tenets of ethnographic film production.)

Malae: Sacred Ground was specifically produced with the goal of stimulating the people of American Samoa to consider the preservation of a threatened cultural resource — their *malae.* *Malae* are the open ceremonial grounds that traditionally every Samoan village must have. As one interviewee stated, "*Malae* are the heart and soul of each village." In recent years, many of the village *malae* in American Samoa have become smaller due to development and population growth, as well as a decreased public value of their cultural and historical significance.

The video aims to remind (or inform) Samoans of the importance of village *malae* in Samoan culture and history; and evaluate the social and environmental issues surrounding the diminishing of village *malae* (at least in some areas). The video incorporates and juxtaposes early historical stills of village *malae* (acquired with assistance from both the American Samoa Historic Preservation Office and American Samoa Archives) with images of those same *malae* today, interviews with village chiefs and scholars of Samoan culture, scripted narration, and other relevant footage.

American Samoa's public television station broadcast the documentary several times, and the village mayors at their monthly meeting have reviewed and discussed the program. We are currently planning a repeat broadcast followed by a public forum of village mayors and government department heads discussing the issues presented in the video. Video copies are also being distributed to all relevant government departments as well as schools. This distribution should increase community awareness of the issue, which may help effect the preservation of village *malae.*

In contrasting documentation with documentary we can see how both forms, though constructed quite differently, can serve complementary roles in efforts to promote cultural continuity. The first form realizes its value through keeping events as whole as possible so that records of the past can be researched and studied to increase understanding. The second form reaches its value by stimulating and motivating people to care more about preserving a valuable cultural resource — in this case, *malae.*

Conclusion

My work as ethnographic specialist/instructor at American Samoa Community College continues with many more projects involving oral history, legends, sacred sites, traditional uses of resources..., which are proving to play a useful educational role in the college as well as the community as a whole. Although historically the majority of ethnographic filmmaking and documentation has not been performed with the aim of serving the communities at which it was undertaken, it has been my goal as an ethnographic filmmaker to reverse this trend, at least here in American Samoa. I find it exciting to produce ethnographic documentaries that may have a direct positive impact in the community.

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John Enright

The Adze Quarries of Tutuila

The island of Tutuila is the main island of American Samoa in the South Pacific, the sole American possession in the Southern Hemisphere. In the pre-western-contact period of Samoa's 3,000-year history, Tutuila (53 square miles of mainly high volcanic mountains) was known as an exile isle, where dissidents from the larger islands in the west of the archipelago were banished.

In recent decades, archeologists and historians have been able to assemble some of the pieces of a story that greatly enhances our understanding of the importance of Tutuila in the centuries before western contact. This story starts high on the jungled ridgelines of the island, extends down to our shoreline, and stretches out to other far-flung islands in the Pacific. It is the story of the stone quarries of Tutuila.

Metallurgy was not practiced by traditional Pacific island cultures. Until the arrival of metal implements brought by Euro-Americans, Pacific islanders fashioned what nature provided into tools and weapons. Archeological research has provided evidence of shell, bone, obsidian, and stone implements, all carefully crafted for specific purposes. Highly prized for the manufacture of stone tools (*to`i ma`a*) was a dense, dark volcanic rock called basalt. A variety of adzes (*matau*), chisels, and scrapping tools were made of basalt.

Grinding stone basins (foaga) at Sogi on the coast below the Tataga-matau adze quarry, Tutuila, American Samoa. Photo courtesy the Feleti Barstow Public Library and the Rotary Club of American Samoa.

Here and there on the ridges, ridge spurs, and steep mountain sides of Tutuila can be found outcrops of particularly high-grade, fine-grained basalt. Samoan ancestors found, developed, and quarried these outcrops. Thus far we know of 10 such basalt quarry sites on Tutuila. The four largest of these quarries are located in the mountains behind the villages of Leone, Faga`itua, and Tula and on a ridge spur in Fagasa.

To the trained eye, these sites tell a story of hundreds of years of continuous use and thousands of manhours of arduous toil. The more we learn about these sites, the more a scenario of long-term, intensive industry emerges, and this scenario affords us a rare opportunity to envision the day-to-day activities and lives of people long gone and unable to tell their story in any other way.

From the dense scatter of basalt "flakes," "cores," "blanks," "preforms," and pieces of tools that characterize these sites, and from the stone and earth-work, man-made platforms, foundations, and fortifications that have been excavated in association with the largest site—Tataga-matau in Leone—we can reconstruct an ancient manufacturing industry that also speaks of prehistoric social organization and economic relations. No other such quarries have been found on any other islands in Samoa. These were special, export-quality basalt tools.

From Tataga-matau Leone Bay is far below you when you can see it through the jungle canopy. The footing can be treacherous. This is the site of the largest basalt quarry found—50 acres of once intensely occupied land, now mainly bush. Because of its significance, Tataga-matau has been entered on the National Register of Historic Places.

Here is where it all begins, at a large basalt outcrop, where "blanks" were rock hammered out of a core boulder. Down slope, the way the basalt pieces were discarded at various steps of manufacture allows us to reconstruct the stages needed to make each type of tool.

A sense of the social order of the manufacturers takes shape when we realize that tools were made in an assembly line fashion with different

Front and back views of a Type I adze from Ta'u island, American Samoa. Photo courtesy American Samoa Historic Preservation Office.

stages of tools completed at different areas in the quarry. And what is the meaning of all those fortifications guarding the quarry? Why such extensive defenses?

Down at Sogi, on the Leone coast, are hundreds of *foaga* in the black lava flow, hand-worn bowl-shaped depressions, where the basalt adzes went through the final sharpening and polishing step in their production. Why so many? How many people sat here at the high-tide line putting the final touches on the island's major prehistoric export? How many voyaging canoes from different islands pulled at their stone anchors in the bay?

Many of Tutuila's prized adzes did leave the island as trade items. Thanks to recent developments in the elemental analysis of basalt rock, we can trace to Tutuilan quarries adzes discovered on the islands of Manu'a, Western Samoa, Tonga, Fiji, the Solomon Islands, and the Cook Islands. This examination of pre-contact trade relations has just begun, but already Tutuila has assumed a historic role at the center of a great regional trade in fine stone tools.

The exciting thing about this story from the past is that it is still unfolding before us as we explore it.

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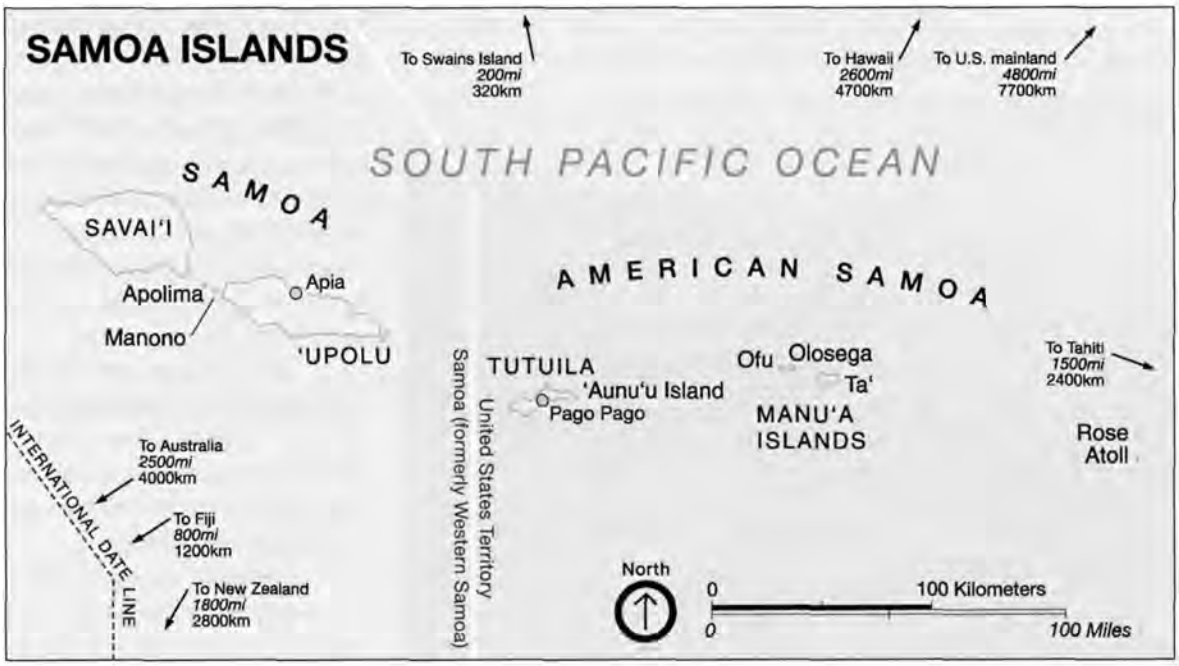

John Enright

Finding Help to Restore a Landmark

Although they were never fired at the enemy, the four six-inch naval guns defending the entrance to Pago Pago Bay on the island of Tutuila remain as mute reminders of a time almost 60 years ago when American Samoa briefly stood on the front lines in America's war with Japan.

In 1941, in anticipation of the coming war, gun emplacements were built on the jungled ridges on both sides of the harbor entrance. The ridge locations were not accessible by roads. About 1,000 Samoan laborers (basically the entire male workforce of the island) were hired to haul the cement, aggregate, and reinforcement bars to the ridge tops; and somehow the massive guns, carriages, and ammunition were lofted into place.

In the grim months following the attack on Pearl Harbor, the Japanese advance in the Pacific appeared to be unstoppable. Samoa was a vital link in the route from the United States to Australia and New Zealand, and Japan's 1938 Basic War Plan called for its seizure. There was considerable evidence in early 1942 that Japan was preparing to seize Samoa, especially after its advance into the Gilbert Islands to the north and New Britain to the west. The United States rushed the 2nd Marine Brigade to strengthen American Samoa's defenses and the 3rd Brigade to defend Western Samoa and Wallis Island. American Samoa became the largest Marine Corps installation in the Pacific Ocean. However, the subsequent battles of the Coral Sea and Midway halted the Japanese Navy's push to conquer the South Pacific, and Samoa was spared the scars of modern war. The guns guarding Pago Pago Bay were left to rust and be claimed by the jungle.

The lower Blunts Point Gun as it looked prior to restoration. March 1998. Photo by David J. Herdrich.

In 1987, the Naval gun site atop Matautu Ridge at Tulutulu Point, commonly called Blunts Point Battery, at the western entrance to the Bay was designated a national historic landmark. The landmark includes one of the two original guns of the Battery. Since its designation, however, the landmark had been largely ignored by the American Samoa government on whose land it sits and by the local Department of Parks and Recreation, which was nominally responsible for its maintenance. Access was difficult, dangerous, and unmarked. The gun emplacement and accompanying bunkers were flooded and overgrown by jungle.

In April 2000, the islands of American Samoa were to celebrate the centennial of their cession to the United States. More than two years before the centennial, the American Samoa Historic Preservation Office (ASHPO) initiated efforts to repair and restore historic sites associated with the Territory's Naval period (1900-1951). The Blunts Point Battery National Historic Landmark was high on its list.

The main problem was a lack of funds. ASHPO is the sole U.S. state and territorial historic preservation program that operates entirely without any local funding. The American Samoa government was, as always, experiencing a severe economic crisis. There was no budget for repairs, no hope for an ad hoc appropriation.

Through the efforts of the governor's office, a contingent of 10 U.S. Navy Seabees was assigned to American Samoa for the express purpose of helping with the repairs to historic structures and sites. In March 1999, a crew of five Seabees began work on Blunts Point Battery.

Following plans drawn up by ASHPO and the Amercan Samoa Department of Public Works, the Seabees constructed cement stairways and paths to the Battery. They drained the emplacements and bunkers, cleared the long-

Boy Scouts clean the concrete gun enclosure and remove rust from the lower Blunts Point Gun using sandpaper and wire brushes. December 1999. Photo by Analosa Vele.

clogged drains, and cut trees and vegetation away from the sites and approaches. The necessary pumps, welders, and construction materials were scrounged and borrowed. The Seabees (from NMCB5) did a great job.

When the Seabees were finished, however, much was still left to be done. ASHPO decided to turn the several acres of ridge top grounds surrounding the Blunts Point guns into an arboretum of Samoan heritage trees and plants and invited the American Samoa Community College's Land Grant Program foresters to take on the new park as a model project. An incremental replanting plan was devised and implemented. Maintenance of the new park was adopted by the local Americorps Volunteers as a community project. This was done at no cost to ASHPO or the American Samoa government.

But the landmark's single gun still needed to be cleaned of rust, treated, and painted. ASHPO was fortunate to find an Eagle Scout, Eti Vele, looking for a challenging project to take on for his Eagle Scout Merit Badge. Under ASHPO's direction, Eti and his buddies undertook the considerable task of wire-brushing, sealing, priming, and painting the big gun and its base. Through donations from the community, Eti paid for all the materials and supplies needed to complete the job. And he got his Eagle Scout badge. All was completed in time for the centennial celebration.

Today, ASHPO staff can safely take tours of school children to the landmark site and tell them about their grandparents' efforts to defend their island and what life was like in those times of nightly blackouts and anticipation, the island swarming with thousands of Marines.

It would have been easier to write a work order against appropriated funds and just have it done, but that was not possible. By the end of this process, more people had become involved, and in a traditional community such as American Samoa that is what really matters. The Eagle Scouts, Americorps, and the Land Grant folks have all committed themselves to the long-term maintenance of the landmark and its park.

A lesson that life in the islands keeps teaching is that the process is what contains the meaning, and its products are always properly transitory.

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Aerial view of the Rock Islands of Palau. See related article, p. 41. Photo by Tom McDonald.

Maria Annie Flores

Artifacts of Our [ti][1] Facts

Recent reports of stolen artifacts on Guam have been covered by local radio talk shows and newspaper reports. A photographer tipped Rlene Steffy, the host of "Rlene Live," K-57 Radio, to express his outrage when he discovered *lusong*[2] had been removed from a historic site he frequently visited for photography purposes. Thieves removed two stones that were well publicized when it was photographed for the 1996 Guam telephone directory.

In order to remove these artifacts, a vehicle equipped with specialized apparatus would have to have been used to transport it out of a valley that has been described as remote. Contrary to reports, the site is easily accessible during the dry season, by vehicles with four wheel drive. Removing the artifacts was a very ambitious venture. Thieves intended to steal two *lusong,* and part of a *latte,*[3] however, the *latte* was left at the site after it cracked while being pried out of the earth. Desired for landscaping, one of the stolen artifacts now sits in the front yard of a private home.

For weeks, the public debate between private ownership rights and respect for traditional cultural values continued in the airwaves, revealing more than just ambiguities in Guam's laws. The occasion also served to legitimize the survival of traditional cultural values and beliefs associated with Guam's natural landscapes. Documenting traditional values and beliefs, through the experiences of the *manamko,*[4] could enhance our understanding of how these artifacts have managed to exist in Guam's landscape, perhaps even predating the arrival of European voyagers. If these artifacts have always existed in Guam's landscape, prior to Guam's first historic preservation plan, what traditional Chamorro value(s), if any, might still serve to protect artifacts from thievery and destruction today?

Assisted by family elders, shortcomings of Guam's current program became obvious. According to Charo-Bobi (pronounced Tsa-row-boe-bee), the family *techa,*[5]

> *Juss bicuss you buy the lann, dussin min you own those [latte stones] thingks. You tell those peepull to leaf them [the artifacts] alone bicuss they are diss-turbing thingks that dont bilong to them. Ee-fen doctors understand the beleaf of the taotaomona*[6]*, thass why peepull come see me. Hwen efreeting is finiss, they [the sick or disturbed] will not talk about what they dit bicuss its dis-wrist-speck-full.*[7]

As a child, my father[8] learned that places filled with *latte* stones are to be avoided because of their association with *taotaomo'na.* Why anyone would bring a grave marker to their home was incomprehensible to him. Then my father just had to ask,

> *Bebee. Hwen dit these things become our-ti-facts?*[9]

These sentiments resounded into imagery that was not easily distanced. The experience recalled critiques of colonial discourse and post-colonialism.[10] Developing strategies to address theft and vandalism of historic sites was further complicated on the eve of the golden anniversary of the signing of the Organic Act of Guam.[11] It was apparent that Guam's traditional sense of place[12] was being displaced by the western methods of preservation. While envisioning all the various ways Guam's current program conveys[13] historic significance, traditional sense of place was nowhere to be found.

Latte *stones and* lusong *historic sites are showing up in residential landscaping. Photo by the author.*

Various stones lining a private driveway. Photo by the author.

The issue of theft and vandalism of historic sites on Guam, provides the opportunity to seriously consider whether Guam's current program design could still allow for the preservation of indigenous knowledge systems and values. Being of the position that they have always existed, the merits of this claim, if viewed through the current program, would ostensibly be challenged as having little to no impact in improving today's preservation practices and policies addressing theft and vandalism of historic sites.

The first concern would be how to validate the existence of traditional value systems and beliefs. An inter-disciplinary study could be designed to accomplish this. The outcome of this study may again be argued as being outside of Guam's current program needs, citing the lack of adequate personnel and budgetary constraints. Again, being of the position that traditional value systems and beliefs associated with *latte* stones and *lusong* have always existed, the merits of this claim, if viewed through the current program, would ostensibly be challenged, for a few reasons already mentioned. However, the greatest challenge to overcome yet would be the endless rhetoric of Guam's rapid urbanization as proof of the non-existence of traditional values, beliefs and traditions.

During a 1997 symposium entitled, Preservation of What, For Whom?: A Critical Look at Historic Significance, David L. Ames, Chairman for the National Council for Preservation Education, recognized the need to examine the field of historic preservation today:

> ...the field has matured significantly since the late 1960s. Looking ahead, we must ask whether the programs, policies, standards, guidelines, and processes that currently govern historic preservation are still appropriate and relevant as they should be... Finally, how can the answers to these questions become incorporated into a field that cuts across academic disciplines, professional practice, and a number of public policies.[14]

Like the nation, Guam has had 25 years to reflect on the results of earlier preservation initiatives. Guam's program has changed considerably since 1976 and although many improvements have since been made, the program may not be as effective as professionals in the field would like to think. Unlike Guam, the Republic of Marshall Islands, the Republic of Palau, and the Federated States of Micronesia, through the Micronesian Endowment for Historic Preservation, have been allowed and encouraged to participate in the design of their preservation program model(s) to meet the respective values and beliefs of their peoples.

> In Micronesia, historic preservation involves more than historic places; it includes oral history and oral literature, art forms, music, dance, ceremonies, and perhaps most important, traditional values and beliefs. Historic places are important to Micronesian people largely because they are physical links to traditional beliefs, traditional forms of social and political integration, and traditional moral values. Values and traditions are as important as historic places, and are cherished whether they have a physical, real property referent or not.[15]

Returning to my father's question,

> *Bebee. Hwen dit these things become our-ti-facts? These things should be treated like turtles and fanihi (fruit bats). No buddy should own them. There should all-sue be stiff pennol-tees for those ack-sep-ting eni kind of our-ti-fact. Juss cole it ack-sep-ting stolen prop-pa-tee. Your office needs to come down hard! Im tellin you right now. Its juss like the poe-tsing deer. If caught, you con-fi-sket the truck, the guns and the carcass. You bedder tsek into that low ray-dee-you actiff pent to start marking all the things and buy a Geiger counter. They use that in the melee-tary. Is safe.*[16]

Ek-wah Dad! But I'll be sure to make your concerns known.

Haunani-Kay Trask was right when she wrote of colonialism and sovereignty in Hawaii in 1993,

> ...I had misunderstood this written record, thinking it described my own people. But my history was nowhere present. For we had not written. We had chanted and sailed...and

prayed. And we told stories through the great blood lines of memory, genealogy.[17]

Written records, produced by professionals in the field of preservation now serves as evidence. *Latte* stones and *lusong* can appropriately be viewed as artifacts of our "not" facts. Historic significance has rested largely on the facts of archeologists as well as former and present professionals of historic preservation, not the values and beliefs of the people. For whom then, have these artifacts been preserved for?

Fortunately, the National Park Service has become cognizant of differing values in the Marshalls, Belau and the FSM. The NPS has increased emphasis on the recognition of traditional cultural attributes and the preservation of special sites other than those of archeological interest. Through much assistance of the Western Field Office, (now the Pacific Great Basin Support Office) of the National Park Service in San Francisco, emphasis has been made to design historic preservation programs to meet the needs of respective peoples of Micronesia. Guam's program can benefit greatly from the results of the Micronesia Resources Study and the various programs that have since been implemented as they were designed.

> One important feature and recurrent theme of the [training] project was their concern over what might be best characterized as cultural values. Micronesian historic preservation office staffs and the broader communities interested in preservation frequently emphasized the need for a greater focus on traditional culture, over more typical historic preservation interests in archeology and historic buildings.[18]

It is time for Guam to re-evaluate how its current program interprets historic significance and re-consider all the possible ways it is being conveyed to the community for which historic sites are being preserved. Guam should consider examining preservation models that have been designed to meet the cultural needs of islands similar to Guam, such as those in Micronesia. It is not too late for Guam to preserve traditional cultural values and beliefs associated with *latte* stones and *lusong* in order to protect and preserve them. One way to document traditional values and beliefs is through the experiences of the *manamko.* Doing so will enhance our understanding of how artifacts have managed to exist in Guam's landscape, even predating the arrival of European voyagers. If these artifacts have always existed in Guam's landscape, prior to Guam's first historic preservation plan, traditional Chamorro values and beliefs may be used to enhance our understanding of historic significance to further improve current practices and policies in protecting artifacts from thievery and destruction today.

Notes

1 According to Jose Rivera Flores (see note 8.), *Ti* is a negative marker in the language of Chamorro people, meaning "not." See also Donald Topping, Pedro M. Ogo, and Bernadita B. Dungca. *Chamorro-English Dictionary. Pacific and Asian Linguistic Institute Language Texts: Micronesia.* (Honolulu: University of Hawaii Press 1975): 202. Hereafter CED. Many Chamorro speakers do not agree with the definitions listed in this dictionary.

2 The word *lusong*, was not a Chamorro word typically used by Jose Rivera Flores or Charo-Bobi (also known as Mrs. Rosario Toves, see note 5). They were both familiar with the word *metate*, a stone typically used for grinding food, but not *lusong. Lusong* is defined as the Chamorro word for mortar.

3 According to Jose Rivera Flores and Charo-Bobi, *latte* stones are stones that mark the location of human burials. Places filled with *latte* stones are also associated with *taotaomo'na.* Both Flores and Charo-Bobi often referred to *latte* stone sets located in various locations of Tumon, that have since been bulldozed by the U.S. Navy. *Taotaomo'na* can be classified further according to their physical size. In Scott Russell's book, *Tiempon I Manmofo'na: Ancient Chamorro Culture and History of the Northern Mariana Islands.* (Division of Historic Preservation, 1998), *Micronesian Archeological Survey Report* No 32: 17-36, *latte* stones are made of two parts. The trapezoidal pillar, called *haligi* and the hemispherical cap, called *tasa.* They are found on the islands of Guam, Rota, Tinian and Saipan. They served as foundations to support above ground thatched dwellings. The stones vary in size. The earliest known written descriptions of *latte* stones were made in 1742 by Commodore George Anson and his officers while on Tinian. The first sketch was that of the House of Taga by Percy Brett, a junior officer. In 1880, Olive y Garcia, the Spanish governor of Guam, suspected that the *latte* sites were inhabited before European discovery. He observed that Chamorros had a superstitious fear of touching and working the stones or the land they occupy, because the places were associated with human burials. The definition in *CED*: 122, is not an accurate description.

4 According to Jose Rivera Flores, *manamko* means the old people or elders. *Mañaina* (plural).

5 According to Jose Rivera Flores and Charo-Bobi, a *techa* is a prayer leader. The dictionary defines it as one who leads prayers. *CED*: 201. Not to be con-

fused with *suruhana*, a traditional herbalist or herb doctor. *Charo-Bobi* is occasionally requested for assistance in situations where an individual is afflicted with a serious illness or experiencing unexplained emotional disturbance.

6 *Taotaomo'na* are the spirits of the "People from Before."

7 As spoken by Charo-Bobi, preserved in vernacular colloquialism. English translation: Just because you buy land, it doesnt mean you own those [*latte* stones] things. You tell those people to leave them [the artifacts] alone because they are disturbing things that don't belong to them. Even doctors understand the belief of the *taotaomo'na*, that's why people come see me. When everything is finish, they [the sick or emotionally disturbed] will not talk about what they did because its disrespectful.

8 Jose Rivera Flores, age 66, *familian Bonik*, has traveled extensively while serving 22 years in the U.S. Armed Forces. He retired from military service in 1974, and retired from government of Guam service in 1995, after serving 27 years. He is the father of the author.

9 As spoken by Jose Rivera Flores in vernacular colloquialism. English translation: Baby. When did these things become artifacts?

10 Post-colonial studies: A literary movement, emerging mostly from within English departments in the United States and elsewhere, that attempts to describe and understand the experience of colonized peoples before and after colonization, by an examination of texts: books, images, movies, advertising, and so on. It simply does not mean studies "after colonization." <www.vmoir.org/panop/subject_P.htm>

11 The Organic Act of Guam, signed on August 1, 1950, is the federal law that granted Chamorros with a limited form of American citizenship. It allowed for the creation of a limited form of self-government, and transferred federal oversight from the Department of the Navy to the Department of the Interior. It also clarified Guam's political status as that of an unincorporated territory of the United States of America which means that the island belongs to, but is not a part of the United States. See Vicente M. Diaz. "...Paved with Good Intentions...Roads, Citizenship and a Century of American Colonialism in Guam," originally prepared for the "Legacies of 1898" seminar, Oberman Center for Advanced Studies, University of Iowa, June 1998 (working draft, February 8, 1999): 6.

12 In 1995, attention to Hawaii's changing landscapes and the significance of both the Native Hawaiian landscape heritage and other types of cultural landscapes in the state's history was recognized. "...recognition of Native Hawaiian heritage as the preeminent concern.... The conference came, in fact, at a significant point in the evolution of Native Hawaiian efforts to gain more direct and most people today would say legitimate control over their own history and heritage." See William Chapman. "Introduction." In *Preserving Hawaii's Traditional Landscapes: Conference Proceedings at the University of Hawaii in Honolulu Hawaii* September 15-17, 1995, edited by William Chapman and Chris Kirk-Kuwaye, viii-xiv. *Hawaii: Historic Preservation Program*, Department of American Studies, University of Hawaii at Manoa, National Park Service, U.S. Department of the Interior Historic Preservation Division, State of Hawaii Department of Land and Natural Resources, Historic Hawaii Foundation, Hawaiian Historical Society, East West Center: viii.

13 Edward Said points out that while the French and British were expanding their colonies, ideas about the colonized were also being formed. In a host of scholarly and literary works, the colonized were described as inferior, irrational, depraved, and child-like. "Scientists, the scholar, the missionary, the trader, or soldier could be there [in the Orient] with little resistence on the Orient's part.... ...under the general heading 'Orient,' within the umbrella of 'Western Hegemony' during the end of the 18th century emerged a complex Orient suitable for study in the academy, for display at a museum, for reconstruction in the colonial office, for theoretical illustration in anthropology, biology, linguistics, racial and historical theses about mankind and the universe for instances of economic and sociological theories of development, revolution, cultural personality, national and religious character." See Edward Said. Orientalism. (New York: Pantheon Books, 1979): 8. According to Antoinette J. Lee, in "Diversifying the Cultural Resources Profession." *CRM*, 22: 8 (1999): 47-48, [t]he *New York Times* reported New York politicians were campaigning to secure votes for foreign born. She further states that this profound change inspires both fear and confidence. The most disturbing observation made by Lee was the disparity between cultural dominant cultures and indigenous groups in the area of historic preservation, such is the case in the Caribbean region. According to William Chapman, when historic preservation did come to the islands, it tended to be borne by Europeans and North Americans who generally imposed their own ideas of preservation upon an often alienated populace. Further, historic preservation was viewed "as an effort to expropriate an indigenous culture and as the imposition of a new kind of colonial power." Lee's article provides a useful bibliography.

14 David L. Ames. "Introduction." In *Preservation of What, and for Whom? A Critical Look at Historical Significance: Selected Papers of the Symposium at Goucher College, in Baltimore, Maryland, March 20-22, 1997*, edited by Michael Tomlan (Maryland: National Council for Preservation Education, the National Park Service and the Center for Graduate and Continuing Studies, Goucher College, 1998): 5-13.

15 National Park Service. "Micronesian Resources Study: Protecting Historic Properties and Cultural Traditions in the Freely Associated States of Micronesia." A report on cultural resource management needs in the Republic of Marshall Islands, the Federated States of Micronesia, and the Republic of Palau. (March 1994.): 4.

16 As spoken by Jose Rivera Flores preserved in vernacular colloquialism. English translation: Baby. When did these things become artifacts? These things should be treated like turtles and fanihi (fruit bats) [endangered species]. No body can own any of it. There should also be stiff penalties for those accepting any kind of artifact. Just call it accepting stolen property. Your office needs to come down hard! I'm telling you right now. It's just like poaching deer. If caught, you confiscate the truck, the guns and the carcass. You better check into that low radio active paint to start marking all the things [artifacts] and buy a Geiger counter. They use that in the military [to mark government property.] It's safe.

17 Haunani-Kay Trask. *From a Native Daughter: Colonialism and Sovereignty in Hawaii.* (Monroe, Maine: Common Courage Press, 1993): 154. For another perspective, see Lin Poyer. "Defining History Across Cultures: Islander and Outside Contrasts." *ISLA: Journal of Micronesian Studies* 1 no. 1 (Rainy Season 1992): 73-98.

18 William Chapman and Delta Lightner. "Historic Preservation Training in Micronesia, An Assessment of Needs." *CRM* 19:3 (1996): 13-14.

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Victor Hara Torres

Guam's GIS Program

The Guam Historic Preservation Office (GHPO) is now utilizing Geographic Information Systems (GIS) technology. In fiscal year 1998-1999 the GHPO applied for additional historic preservation funds from the National Park Service to develop a GIS program. The project involved the purchase of computer hardware, a plotter, GIS software, training, and the completion of specific tasks.

A primary reason for developing the GHPO's GIS capability was to update Guam's Historic Sites Inventory (GHSI) maps. The addition of hundreds of sites to the site inventory by an early 1990s building boom necessitated such action. The existing 1:4800 Orthophoto maps, which were over 20 years old, were also cumbersome for fieldwork. Newer site locations were hand drawn onto paper United States Geological Survey (USGS) maps and not the old Orthophotos. The USGS paper maps began fraying at the edges from use. There had to be a better way to preserve and graphically display site information. That way was through the use of GIS technology.

ArcView GIS products from Environmental Science and Research Institute (ESRI) based in Redlands, California were chosen. The University of Guam's Water and Environmental Research Institute (WERI) was selected as the contractor to conduct the GIS training and development of the GIS historic sites coverage and application.

The development of the historic sites coverage was actually quite simple because the GHPO already had in place a Historic Sites Inventory database. This database with selected site information had either single point or boundary coordinate data for each site. The GHPO GIS uses the site single point coordinate data in the database to create the historic sites map coverage as points or selected symbols on digital maps.

It was in solving problems associated with using the base maps and the cadastral map data that WERI's expertise became invaluable. The GHPO decided to utilize both the USGS topographic maps and Government of Guam's 1992-94 Digital Orthophotos as base maps. Though useful, the USGS topographic maps were last revised in 1975. Therefore, the government of Guam's Digital Orthophotos, photographed from 1992-1994 were also used for their more current ground data. Due to the different base map coordinate systems, Universal Transverse Mercator Grid (UTM) and Government of Guam Grid (GG) respectively, software was purchased that would calculate existing UTM coordinate values into GG coordinate values. The GG coordinate values derived from the UTM data were then placed in separate fields in the GHSI database. The user's choice of which base map format to use determines which site coordinate data fields are chosen to create the coverage.

The GIS has proven to be valuable in the following ways:

Map Making. GIS gives us the capability to produce maps with flexibility that we never had before. It allows us to portray historic sites on maps of different scales and formats. We print large format paper maps for presentations, smaller ones for the field, and even smaller ones to update or enhance maps in site inventory files. We can do this for all or only particular types of sites, for either the whole island or within a specified area. They can be reprinted as necessary. As another author noted, "This represents a considerable advantage over paper-based systems which are exceptionally difficult to modify or to expand upon in the face of new demands."[1]

Performing Geographic Queries and Analyses. Another great feature of GIS is that from your computer desktop you can quickly access various maps and selected site information from a database at your fingertips.

> The power of GIS centers on the relationships between map themes and attributes. This integration allows users to manipulate maps, run queries, or model future events. Users can quickly locate resources on a map based on a database query, or conversely, locate database information via a spatial query of map themes.[2]

This is quite an advancement from searching paper maps, hard copy lists, and filing cabinets. GIS has become a valuable tool in project reviews, management of Historic Site Inventory information, and historic site analysis with regard to many factors.

Checking the Accuracy of Site Coordinate Information. In our use of GIS to update our site maps, we found a number of errors in the site coordinate data submitted to the GHPO. This fact became readily apparent in GIS. There were even a number of terrestrial sites that were shown as being offshore from Guam. Fortunately, GIS made it easier to correct the errors.

Once a site was determined to be in the wrong place we referred to the site inventory files and maps to find and digitize the proper location. Many of the early surveys used USGS topographic maps. In these cases, we used the GIS to give us the correct site coordinates after the site was properly located on the digital USGS base map. The process was easier if the historic property was a building or a structure shown on the base maps.

Many prehistoric sites do not show up as features on base maps. They can be difficult to map accurately. The detailed drawings and descriptions on the site inventory forms then become very important in determining where to place the site on the digital map. One time a call to the archeologist who surveyed the site helped in accurately locating the site on a map. In some cases additional fieldwork will be necessary to relocate sites.

Improved Data Capture and Sharing. GIS allows the GHPO to accept new historic sites coordinate data from inventory surveys in a digital format, which can be downloaded and used to create coverage quite quickly. Data received in this manner allows for reduced data capture needs, immediate mapping, and reduced data entry error.

We have also obtained other map coverages for coastlines, rivers, wetlands, parks, roads, etc., from the Government of Guam as well as federal agencies. More coverages are being developed for other resources. An updated USGS map is also expected to be available soon.

Much effort was necessary to develop the GIS program, but a good database is of critical importance. Having the support of management, staff, and other government agencies developing GIS products is also important. However, having the increased flexibility and power to graphically portray, manage, and analyze historic site data within the context of their geographic environment makes the effort worth it for the GHPO. In fact, we have only started to utilize Geographic Information Systems as a tool for the 21st century.

Notes

1 William Moss, Daniel Simoneau, and Benoît Fiset, "Archeology, GIS and Urban Planning in Quebec City," *CRM* Vol.21, No.5 (National Park Service, 1998): 20.

2 Diedre McCarthy, "Applying GIS Technologies to CRM," *CRM* 21:5 (National Park Service, 1998): 34.

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Scott Russell

Dealing with Human Remains
An Approach from the Northern Marianas

Over the past two decades, the Northern Mariana Islands have developed into a prosperous resort destination catering to hundreds of thousands of visitors yearly. Necessary components of this development have been the construction of resort facilities such as hotels, golf courses and commercial buildings, and a significant expansion of the islands' infrastructure to support a rapidly growing population comprising foreign guest workers and local residents.

In accordance with Commonwealth and federal statutes, earthmoving projects are reviewed by the Division of Historic Preservation (HPO) to determine their potential effects on archeological, cultural and historic sites. In cases where significant sites are identified, priority is given to *in situ* preservation, or, where this is impractical, to implementing appropriate mitigation of impact measures which often take the form of archeological data recovery.

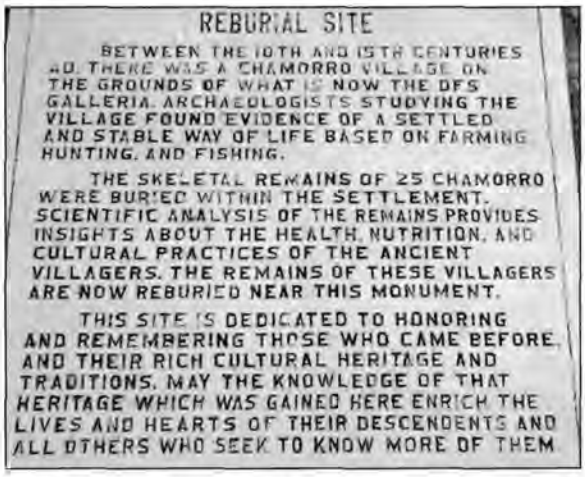
Particularly sensitive are sites that contain human skeletal remains ranging from ancient Chamorro burials to Japanese casualties of World War II. Ancient remains are most commonly found in former village sites that were usually situated in coastal beach environments.[1] Also present in coastal areas are individual and mass graves of Japanese military personnel and civilians killed during the World War II battles for Saipan and Tinian, and a much smaller number of 19th-century burials associated with abandoned historic cemeteries. Today, these same coastal areas are highly sought after sites for commercial development as well as the logical rights-of-way for the islands' ever-expanding infrastructure system, a combination of factors ensuring that human remains are encountered on a routine basis.

A latte and interpretive plaque mark a reburial site on Saipan. Photo by the author.

Finding human remains is relatively easy, but determining what to do with them has proved to be a more difficult task. Should they be left in place, excavated by archeologists and subjected to rigorous scientific study, moved to a safe location and reburied without study, or simply ignored? What parties should be consulted? Should all classes of human remains be treated in the same fashion?

Opinions on these questions vary. Developers, both in the public and private sectors, along with landowners hoping to secure lucrative lease agreements, commonly view human remains as impediments which either threaten their planned projects or make them more costly. The scientific community, primarily composed of professional archeologists, tends to look upon human remains as important sources of data about ancient life that should be recovered and studied as thoroughly as possible. Views of other members of the public range from indifference to a strong belief that human remains are sacred and should be left undisturbed and unstudied. Adding to the mix is the official policy of the Japanese government that calls for the recovery and repatriation of its war dead.

As the agency legally mandated to protect the Commonwealth's historic resources, the HPO had the responsibility to take into consideration these various viewpoints and to develop a coherent policy for the treatment of human remains.



A typical interpretive marker at a reburial site. Photo by the author.

Public hearings were held on Saipan, Tinian, and Rota during which an important point emerged: while a majority of people wished to see human remains left undisturbed whenever practical, they did not want their *in situ* preservation to interfere with important public and private sector projects, particularly those supporting the economic vitality of the community and those that involved the provision of essential infrastructure services.

Taking into account these comments, the HPO issued "Standards for the Treatment of Human Remains" which were formally adopted by the CNMI Historic Preservation Review Board in October 1999. These standards establish four classes of remains—Ancient Chamorro, Historic, World War II, and Modern—with priority treatments for each class.

In accordance with the standards, ancient Chamorro remains, the most commonly encountered class, are to be left *in situ* whenever practical with special effort directed to modifying construction and earthmoving plans to avoid disturbance. When this is not possible, ancient remains are to be carefully excavated under professional archeological supervision and, where appropriate, subjected to specialized osteological study with the aim of expanding our knowledge about ancient life. Once analysis is completed, the standards call for the remains to be reintered in a secure area as closely as possible to the original grave site. In some cases, reburial sites are marked with cultural objects such as latte stones and basalt grinders and provided with information about ancient life gleaned from the archeological investigations.[2]

Historic remains are also to be left *in situ* whenever possible. When necessary, historic remains are recovered by professionally supervised archeological excavations that include basic osteological field analyses. In cases where the remains are of Carolinian origin, they are turned over to the Office of Carolinian Affairs for final disposition.[3] In cases where the remains are determined to be Chamorro, they are turned over to the Catholic church for reinterment at an appropriate cemetery.

World War II remains comprising Japanese war dead, are the second most commonly encountered class. In accordance with an agreement between the Japanese government and the HPO, these remains are to be collected whenever they are discovered, subjected to basic in-field analyses and stored in a specially designated container. Special attention is focused on recovering personal effects that will aid in the identification of individual remains so that any surviving family members may be notified. Once a year, these remains are to be turned over to representatives of the Ministry of Health and Welfare for cremation and subsequent repatriation to Japan.

In rare instances where modern remains are encountered, the standards call for coordination with the Departments of Public Health and Public Safety for appropriate investigation and disposition. In one recent instance, the HPO was asked to examine two human skeletons that turned out to be the apparent victims of a homicide.

Finally, the standards require the HPO to seek the repatriation of human remains from the Northern Marianas that are held in museum collections around the world. It was a commonly held sentiment that long-term museum curation is not an appropriate or acceptable treatment and that such remains should be returned to the islands for reburial.

It is hoped that these standards will allow for a flexible and balanced response in cases where human remains are encountered, one that takes into account a widespread desire for modern development while at the same time addressing the traditional respect for the dead that is still an important element of local society.

Notes

1 Chamorro human remains are most commonly associated with the Latte Phase which began roughly 1000 AD.

2 *Latte* are a two-piece foundation stone that supported Chamorro residences late in prehistoric times. It is now an important cultural symbol.

3 Carolinian burials may be identified by the presence of elaborate glass bead necklaces.

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Jeannette A. Simons

Compliance, Science, and Research

Archeology in the Mariana Islands

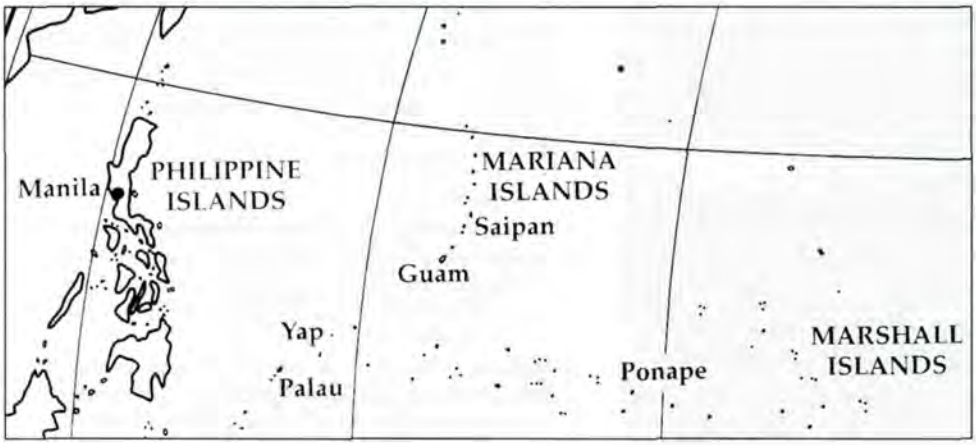
The Department of the Navy has jurisdiction over approximately 17,200 hectares (43,000 acres) of land in the Mariana Islands, in the Territory of Guam, and the Commonwealth of the Northern Mariana Islands (CNMI) on the island of Tinian.

An important part of the Navy's mission is to protect the environment including cultural resources. Sections 106 and 110 of the National Historic Preservation Act (NHPA) of 1966, as amended, and Navy policy* provide for agencies to allocate funds in support of compliance efforts to identify, evaluate, inventory, and protect resources that are listed or eligible for listing on the National Register of Historic Places (NRHP). The Navy is committed to operating in a manner compatible with the environment and incorporates preservation considerations into its daily management of cultural resources and stewardship activities. Navy installations and training areas in the Pacific become islands of safety for cultural resources.

Lands under the jurisdiction of Commander, Naval Forces Marianas (COMNAVMARIANAS) hold thousands of cultural resources. Archeological remains record 3,500 years of occupation, with the prehistoric era beginning approximately 1500 B.C. and lasting until after European contact in A.D. 1521. Remains of Chamorro culture display unique early pottery traditions and the later development of the megalithic Latte architecture. Historic structures from the Spanish occupation, American colonization in the Territory of Guam, and Japanese colonization in the CNMI dot the landscape. World War II sites hidden in the thick jungle testify to the fierce battle for the Marianas.

Restricted use in large tracts of diverse land, such as the 3,536.8-hectare (8,842-acre) area in central Guam known as the Ordnance Annex, protects the archeological record from vandalism and development. Remains are thus preserved to record and study occupational systems such as caves; subsurface deposits containing materials vital for obtaining radiocarbon data to study temporal issues; and macro- and microconstituent data to address subsistence issues.

Professional efforts to identify, evaluate, and protect cultural resources demand that the laws, ethics, standards, methods, techniques, and theories that guide good science and research are properly applied to compliance projects. Projects conducted in support of compliance efforts develop research goals pertinent to the understanding of human subsistence and settlement for each project area, and the region. Field strategies are developed to determine data requirements and to guide data collection, analysis, and interpretation. Laboratory investigations such as paleoenvironmental studies, lithic analysis, and residue analysis contribute to our understanding of the archeological record.



Analysis results provide COMNAVMARIANAS land and resource managers with data to evaluate cultural resources under their purview and develop appropriate management strategies, while simultaneously providing scientists with comprehensive explanations and material for inquiry to continue furthering our understanding of Mariana Islands prehistory.

A winch is used to extract a drive segment of the Laguas core. Photo courtesy Department of the Navy Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, by International Archaeological Research Institute, Inc. Honolulu, Hawaii.

Paleoenvironmental studies conducted in conjunction with archeological survey in Guam's southwestern Piti District near Apra Harbor, sponsored by CONINAVMARIANAS in compliance with Section 110, provide supporting data for evaluating and interpreting cultural resources. A 28-meter sediment core collected from a wetland near the Laguas drainage produced microfossils of pollen, phytoliths, diatoms, and charcoal particles. These data were applied to investigations concerning island environment prior to human colonization, impacts on the environment subsequent to human colonization and land use, climate changes, native plant introductions, and agriculture.

Other paleoenvironmental samples were collected from the Fonte wetlands and savanna grasslands in conjunction with a Section 110 survey at Nimitz Hill, Guam. These data add to a stimulating scientific debate concerning the development of grasslands on Guam and other Pacific islands. Did the grasslands result from past agricultural practices, or did their existence restrict past agricultural practices? Clearly, to interpret archeological sites and manage them wisely, the relationship to past environmental conditions is essential.

The Nimitz Hill survey also located the largest lithic quarry found to date in the Mariana Islands, now known as Chert Hill. Specialized lithic studies provided data supporting a hypothesis that the upper slopes of the Fonte drainage system were used for prehistoric farming. The stone cores showed little preparation prior to flake removal and the tools produced were simple, suggesting the quarry provided a convenient and expedient chert resource for on-the-spot tool making. This information is now integrated into the regional database, providing material for comparison studies as archeologists investigate the distribution of Chert Hill material at other sites as part of the process of understanding our cultural resources.

Pottery sherds are ubiquitous in the Mariana Islands archeological record, providing researchers myriad venues for investigating temporal and subsistence issues. Four sherds collected during the Section 110 Nimitz Hill Survey yielded charred deposits from the interior surfaces suitable for residue analysis. Starch grains of *Colocasia esculenta* (taro) were identified on each of the four sherds and phytoliths diagnostic of rice were seen on one sherd. This is the first instance this kind of analysis has been applied to Mariana Islands pottery. It produced the first hard data enabling development of a hypothesis that pots with wiped/brushed, plain, or faintly combed exterior surface treatments were used for cooking. These approaches have been proven a viable avenue of study to address issues of food preparation and pottery function critical to understanding Mariana Islands prehistory.

The results also bolster existing data strongly suggesting that rice was a prehistoric crop, a topic of interest to Mariana Islands archeology for some time. Rice grain impressions have been identified in a few pottery sherds. Work supported by COMNAVMARIANAS compliance actions contributes to the body of scientific data to address specific and general research issues.

A regional Integrated Cultural Resource Management Plan (ICRMP) presently in preparation will synthesize the data collected by Navy projects, create a geographic information system data base, and develop or restructure regional research questions with suggestions for future investigations. The regional ICRMP will provide guidance for COMNAVMARIANAS continued responsible stewardship and direction for future studies.

Note

* *Environmental and Natural Resources Program Manual*, Chapter 23, Department of the Navy Office of the Chief of Naval Operations Washington, DC. (OPNAVINST 5090. 1 B CH-2).

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Wendy M. Coble

The Navy and the Protection of Pacific Cultural Resources

A Unique Challenge

The U.S. Navy is responsible for more than 350 of its shipwrecks and 4,200 aircraft wrecks now resting in Pacific territory. The great majority of these underwater resources were involved in World War II and are currently under the most threat. The Naval Historical Center's Underwater Archaeology Branch (NHC-UA) is the office tasked with the inventory, study, and preservation of these wrecks. This is a daunting responsibility as the Navy has more than 3,000 shipwrecks and 12,000 aircraft wrecks worldwide.

Often by the time NHC-UA is notified of a discovery, the site and many of its features have been stolen or damaged, leaving scattered bits as the only reminder of what was once an important artifact. World War II artifacts are increasingly targeted by commercial salvors. Even small pieces of wreckage can net large profits, and this business is thriving.

Because of these threats, the U.S. Navy has implemented permitting procedures and policies to help protect these fragile resources. The Navy has limited resources for on-site protection in the Pacific due to distance and limited staffing and funding. These limitations create an opportunity for creative management and cooperation between the Navy and local cultural resource managers.

This article outlines the Navy's congressionally mandated duties, details its policies, and calls for cooperation in protecting U.S. Navy historic cultural resources in the Pacific. Although the article will concentrate on aircraft, U.S. Navy historic shipwrecks are similarly managed.

Naval custody of its sunken cultural resources is based on the property clause of the U.S. Constitution and international maritime law. It is consistent with Articles 95 and 96 of the Law of the Sea Convention. Abandonment of Navy wrecks requires specific congressional action. The Navy retains custody of its wrecks regardless of their geographic location through sovereign immunity provisions of admiralty law. The National Historic Preservation Act of 1966, as amended, directs all federal agencies to manage their cultural resources emphasizing preservation, and shunning activities that might adversely affect the resource. The Navy further emphasizes the respect due a war grave and the potential volatility of unexploded ordnance that may be associated with these wrecks, in its management plan.

Visitors to these sites are invited to look but not touch, alter, enter, or disturb these remains without permission from the NHC-UA. In the Pacific, however, WWII naval sites are frequently visited and often disturbed. In some cases the visitor has no idea what is and is not allowed, although this is not always the case. Nonetheless,

Dan Bailey standing beside a Navy Corsair in Palau that he helped document. Photo by Patrick Scannon.

many of these assets are being destroyed by a number of unusual sources.

Many who threaten these sites may be unaware of what they represent and how historically valuable they remain. World War II affected not only its own generation but also the generations that followed. People remain fascinated with stories of the war's epic battles. Aircraft hold particular interest and even the most circumspect, when faced with their remains, may feel compelled to own a piece of this history. Few casual collectors realize that by taking pieces, moving objects, or altering their environment they severely damage an investigator's ability to understand the story the site holds.

Often, the average sightseer does not realize that someone's family may be waiting for answers to what happened to a father, brother, or son. The casual collector is not the only threat to these resources.

Navy Corsair on a reef in Palau. Photo by C. Lambert and Pat Scannon.

World War II dramatically altered many Pacific Islander's lives. Islanders were introduced to new technology, new sources of supplies, new foods, and some had to build new lives on new islands as their own islands had been destroyed. After the war, aircraft crash sites littered the islands and islanders were left alone to rebuild. It is little wonder that many aircraft crash sites were salvaged by islanders to rebuild their homes, villages, and towns. It seemed this material was scrap, left behind and certainly viable for re-use. Island life requires the use of all resources for survival, but while understandable, these actions have damaged site integrity. Ideally, local islanders should be educated in how to study and protect these sites. Realistically it is a difficult if not impossible task.

Ironically, it is these same islanders who are the best resource for educating a researcher about the site's original features, where the resources are now, or how they have been used. Usually islanders are happy to assist a researcher by showing the visitor to the area and assisting in the research. This cooperation ensures that as much information as possible is extracted from a site. It should also be noted that many Pacific islanders respect these crash sites and have left them untouched, often going out of their way to avoid the site.

A third and more serious threat is the commercial salvor or professional collector. Many of these individuals are aware of the historic and emotional value attached to a crash site, but are more concerned with the monetary value these isolated parts represent. The historic aircraft parts business is thriving and very lucrative. A few commercial salvors state they are desperate to save these aircraft for museums rather than personal gain. They cite the long hours required for restoration, resulting in little profit from their work as an example of their good intentions. While this may be true for some, others do profit, handsomely, and seem to thrive on the "adventure" of wreck hunting. But rather than accepting some of the responsibility for the destruction of rare resources, many blame government bureaucracy as the biggest threat.

According to many professional salvors and collectors, the government, especially the Navy, is doing more harm than good by restricting access to historic aircraft crash sites. Salvors claim the continued ravages of saltwater on aluminum components and the imminent decay of aircraft sites are due to inaction by the U.S. Navy. These individuals seem to believe that if they do not retrieve the aircraft components, these rare aircraft will disappear within the next year or so. These claims are overly exaggerated.

While it is true that saltwater is corrosive to aluminum parts, sunken aircraft have been in the saltwater for more than 50 years. Experience has shown that objects reach a stasis in their new environment after a certain time period. Unless the environment changes, the object will likely maintain its structural integrity for hundreds of years. Most would agree that wood is much more fragile than metal and yet wooden shipwrecks

Winch assembly and nose gun turret of a Navy PBY-5 Catalina sunk on Oahu December 7, 1941. Photo by the author.

have survived their underwater environments for hundreds of years. Ironically, it is salvors' activities that put the object at risk. Increased human activity around a site will affect its environment and accelerate the decomposition process. Rarely do humans look but not touch. Often divers attach anchors or marker buoys to the wreckage, which wears on or breaks off portions of the wreckage. Even more disastrous have been some attempts to raise aircraft or remove them from a beach for restoration and display without following accepted conservation procedures. When not properly conserved, these objects quickly crumble to dust. Advances in the conservation of aluminum and other 20th-century materials are being made daily, and will only improve over time.

Therefore, the Navy feels it is in the best interests of the artifact to leave it in its stasis environment unless properly trained professionals oversee the removal and conservation of the artifact. Because of the need to regulate activity around U.S. Navy historic cultural resources, NHC-UA has written and recently published a permitting policy (32 CFR 767) and guidelines for work involving U.S. Navy cultural resources. This policy requires anyone wanting to conduct research and/or recovery on U.S. Navy historic cultural resources to obtain a permit from the NHC-UA. Upon written request applicants are given guidelines and an application form. Included in the permit application must be proof of professional ability for the project's principal investigator, proof of funding to cover the project, and a feasible research design among the considerations. When submitted, the application is reviewed, and a decision regarding approval sent within 180 days. Permits are issued for intrusive archeological research, non-intrusive archeological research, or artifact removal and conservation, are valid for one year, and are renewable. All proposed projects must begin with research of the site and its history by a qualified archeologist. The office encourages professional investigation and research on the U.S. Navy's historic cultural resources.

Due to staffing and fiscal constraints, NHC-UA must rely on the assistance of fellow cultural resource professionals to help manage its resources. This assistance may take the form of a request to physically protect a site. Assistance might mean a request for information regarding a site and its environment, or it could mean a request to quickly document a site before it is destroyed.

Often Pacific cultural resource managers feel ill equipped to document a site or undertake a research project involving these resources. For this reason NHC-UA is consistently updating and improving resource material available through the Naval Historical Center's web page. An electronic copy of the Navy's Policy Fact Sheet can also be found at <http://www.history.navy.mil> under the heading "Underwater Archaeology Branch." The site is filled with information regarding U.S. naval history and provides an excellent resource for researchers. These materials can provide training for cultural resources managers unable to travel off island.

To maintain and preserve the Navy's cultural resources, NHC-UA has enacted policies and guidelines geared toward these goals. But they cannot fulfill their mandated tasks alone. The NHC-UA staff enjoys working closely with Pacific cultural resource managers to create innovative and useful solutions to mutual problems. Cooperation is the only way to ensure that these resources can be protected and interpreted. With great appreciation for assistance in the past, we look forward to more cooperation in the future, as it is in everyone's best interest to appropriately manage these precious pieces of our collective past.

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Dirk H.R. Spennemann, David W. Look, and Kristy Graham

Heritage Eco-Tourism in Micronesia

Expectations of Government Officials

Cultural heritage tourism is on the increase worldwide, focusing on sites, sights, museums, and cultural experiences such as festivals and traditional communities. At the same time, various decision makers see cultural heritage places as an asset and studies have been undertaken to assess the feasibility of using such sites as attractions. The development of eco-tourism opportunities in the heritage arena has created increased visitor demand, with Micronesia the last largely unassessed region. If heritage eco-tourism is to succeed, coordination and planning are required. This begs the question: What are the attitudes of Micronesian government officials toward eco-tourism and toward cultural heritage sites?

A recent symposium organized from February 28 to March 3, 2000, by the mayor of Rota, the Commonwealth of the Northern Mariana Islands (CNMI) Historic Preservation Office, and the U.S. National Park Service provided the opportunity to poll participant decision makers. Attended by approximately 100 participants from the CNMI, Guam, Republic of Palau, Republic of the Marshall Islands, Federated States of Micronesia, and Hawaii, the symposium was intended to make a substantial contribution to the management of cultural and natural resources in Micronesia while encouraging ways to develop heritage eco-tourism that is responsible and sustainable.

A questionnaire was administered to each participant (except presenters) at the beginning of the symposium. It contained demographic and attitudinal questions (using a seven-point Lickert scale from "strongly agree," to "strongly disagree"). The overall response rate was 52.2%. Some results of the survey are presented below.[1]

The breakdown of the nature of employment of the respondents is important. All too often, symposia such as this are only attended by a specialized, self-nominating minority. At the Rota Heritage Eco-tourism Symposium the key stakeholders of heritage managers, parks and wildlife staff, and people involved in the tourism businesses (both government and private enterprise) made up 56%, with 34% of the attendees coming from other government agencies (Finance, Public Works etc.). The remaining 10% were students and others.

Who Are The Expected Visitors?

An integral aspect of any heritage eco-tourism development is the ability to identify the potential market. By ascertaining who the perceived visitors are expected to be, it is possible to understand the various attitudes of the government parties involved in the survey. Clearly, eco-tourism is seen as a privilege of the middle-aged wealthy. The demographics of the eco-tourist were perceived to be adults predominantly between the ages of 36 and 50 (63.2%) with a substantial income in excess of $50,000 dollars (US) per annum (33%). Although all age groups should be considered clientele, it is intriguing that the age profile of the expected eco-tourist roughly resembles that of the respondents.

Profiling Heritage Eco-tourism

The heritage eco-tourism industry does not benefit from a standardized definition. The conceptual definition of sustainability, environmental awareness, economic benefits to local communities, education through interpretation, and social and cultural sensitivity, can be somewhat different to the operational situation.

Do the Micronesian decision makers understand the concept of heritage eco-tourism? Only 1% of the respondents stated that they did not possess an understanding of the concept of heritage eco-tourism. On face value this could be regarded as a positive sign, as one might assume that the participants were well prepared for the symposium. On the other hand, it could be interpreted as misplaced confidence.

The questionnaire posited that heritage eco-tourism does not exist as a bona fide industry, but rather it is just a small segment of the overall tourism industry. Almost 64% of respondents

agreed with this statement. The opinion was more polarized with respect to the assertion that heritage eco-tourism is just a fashionable term for general tourism, which capitalizes on natural and cultural heritage. In that case 43.8% agreed and 56.2% disagreed, with no one undecided on the matter. All forms of tourism capitalize on the natural and cultural resource base of a destination; they are two integral factors in formulating a place, into a primary destination. The concept of heritage eco-tourism is to go beyond this and inspire an appreciation and to educate people about its value. If the participants truly understood the conceptual description of heritage eco-tourism—as their responses to a previous assertion would have us believe—the response should have been decidedly more toward disagreement. As it stands, the responses to this assertion demonstrate the symposium participants' propensity to overstate their prior knowledge.

Although heritage eco-tourism was not perceived to be a bona fide industry, the overwhelming majority of respondents (91.6%) agreed with the assertion that heritage eco-tourism is not a short lived phenomenon, indicating that they believe heritage eco-tourism is more than just a trend and will continue to have a future.

The Impacts of Heritage Eco-Tourism

Heritage eco-tourism is often perceived as "softer" on both the natural and the cultural environment than mainstream tourism. Heritage eco-tourists are often attracted to those sites of particular rarity and of cultural and natural significance. Hence, the threat of impacts to these sites may be greater due to the fragility or significance of such sites. Even if we do pull back from heritage eco-tourism, some impact may not be able to be mitigated and reversed. If left unmanaged, however, the potential severity of these impacts could increase. The survey demonstrated that a large majority of respondents (71%) disagreed with the assertion that we can pull back from heritage eco-tourism development if environmental problems occur and that nature will not heal itself. What could not be assessed is participants' knowledge to what extent re-vegetation of environments could mitigate some or all of the impact.

On the question whether "damage done by tourists to cultural heritage places can be repaired without detriment to our heritage," 86% of the respondents disagreed. If we combine the responses to the two questions it becomes clear that the symposium participants had some idea about the fragility of the natural and cultural environment and the lasting effects of any damage done.

Given this, the question has to be posed how that can be achieved. The use of a sacrificial area is one of the common strategies. When assessing the attitudes toward the fragility of sites, it was found that 52% agreed that it is better to have more tourists in a less fragile area than fewer tourists in a fragile area thereby indicating that it is better to sacrifice a resource of lesser fragility in order to ensure the conservation of those more fragile areas. However, 43% of respondents disagreed with this statement, demonstrating that opinions were well divided, possibly due to lack of information on the matter.

Ranking Opportunities

Heritage eco-tourism opportunities arise in many aspects of the natural and cultural environment. By assessing the responses, it is possible to identify the perceptions and values of various heritage eco-tourism opportunities. In keeping with the training opportunities of the symposium 10 options were chosen. Participants were asked to rank these, according to their perceived potential (1 being the most important and 10 being the least important).[2]

From the 10 options provided, the most prominent response in ranking was archeological sites closely followed by natural landscapes. Both responses could be expected given the theme of the symposium. This is an interesting result when we consider that heritage managers constituted 22% and parks and wildlife staff only 17%. The second cluster comprises local bird life and local plants. The means for both responses were very close together. This ranking is possibly biased by the high percentage of participants from Rota. The fact that local bird life outranks local plants has most likely come about because the symbol of Rota is the Marianas fruit dove, which is also the national bird of the Mariana Islands and features predominantly in a local environmental education campaign.

The third conceptual cluster comprises the social aspects of island life, preferring traditional skills and traditional fishing. The mean of the two are over one ranking unit apart, and the standard deviations are quite large. The transition from traditional fishing to shipwrecks and diving opportunities (part of the next cluster) is not that clear cut.

The fourth cluster comprises the non-indigenous heritage locations. These ranked poorly, with an average rank of 6.5 and less. Of these, World War II sites ranked the poorest, a full rank value lower than the others.

Overall, the rankings indicated that indigenous past was seen as the most important aspect of heritage eco-tourism followed by the local environment. Traditional cultural values are then much less important, while the tangible heritage places associated with colonial administration ranked last. The fact that non-indigenous heritage sites, and in particular WWII sites ranked so poor may be due to the negative perception of the war by the local population.

Priorities for Heritage Eco-Tourism

Asked to rank various priorities for heritage eco-tourism, cultural issues ranked highly, with the options "Preserve cultural heritage sites," "Ability to showcase my own culture," and "Preserve local plants & animals" taking the top three spots. Although the survey previously identified that it was the perception of the participants that heritage eco-tourism has the potential to increase visitor numbers without increasing the problems they pose, large visitor numbers were not a priority and ranked lowest.

Discussion

The questionnaire provided a good insight into the attitudes of Micronesian decision makers. The lack of opportunity to pretest the questionnaire resulted in two questions returning ambiguous answers.

The responses to a number of attitudinal questions showed that the decision makers attending the symposium had a limited understanding of the concepts of eco-tourism, despite their initial claim that they did. The opinions were divided whether eco-tourism was a bona fide industry, or whether it was simply general tourism focusing on the natural and cultural heritage. Overwhelming agreement existed on the assertion that eco-tourism was not a short-lived phenomenon. Overall, eco-tourism was perceived to have fewer negative impacts than mainstream tourism. The respondents expressed awareness that the development of eco-tourism may have impacts on the natural and cultural environment, as well as social impacts on the community, that may not be easily mitigated—if at all.

Yet at the same time the participants expressed the opinion that there was much potential to increase the number of visitors without increasing the problem they pose and that other island communities would be receptive to the development of heritage eco-tourism. The respondents saw archeological and natural landscapes as the main eco-tourism opportunity, while attractions related to the colonial periods were perceived to be much less significant.

While the symposium was successful in raising awareness and the overall state of knowledge on the matter, further training in the form of country-specific case studies is required if the expectations for the economic return inherent in heritage eco-tourism opportunities are to be fulfilled.

Notes

1 A full presentation and discussion of all findings can be found in Dirk H.R. Spennemann, David W. Look, Kristy Graham (2000). "Perceptions of Heritage Eco-tourism by Micronesian Decision Makers," *Johnstone Centre Report 174*. Albury, NSW: Charles Sturt University, The Johnstone Centre. The report is available for free download in pdf format at the following site: <http://life.csu.edu.au/marshall/Reports/RotaAttitudes.pdf>[This is not yet available on the web]

2 The lack of a pretesting opportunity revealed an unexpected problem. A number of respondents did not rank the responses properly and assigned the same number (commonly the top rank) to a number of options. These multiple responses were excluded in the analysis. Hence the response rate for this section is lower.

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Andrew W. Smith

Interpretive Enhancements for Rota Route 100

The Commonwealth of the Northern Mariana Islands (CNMI), Department of Public Works (DPW) is implementing a $3,000,000 road improvement project along approximately 12 km of Route 100, on the island of Rota. This 85-square-kilometer island has a population of about 3,500 and is one of the three main islands, along with Saipan and Tinian, in the CNMI archipelago. A primary paved road along the north coast connects the airport and two population centers of Sinapalu with Songsong village and the harbor. Route 100 is currently an unpaved secondary road providing an alternate connection between the villages. It traverses a variety of natural terrain, has many prehistoric and historic features along the alignment and is a potential tourist attraction. This project is being entirely funded through the Federal Highway Administration (FHWA) with Federal-aid Highway program, Emergency Relief and National Highway System funds.

A key challenge is to develop an innovative mitigation of impact strategy, which satisfies local permit requirements. The main permit for all CNMI development, including public infrastructure projects, is issued by the Coastal Resources Management Office (CRMO). This office obtains Major Siting Permit conditions from other local government agencies, significantly the historic preservation office (HPO). Rota is rich in cultural resources and the Route 100 project spans a 1,000-year time period with various sites. The FHWA, by performing a federal undertaking is required by the National Historic Preservation Act (NHPA) of 1966, as amended, to conduct a Section 106 review. In accordance with the law a memorandum of agreement was developed between the Hawaii Division and the CNMI HPO for this project. In consultation with HPO, the DPW Technical Services Division (TSD) has planned a suite of interpretive enhancements to be included in the project as part of the mitigation plan. These are to be placed at representative sites along the road, tied to interpretive centers and indexed on a key map of Rota.

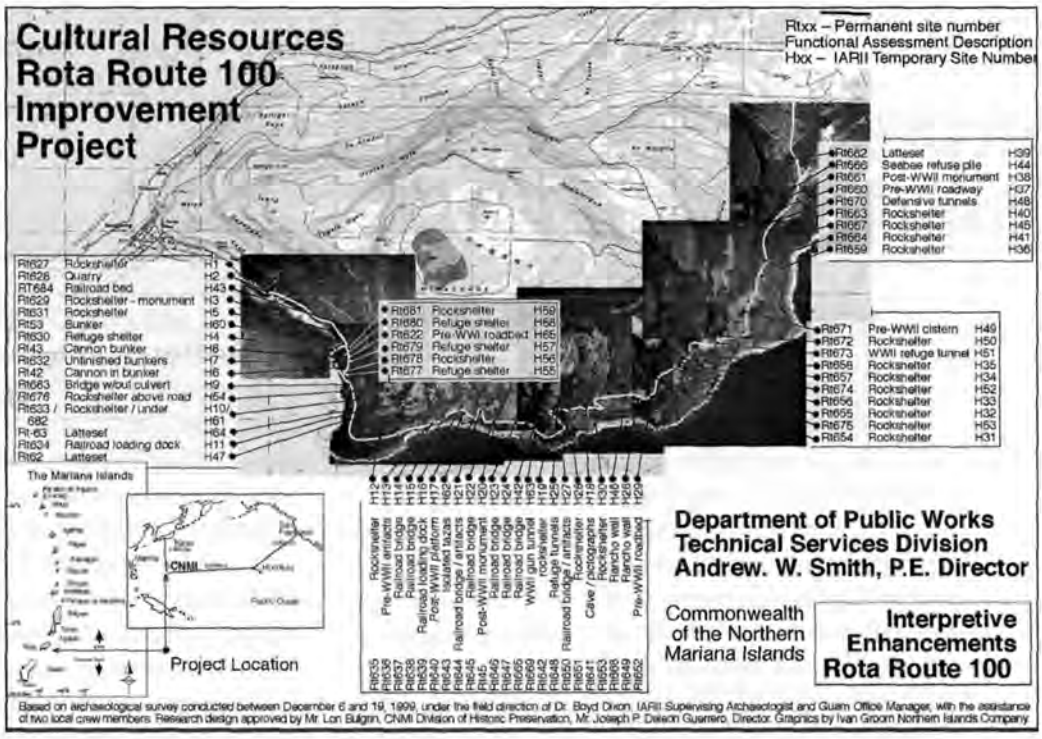
The 1,000-year historic period on Rota consists of the following:

- Late prehistoric (AD1000-1521) and proto-historic period (1521-1668); three disturbed *latte* sets and over 30 inland rock shelters suggesting a hunting and gathering focus;
- Spanish (1668-1898) and German (1898-1914) Colonial Period; in the Talakaya vicinity rice production and irrigation technologies for this subsistence crop not grown elsewhere in Micronesia or Polynesia;
- Japanese period (1914-1944) including World War II; transportation system developed by the Nanyo Kohatsu Kabushiki Company for sugarcane production, consisting of loading docks, cobble masonry bridges/culverts, and two narrow gauge locomotives; WWII defensive remains—one 120mm coastal defensive gun in a concrete bunker with one empty bunker nearby and a probable concrete ammunition storage bunker, interconnected rifle pits, and rock shelter tunnel complexes.

A secondary problem to overcome is providing a concise interpretation for a variety of historical periods, in an understandable and easily recognizable form, to the public.

Three main issues raised by these challenges relate to conveying the information sensitively, blending with the natural beauty of Rota, and meeting highway safety objectives. Planning elements for these improvements requires knowledge of the resources and the visitor and assessing the impact of the interpretive site.

Conveying information requires an awareness of the subject matter and the site location. One focus is to address historical improvements, not WWII losses, economic domination by colonial powers, or pre-contact ignorance of the outside world. Another sensitive issue is private property that abuts the roadway corridor. All of the sites and interpretive centers are on private land and have the potential to enhance the property but also could offend local landowners. Also, placing too many signs, and developing roadside pullouts has the potential to create a negative impact



on the surrounding area. This impact has to be minimized but the message context must be broadly understood.

Blending in with the natural beauty of Rota is possible with low scale enhancements. They have a low visible impact but need to be clearly seen by drivers. They should not be incompatible with the surroundings.

A major concern with all road projects is highway safety. This cannot be compromised by obstructions or distractions. The Route 100 roadway in some areas is very steep with grades reaching 20% and narrow with cliffside cuts only one-lane wide. All of the historic cobble masonry bridges/culverts are narrow but short. To preserve these structures, guardrails are added and the road pavement is raised but the original structure remains. Scenic vistas at five locations will show off a biotic-geologic component of the island. Steep drop-offs occur frequently along the road and metal beam and concrete barrier guardrails are included in the project. Their placement can be too frequent, for both enhancements and standard roadside signs can obscure the view. Sight distance and visibility are necessary aspects of day and night driving.

Given the problems and issues, the interpretive enhancements include interpretive centers, signage, and printed brochures. These enhancements generally follow the historic period; Japanese transportation system and Japanese WWII defensive portions; colonial period; pre- and proto-historic period; and scenic vistas. It is important to note that with Route 100, the road itself is a historical site since this was originally constructed as a narrow gauge railroad.

Interpretive centers will be placed at different locations along the road and in some cases off-site elsewhere on Rota. These will be at major focal points for the main five themes with detailed descriptions using colors and icons. Material must be able to withstand high ultraviolet sunlight, heavy concentrations of salt spray, typhoons, and vandalism, and be low maintenance.

Signage along the roads will have a minimal amount of text and key into the colors and icons at the interpretive centers. This includes a red locomotive, blue coast gun, green rice stalks, gray *latte* stone, and eye symbol.

Printed brochures will be placed at car rental agencies, hotels, government offices, and the Marianas' Visitors Association. Multilingual text is necessary for the predominately Asian Tourist. Foldout maps of Rota will be indexed for the roads, interpretive centers, sites, icons, and colors.

The cost of signs, brochures, and interpretive centers will be borne by the project. As a local permit requirement, DPW is working closely with HPO to develop this material, which will enhance the road improvement. A future goal is to establish Route 100 as one link in a CNMI wide scenic byway route system.

Andrew W. Smith is a professional engineer.

Patricia Luce Chapman

Micronesia

Preserving a Fragile Resource

In the western Pacific Ocean, straddled between the Philippines and Hawaii, some 2,100 islands are scattered over three million square miles. These islands make up the area known as Micronesia. Their total landmass is smaller than Rhode Island. The islands' unique landscapes, formed in part by volcanic activity and featuring coral atolls, rain forests, and colorful lagoons, fostered a world of exceptional cultures. Its geographic area has been strategically important to many nations in the past.

The rich history reflects a panorama of societies buffeted for centuries by warring and trading nations of the east and west. Evidence indicates that the islands were first settled over 2,000 years ago. Vigorous and diverse cultures developed in each island group, linked by a far-flung network of trade and commerce conducted by intrepid voyagers in outrigger canoes.

Spanish sailors, including Magellan, were the first Europeans to explore Micronesia. The Marianas served as a stopping point for the famous Manila Galleon trade. They found inhabited islands rich in copra, sandalwood, turtle and pearl, schools of whales, and established colonies on many of the islands. The Spanish flag flew over the Northern Marianas and Guam beginning in the 1500s.

In 1885, Germany took possession of the Marshall Islands (RMI), while Spain retained control of other island groups. By 1898, however, all of Spain's possessions had been sold to Germany, with the exception of Guam, which had been taken by the United States during the Spanish-American War.

After Germany's defeat in World War I, Japan administered most of Micronesia under a League of Nations mandate. Fierce battles between the Japanese and Allied Forces were fought on the islands during World War II. After the war, the United States administered much of Micronesia under United Nations auspices. The islands, except for Guam, Nauru, and Kiribati, were known as the Trust Territory of the Pacific Islands.

Guam remains a territory of the United States. The Republic of Nauru and the vast atoll group of the Republic of Kiribati, both members of the British Commonwealth, are independent nations. In the 1970s, citizens of the old Trust Territory organized four new governments: the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (FSM), the RMI, and the Republic of Palau. Of these, the Marianas are an American Commonwealth and the other three are in a unique relationship with the United States known as "Free Association."

The Micronesia Institute

In recognition that a true private sector resource could be helpful as the Micronesian peoples worked their way out from under the various foreign cultures and governments, which had been imposed on them since the time of Magellan, the Micronesia Institute (MI) was founded in 1983. The 501-c-3 corporation's mission statement reads in part: "...founded to be an independent link between Micronesian countries and communities and public and private resources in the United States and elsewhere." Its

The Chuuk, FSM, speaker tells how he saw U.S. bombers hitting Japanese ships in the lagoon during World War II. There are stories and chants throughout Micronesia of the times before that war, some relating to the German occupation of the islands. The Micronesian Endowment for Historic Preservation seeks to preserve these songs and legends. Photo by the author.

The parapets of Nan Dowas curve outward; overhangs gave further protection against intruders. Nan Madol's basalt logs and boulders may weigh up to 46 tons each. These were probably quarried on the mountain called Sokehs Rock, 30 miles away on the other side of Ponape Island, then rolled down the mountain and somehow ferried to the site on the reef and hoisted into position. Photo by the author.

purpose is to enable Micronesians themselves to initiate, develop, and execute needed programs, with expertise and funding as necessary. Programs focus on education, health, historic preservation, privatization, and community service organizations, all to improve the quality of life. Visibility in the United States and the education of Americans about Micronesians and their cultures are also important functions of the organization.

The Micronesian Endowment for Historic Preservation

Associated with the MI, the unique Micronesian Endowment for Historic Preservation (MEHP) is an international nonprofit organization incorporated in the RMI in 1985. In 1984 and 1985 it began to be realized by Micronesian cultural leaders and by MI that there was real danger that in the future cultural programs might not be funded even at a minimal level. Conversations and meetings brought the leaders on both sides of the Pacific to consider ways whereby private funds could begin to supplement government grants. Historic preservation officers (HPOs) of the various entities, meeting with members of MI, came to believe that an endowment for historic preservation and cultural growth, and which encompassed the entire Micronesian cultural family, would be the most effective means for ensuring that adequate resources could be found.

The Articles of Incorporation and the Bylaws were prepared with the help of the Alele Museum in the Marshall Islands and with the participation of all HPOs. A MI ad hoc committee of lawyers and international cultural endowment experts reviewed these to ensure full compliance with international non-profit standards. The committee also suggested that if the endowment hoped to raise international money, it should stand independently without more than associative ties to any American organization.

The world's only organization of its kind, the MEHP crosses national boundaries to build a loose bridge uniting members of the same cultural family to ensure the survival of their ancient arts, sacred or historic sites, and traditions into the 21st century. A board of directors appointed by the respective governments manages the MEHP. Officers rotate from one nation or state to another. The MI provided expert reviews of the Articles of Incorporation and Bylaws to ensure that the unusual organization would comply with international nonprofit standards. It has also been able to provide funding for brochures and meetings through The Henry Luce Foundation, Inc., Continental Micronesia, and Mobil Oil Micronesia, Inc. Donations to the MEHP may be made through the MI for U.S. income tax purposes.

The structure of society on each island is a fragile resource, treasured by its people, but facing extinction in the modern world. Micronesians are committed to preserving not only their ancient artifacts but also the living traditions that give them meaning. Lore and legends are told through songs, stories, and dances.

Remarkable skills in woodcarving, canoe building, navigation, architecture, and weaving have been passed down from one generation to the next but are rapidly disappearing. Early colonial and military history has been preserved in German plantation houses and churches; Spanish fortifications; Japanese roads, buildings and ports; sunken American whalers and pirate ships. Bomb-blasted buildings, rusted cannons, and warships on the sea bottom remind us of a tragic, painful period.

Endangered Resources

The demands of modern society and a cash economy threaten important aspects of the Micronesian cultural heritage. As older generations disappear, so do ancient skills and knowledge. Younger Micronesians leave the islands to seek opportunities elsewhere. Much needed development projects, including roads, harbors, airports, and hotels, can endanger ancient sites. Artifacts are removed from prehistoric tombs and from World War II and prehistoric sites, while modernization displaces traditional values. Natural hazards such as the encroaching jungle, tidal waves, typhoons, and earthquakes erode and destroy historic dwellings. The MEHP is devoted to recording, interpreting, and maintaining aspects of Micronesia's past and to regenerating it for the future. It is a focal point in the efforts to preserve Micronesia's history and culture.

With the advice of international experts in anthropology, archeology, history, and other disciplines, Endowment funds are allocated to programs on the basis of need and the requests of donors. The MEHP is working with the Smithsonian Institution, the U.S. National Park Service, and other prominent organizations on a wide spectrum of conservation projects relating to libraries, archives, museums, and exhibitions.

One of the very old "story boards" in the Bai at Airai, Palau. The beams are decorated with story boards illustrating ancient legends. Later, the Palauan artists began carving the story on wood. Photo by the author.

The Need for Assistance

The Micronesian peoples welcome changes that improve the standard of living, but they do not want to sacrifice their histories and cultures. Resources are in short supply. Modern museum facilities are badly needed, as are studies to document sites and cultures. Systems must be set up to ensure the endurance of lore and arts. Safeguards must be taken against souvenir seekers and vandals. The tropical climate and jungle growth that erode equipment and materials, and jungles that overrun ancient ruins, contribute to the deterioration of important sites and artifacts. Ultimately, an effective historic preservation effort will require a partnership between governments, corporations, and individuals.

Contributions to the Endowment

The MEHP envisions the peoples and cultures of Micronesia as living and growing on a solid foundation of knowledge of the Micronesian past. The challenge in fund-raising for Micronesia is quite different than for most causes in the United States though. Vital U.S. government funding for programs in Micronesia will be greatly reduced over the next decade. The Asian economic crisis also hurts. Private sources of financial assistance are required if Micronesia's historic and cultural resources are to be preserved for future generations. Funds are sought to help preserve the Micronesian cultures through the protection of customs and historical sites, and through education in traditions.

Dancers from Ujae Atoll in the Republic of the Marshall Islands perform the "Jobwa," the oldest Marshallese dance still in existence today. Photo by the author.

Patricia Luce Chapman is chairman and founder of the Micronesia Institute and has been deeply involved in program activities in the area, and in writing, since 1983. Previously she edited a children's magazine for the Museum of the City of New York.

Maradel K. Gale and Scott M. Fitzpatrick

The Micronesia and South Pacific Program

A Decade of Cultural Resource Preservation Assistance

Travels by Maradel Gale throughout the Pacific islands in 1984-85 provided the impetus for the development of a technical assistance (TA) program at the University of Oregon. While visiting a number of government agencies and organizations concerned with various enterprises ranging from land use controls to education, Gale found good intentions and on many occasions, few skills necessary to carry out their plans and tasks. Working as a professor with graduate students at the University of Oregon gave an awareness of the range of skills which could be transferred by these students to interested agencies in the islands.

The initial successes of a library development program generated support for an infusion of major funding by the U.S. Department of the Interior, Office of Territorial and Insular Affairs (OTIA; now Office of Insular Affairs, OIA). These funds were to provide technical assistance to the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia. Eventually the program and funding sources expanded to include American Samoa and other nations in the south Pacific.[1]

Scott Fitzpatrick and Vicky Kanai (bottom left) with historic preservation office staff and National Park Service representatives, 1997. Photo by David Look.

The Program

The basic tenets of the Micronesia and South Pacific Program (MSPP) were as follows:

- The program responded only to requests for assistance which came from the island governments, agencies, and organizations.
- A counterpart must be designated to work side-by-side with the technical assistant.
- The recipient agency/organization provided a supervisor for the designated project.
- The grant from OIA provided per diem and air fare for the technical assistant.
- The recipient agency/organization provided local housing for the technical assistant.

The placement of a technical assistant began with a request for assistance submitted to the MSPP by an eligible agency or organization in the Pacific islands. These positions were typically for projects that could be completed within a three-month period of residency by the technical assistant. Requests were cleared by the program director and the person in OIA responsible for oversight of the program. The program then recruited graduate students capable of meeting the needs of the agencies. Prior to their selection, potential technical assistants underwent a three-month training in intercultural communication. Adaptive skills were assessed during this time, both by the potential assistant and the training staff. At the end of the three months, qualified students were assigned to specific positions from among those approved to receive technical assistance.

It should be noted that this program was very different from the standard bilateral or multilateral development program. In those programs, the arrangements are between top levels of government, with the programs being developed

at the top. Funds are also transferred to the top, with little or no funding available for grassroots development projects. The projects are generally large-scale with the amount of funding per project matching that scale. While that approach can work reasonably well in a large country, it is often out of scale with the needs of small, isolated island nations. Multilateral development banks are ill-equipped to deal with small, low-cost projects.

Types of Projects Completed

After the library development program, requests for assistance soon came from a much wider array of agencies and organizations. Over the course of 10 years, the MSPP has filled positions in agencies and organizations dealing with education, health care delivery, women's issues, land use planning, cultural resources management and historic preservation, tourism, agriculture, manpower and economic development, and budget and finance, to name a few.

This diversity of projects enhanced the success of the program. Technical assistants were encouraged to assist their counterpart and supervisor to collaborate with other agencies and organizations that might be dealing with related issues or similar problems. In much of Micronesia, there is a high value placed on information, and as a result, it is not always shared. This means that skills learned may not be shared with others in similar situations. One of the

Micronesia and South Pacific Program
Cultural Resource Management Projects (1990-1999)

State	Year	Project	Agency/Organization
American Samoa	1997	GIS development	HPO
	1999	GIS development	HPO
Kosrae	1997	Eco-tourism management	Tourism Office
	1997	Utwa-Walung Marine Park	Tourism Office
Marshall Islands	1993	Tourism development plan	Tourism Office
Palau	1990	Management plan	HPO
	1990	Tourism/heritage management	Visitors Authority
	1992	National Register plan	HPO
	1995	Data management plan	HPO
	1996	Eco-tourism	Visitors Authority
	1997	Five year plan	HPO
	1998	Cultural/historic site brochures	HPO
Pohnpei	1990	Tourism development plan v. 1	Tourist Commission
	1992	Tourism development plan v. 2	Tourist Commission
	1992	Planning and management	HPO
	1992	Nan Madol plan	HPO
	1993	Tourism development plan v. 3	Tourist Commission
	1994	Library development	HPO
	1995	Tourism marketing plan	Tourist Commission
	1996	Maritime Museum development	HPO
	1997	Multi-year plan	HPO
	1997	Kapingamarangi canoe building	HPO
Yap	1993	Multi-year plan - phase I	HPO
	1994	Multi-year plan - phase II	HPO
	1996	Multi-year plan - phase III	HPO

attempts of the program was to encourage greater interaction between agencies for the express purpose of sharing knowledge and resources.

Among these projects, those dealing with historic preservation and cultural resource management have been some of the most successful. This is due, in part, to the continuance of research and skills transfer that have taken place after the completion of the initial three-month projects (through MSPP and other funding agencies), as well as the development of cooperative endeavors between historic preservation offices (HPOs) and other government agencies. MSPP-related projects have included the promotion of cultural resources, often in conjunction with the local tourism office, strategic planning, computer training, site identification, and fostering development of inter-agency cooperation.

Working with Cultural Resource Management Agencies

With the dissolution of the Trust Territory of the Pacific into a milieu of independent states in the late 1980s and early 1990s, there has been increased interest by foreign investors, as well as local governments to increase revenue. Many development projects have been tourist related, while others have focused on maintaining or expanding infrastructure support. Both types of development can affect how successfully cultural and historical resources are preserved and protected. It is with this understanding that many HPOs in the Pacific have requested technical assistance from MSPP.

Since 1990, MSPP has been involved in 25 projects related to cultural resources management in Micronesia and American Samoa (see chart, page 39). Scott Fitzpatrick was involved with the 1997 Palau project where he developed and co-wrote a five year plan for cultural and historical resource preservation with Vicky Kanai (Chief/HPO). He also worked on the 1999 American Samoa project with Julie Taomia (senior archeologist, HPO) involving the training of staff on Global Positioning System (GPS) equipment.

The Palau five year plan outlined a strategy the HPO could take in better protecting and preserving the nation's cultural heritage. Part of this included communicating with other government agencies and ultimately the sharing of personnel and information. This has since led to additional training projects led by Fitzpatrick, funded by the Sasakawa Peace Foundation, the Bishop Museum's East-West Center, the National Science Foundation, and Sigma Xi. These have dealt with archeological survey and mapping, aided by such agencies as the Bureau of Lands and Survey, which shared equipment and data, provided technical expertise, and helped in the installation and use of a Geographic Information Systems (GIS) workstation at the HPO.

The American Samoa project involved the training and field-based application of GPS for surveying and mapping archeological and historical sites. Aided by the National Park of American Samoa, which lent GPS receivers, the project collected data to determine the most feasible means for recording WWII-era installations on Tutuila, and developed standardized procedures for gathering this information.

These two projects were significantly different in terms of content, types and duration of field activities, and geographical location. However, the overall intentions were the same—to increase the effectiveness of data collection, nurture inter-agency collaboration, and devise ways for the public to become more aware and involved with cultural resource management. We believe MSPP has played an important role in this effort.

Note

Micronesia and South Pacific Program technical assistance activities are currently in abeyance due to cutbacks in federal funding.

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Scott M. Fitzpatrick and Vicky N. Kanai

An Applied Approach to Archeology in Palau

One of the greatest challenges Pacific Islands face is how to combat threats to cultural resources from tourist development. Although not inherently detrimental, tourism can sometimes purposely or inadvertently impact important cultural or historical properties depending on a milieu of economic, social, and political factors. How smaller island states grapple with this issue thus becomes extremely important and can determine the extent of damage that occurs.

Ironically, tourism is also one of the few types of development that can provide a means for preserving and protecting cultural resources, while at the same time facilitating economic sustainability. In this paper we describe efforts by the University of Oregon and Palau Division of Cultural Affairs (DCA) to incorporate and promote cultural resources in a tourist-driven economy. The Palau Stone Money Project, developed in response to some of these potential threats, has now evolved into an applied archeological program encompassing cooperative research, education, and training between various agencies. We believe that this project can serve as a model for conducting research in Micronesia and other regions where these issues are of concern.

Palau Division of Cultural Affairs staff member Calvin Emesiochel at a Yapese stone money quarry on Orrak Island. Photos by Scott M. Fitzpatrick.

We began working together in 1997 while writing Palau's five-year plan for historical and cultural resource preservation under a project with the University of Oregon's Micronesia and South Pacific Program. Since then we have organized numerous cooperative archeological research projects funded by the Sasakawa Peace Foundation and the Hawaii East-West Center. The goal of these projects has been to provide field and computerized data management training for new DCA staff and those in the agency who needed to update their skills in particular areas. Sites impacted by development or those already in the process of being investigated by the DCA as part of their own national cultural resource inventory were chosen for the earlier projects to record damage and aid in reconnaissance survey.

Although training for DCA staff has been the major objective for these projects, other considerations—including ethnography, cooperative research, education, and facilitating inter-agency collaboration—have been taken into account to ensure that the data collected are comprehensive in content and accessible to a wide range of researchers and public interest groups. The archeological research projects we have initiated, including the Palau Stone Money Project, are applied in nature and not solely research driven, allowing for broader recognition of what the DCA's responsibilities are and the significance of Palau's cultural resources. In this way we can apply archeology using "anthropological methods, concepts, or knowledge to solve nonacademic problems, formulate public policy, and educate the public."[1] We explain how our interest in this program evolved and why we feel this type of applied organization is useful and necessary.

Background

Palau is a small archipelago in the Western Caroline Islands of Micronesia with over 300 islands ranging from those volcanic in origin to coral platforms and atolls. It harbors one of the most diverse ecosystems in the Pacific (with

almost three times the coral and fish species as other Western Pacific islands), is off the beaten path of typhoons, and is widely considered one of the top places in the world for scuba diving. While its ecological diversity is notably attractive, only in recent years has this small island state caught the attention of tourists. Between 1993 and 1999 total visitor arrivals to Palau increased from 40,497 a year[2] to around 70,003, an increase of 75% in a matter of years. While Palau's tourism base is largely structured around diving and eco-tour operations, an advertisement campaign geared toward promoting the visitation of archeological sites is now being heavily touted by the Palau Visitors Authority (PVA). However, the possible impacts to culturally sensitive areas resulting from visiting tourists and associated infrastructure development are many and can include the removal of artifacts, destruction of features, soil erosion, graffiti, and garbage, to name a few. This is, of course, a major concern for the DCA, the sole agency responsible for overseeing the protection, preservation, and management of cultural and historical properties in Palau. One of the many types of sites the DCA has recently been involved with are Yapese stone money quarries. Because these sites are now being developed or promoted as eco-tourist attractions, they have become the focus of our applied archeology program.

The Palau Stone Money Project

As early as perhaps 600 years ago Yapese islanders voyaged to Palau to quarry their famous stone "money" out of limestone deposits in the Rock Islands. These stone "money" disks, some of which are over three meters in diameter and weigh several metric tons, were carved into circular disks, perforated with a hole in the center, and carried back to Yap on rafts and canoes. After European traders became involved in the transport of stone money during the late 1800s, disks were carved using metal tools and transported on larger ships, thus lowering their value as quarrying and transportation became easier. The Yapese exchanged various goods, exotic foodstuffs, and provided corveé labor to the Palauans to help secure quarrying rights, and traded copra (dried coconut meat) to the Europeans for their part in transporting disks and quarry workers. Scott Fitzpatrick first became interested in this unusual exchange network while working with the DCA in 1997 during their monitoring of access improvements to the Metuker ra Bisech quarry by the Airai state government and PVA.

Several stone money quarries are being documented and others surely exist but have not yet been identified. Because both local and international visitors frequent these sites and have left some notable impacts including grafitti, there became an opportunity for us to work together to document and record these sites to help increase awareness about the significance they have for Palauan and Yapese history.

We began this project with a preliminary survey of Omis Cave (B:OR-1:35) in 1998. Prior to this work, ethnographic and ethnohistorical data provided the only information about this exchange system; intensive archeological surveys had not been conducted to answer questions about how and why Yapese Islanders quarried stone money in Palau and the duration of this activity. In 1999, Fitzpatrick and two University of Oregon undergraduate students worked with the DCA archeology staff excavating portions of Omis Cave likely to reveal evidence of quarrying and habitation activities. This project was the first real opportunity for DCA staff to become involved in an excavation of a site from start to finish (as most of their responsibilities revolve around inventory and recording due to the sheer quantity of sites and a limited staff), and allowed U.S. students to work closely with Palauan archeologists. During our work at Omis Cave we recorded three unfinished stone money disks, a dock constructed of coral and limestone rubble (presumably to facilitate the transport of stone money), and other features associated with quarrying activities. Material culture recovered from the site included over 7,100 pieces of limestone debitage, nearly 200 pottery sherds, charcoal, and a faunal assemblage with fish bone and 31 families of shellfish represented.

Palau Historical and Cultural Advisory Board members, DCA staff, and Klobak er Ngermid (Chief of Ngermid Village) visiting excavation in-progress at Omis Cave. Photos by Scott M. Fitzpatrick.

While the work was in progress, segments of the training were filmed and shown on the local cable television network. We worked with permission from the local chiefs of Ngermid Village (Klobak er Ngermid) and with Palauan government agencies including the Bureau of Lands and Survey (BLS) office staff who, throughout the years, have provided us with equipment, map data, and technical assistance. In the summer of 2000 we conducted excavations at two additional quarries—Metuker ra Bisech and Chelechol ra Orrak. This phase of the project involved eight University of Oregon anthropology students and DCA staff in an intensive survey as part of Fitzpatrick's Ph.D. research funded with help from a National Science Foundation dissertation research improvement grant and a Sigma Xi grant-in-aid for research.

Summary of Results

Our work at Yapese stone money quarries has provided the first archeological data about this fascinating regional exchange network and also provided a glimpse of how Palauan-Yapese inter-relationships evolved through time. Interagency cooperation has helped us gather this site information more efficiently (using survey equipment from the BLS, for example), and helped increase government and community awareness about the DCA's role in protecting and preserving Palau's cultural resources. The recording of fieldwork in progress by the local cable television station also helped achieve this goal and, according to Palau Historical and Cultural Advisory Board members who visited the site, was especially important because it demonstrated how Palauan archeologists and outside researchers are participating together in the process of applying archeology.

As Palau continues to promote archeological sites in tourist guides and brochures we hope that local exposure of the Palau Stone Money Project encourages tourists and other visitors to appreciate the significance of Palau's cultural resources. We also hope that it encourages cooperative efforts for their preservation, protection, and management among agencies like the DCA, BLS, Palau Visitors Authority, and state governments. The placement of Omis on the Palau National Register of Historic Places as a result of data collected during our survey was just one step in achieving this goal.

An exciting aspect of this project is the recognition that we have only begun to scratch the surface of truly applying archeology in Palau. With new technological advances in filmmaking and site recording, the possibilities for educating the public are limitless. In the future we hope to play an even bigger role in establishing a forum for discussing issues related to cultural resources and Palauan history with government agencies, NGOs, tour operators, museums, and the like. As most archeologists would agree, the pursuit of applied work, especially as it pertains to public outreach and education, is critical for developing a long-term cultural resource management program. We expect the Palau Stone Money Project to begin addressing additional issues concerning tourism such as annual data collection on the number of site visitors and studies on how tourism affects archeological sites, while expanding these applied research methods to other cultural properties in Palau. This project can then serve as a model for a broad-based archeological research program geared toward the involvement of not just outside researchers, but the public and special interest groups who have an interest in preserving and protecting Palau's rich cultural heritage.

Notes

1. Charles E. Downum and Laurie J. Price, "Applied Archaeology," *Human Organization* 58:3 (1999): 226-239.
2. N. Douglas and N. Douglas, "Social and Cultural Impact of Tourism in the South Pacific." In *Tourism in the Pacific: Issues and Cases*, C. M. Hall and S. J. Page, eds, (London: International Thomson Business Press, 1996), 49-64.
3. Palau Visitor News, Fourth Quarter Results (1999): 7.

Scott M. Fitzpatrick is a Ph.D. candidate in anthropology and is also completing a M.S. in historic preservation at the University of Oregon, Eugene, Oregon.

Vicky N. Kanai has been the Historic Preservation Officer and Chief of the Palau Division of Cultural Affairs since 1988, and oversees the administration of staff members involved in a variety of historic preservation projects and special programs. To date, her staff has participated in five University of Oregon training projects at six different sites in Palau—two of these stone money quarries.

Richard V. Williamson

The Challenges of Survey and Site Preservation in the Republic of the Marshall Islands

As with all federally funded historic preservation offices, the primary duties of the Republic of the Marshall Islands' Historic Preservation Office (RMI HPO) include site survey, registration, and preservation. The problems encountered, however, by the RMI HPO in accomplishing these tasks are unlike those of any other historic preservation office. Located in eastern Micronesia, 2,200 miles southwest of Hawaii, the Republic of the Marshall Islands is a nation of 1,200 islets that form 29 coral atolls and five isolated islands. Scattered over 750,000 square miles of ocean, all these islands make up only 70 square miles of land. This geography and geology, as well as the culture of the Marshall Islands make the basic duties of the RMI HPO extremely demanding.

Given the isolation of not only the Marshall Islands from the rest of the world, but also each atoll to one another, site survey is a logistically difficult task itself. Transportation is either by air or sea, both of which are intermittent and unreliable. When a survey is required off the capital atoll of Majuro, the minimum travel time is counted in days—even if the work required takes only hours.

When a site survey does occur, given the nature of a coral environment, detection of anything but historic World War II structures is nearly impossible. Prehistoric cultural remains are all organic and thus highly perishable. Standard reconnaissance surveys alone are insufficient—leaving obvious gaps in the prehistoric record. The office has relied on the use of local informants during each survey to assist in identifying traditional Marshallese sites. Although identifying these traditional sacred sites has merit in its own right, it is hoped that a traditional fishing site, for example, may very well be the location of a prehistoric fishing site as well.

As challenging as survey may be, the real difficulty arises during the registration and preservation process. Like much of the Pacific, land tenure in the Marshall Islands is extremely privatized, and—at least seen through Western standards—complicated.[1] In general, the system allows for up to three or four individuals to own each parcel (*weto*) of land. One of the individuals is the traditional chief (*iroojlaplap*); another is the lineage head (*alab*). In the past, before the advent of Western style government, the system worked well to ensure that every Marshallese had land use rights. The alab secured land rights for his family and the *iroojlaplap*—in essence the government—oversaw and partially controlled each *weto* of land within his domain. Today the *irooj* system still exists but so too does a democratic government. Who then has ultimate control of the land? With few exceptions, the landowners, and not the government, have absolute control of the land. In addition, this control includes not only the land, but all resources discovered on, in, and above the land—and even out into the lagoon. The government not only has no right to impose any restrictions on private land; the government itself does not own any land.[2]

The implication of this for historic preservation is not good. Although preservation laws exist,[3] many of these regulations are based upon U.S. laws and do not conform to the customs of the Marshall Islands. The concept of private property and the control of all items on that property is too ingrained in Marshallese culture to support historic preservation legislation that affords any protection to any item on private land. While the concept of eminent domain is in the RMI constitution, it has never been applied. Moreover, as there is no public land, there is no precedence to protect natural or cultural resources for the public good through legislation.

While difficult, historic preservation in the Marshall Islands is not impossible; but it does require some innovative thinking. Although survey, inventory, and registration all continue within the RMI, preservation must come through education rather than legislation. Unfortunately, even education is not simple. Tourism, one of the primary economic reasons for historic preservation, is almost non-existent in the Marshalls and, given the RMI's isolation, it will be many years before tourism validates the importance of historic preservation. Ethnic or cultural pride, an excellent educational tool for preservation, also does not work as well in the RMI as it does in the U.S. Unlike other regions in the world, where there are native groups fighting for the protection of their indigenous land from those they perceive as "outsiders" (an "us vs. them" mentality), this situation does not occur in the Marshalls. The vast majority of the RMI residents are ethnically Marshallese, and since foreigners cannot own land (the major government regulation on land use), Marshallese do not perceive that foreigners are destroying their cultural heritage through the destruction of historic properties. There is, in fact, so little economic development that any interference from the HPO in construction activities is seen as not only hindering development, but also infringing on the traditional Marshallese cultural heritage to do whatever they want on their land. Additionally, there is the perception that since most of the visible and potentially preservable sites are not prehistoric, but instead date from either the German or more likely Japanese (WWII) era, the preservation of these sites has nothing to do with Marshallese heritage anyway.[4]

Nevertheless, Western culture is coming and there is a growing concern among Marshallese to preserve local customs, traditions, and language (if not actual sites). It is in this regard that the RMI HPO supports unconventional activities. If the preservation of Marshallese heritage through the protection of historic sites does not work, we will preserve the sites by first protecting the culture. In conjunction with the national Alele Museum many cooperative projects have occurred. Educational activities such as the instruction in and videotaping of traditional Marshallese activities, including outrigger canoe production and sailing, making of baskets, and recording of oral histories, have all had the support of the HPO. Although not directly related to the primary duties of site survey and preservation, these activities that preserve the intangible past get the high profile attention that is required to lay the groundwork needed to preserve the physical past.

Notes

1 Jack E. Tobin, "Land Tenure in the Marshall Islands," *Atoll Research Bulletin* No. 11 (1952): 1-36; and Jack E. Tobin, "Land Tenure in the Marshall Islands," *Land Tenure Patterns, Trust Territory of the Pacific Islands*, Vol. 1 (1958).

2 Despite studies by former RMI HPO archeologist, Dirk H.R. Spennemann, which raise the possibility of government owned land, Dirk H.R. Spennemann, *Cultural Resource Management Plan for Majuro Atoll, Republic of the Marshall Islands Part 1: Management Plan Majuro: Office of Territorial and Insular Affairs*, Department of Interior, United States Government (1990), the author is not aware of any land that is presently owned by the government.

3 Republic of the Marshall Islands Historic Preservation Legislation, Ministry of Internal Affairs, Historic Preservation Office, Majuro Atoll (1992).

4 Jon G. O'Neill, *Management of German Colonial Heritage in the Pacific*, unpublished bachelor's thesis, Faculty of Science and Agriculture, School of Environment and Information Sciences, Charles Sturt University, Albury, New South Wales, Australia (2000).

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Jon G. O'Neill and Dirk H. R. Spennemann

German Colonial Heritage in Micronesia

Historical associations with non-Oceanic civilizations have shaped Micronesian states such as the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia. Centuries of contact with diverse arrays of colonial administrations, traders, whalers, shipwrecked sailors, and escaped convicts, generated great pressures for cultural change. Some were imposed while others were adopted, some were deliberate and others accidental, but together they have contributed to the formation of today's Micronesian cultures.

Following the Spanish-American war of 1898, Spain withdrew from the Pacific allowing Germany to expand her influence and briefly become a significant colonial power. The 1914-1918 World War saw Japan annex German possessions north of the equator, a move subsequently sanctioned by the League of Nations. Following Japan's defeat in the Pacific War of 1941-1945, the United States assumed control. Micronesians were again denied a significant part in determining their own future as the United Nations ratified America's action and established the Trust Territory of the Pacific Islands.

Since the 1970s, America has gradually withdrawn from direct administration and Micronesians have acquired national "independence." These post-colonial processes were not always smooth and conflicts occurred within Micronesia and between Micronesia and America. Nevertheless, self-government was achieved. A consequent, passionate interest in what Micronesians perceive to be their "real" heritage is developing, together with the realization that they must now manage their past on their own terms.

Difficulties are attached to this as the triple conundrum of historic preservation remains—who owns it, who wants it, and who pays for it? From a conceptual viewpoint it seems so easy. If people have the right to determine what elements of the past are to be preserved as their heritage, they need only make their choices, allocate resources, and it is preserved. From a pragmatic viewpoint however, it is much more difficult. Effective preservation of cultural property is dependent on two critical factors—community interest and political will, and availability of a variety of resources.

How much interest in the vestiges of Germany's Empire exists in these former colonies? What are their national priorities? What resources are available? Where are the money, skilled labor, historically and culturally appropriate materials and methods, and the management and planning experience? Social and political environments where the will to preserve heritage is frequently low, where pressure to provide modern infrastructure is high, and where national resources are limited, are not conducive to historic preservation. Such environments are common throughout post-colonial Micronesia.

Essentially, funds for historic preservation must be generated internally or externally. The first requires a population with disposable income and the second requires external fund providers. Most Micronesian nation-states have very little of the former and a steadily declining amount of the latter. Since 1945, they have become highly dependent on external funds in the form of international aid, most of which comes from the United States. With few exceptions, natural resources are limited and national economies are restrained because of the continuing excess of imports over exports. Consequently, national trade figures are highly unbalanced, economic opportunities are restricted and prospects for near-term improvement are limited.

Oceanic peoples are genuinely proud of their varied and dynamic cultures, frequently focusing on areas that Western cultures tend not to appreciate. For example, Western styles of cultural preservation concentrate on *tangible* historic property. In contrast, Micronesians do not always value tangible historic property highly but show a marked preference for *non-tangible* heritage such as traditional skills and knowledge. This preference seems particularly strong in low coral atoll communities such as the Marshall Islands. Perhaps this may be attributed to factors such as their reliance on less permanent resources for tools and building materials, and the frequency and extent of damage from severe tropical storms.

During the post-colonial era, the focus of preservation in Micronesia has changed from non-indigenous historical property to indigenous cultural heritage. This critical development has increased the complexity of historic preservation management and may also have triggered "adoption" of some historic property that may otherwise have been regarded as colonial heritage. The Likiep Village Historic Site, in the Republic of the Marshall Islands, is a powerful example where historic property associated with the operations of trading companies during the German administrative period has been "adopted" by the Marshallese people.

Without appropriate management, such property deteriorates rapidly as tropical decay processes continue unabated. Despite this outstanding example, a general lack of interest by both Micronesian nation-states and Germany is evidenced in three ways—a lack of funding, a lack of proposals to preserve, and a widespread public lack of knowledge of their shared past. For example, 40 hand-written business books were found decaying in a pool of water and accumulated rubbish in a disused house in Likiep Village. Originating from operations by German (Jaluit Gesellschaft) and Marshallese (A. Capelle and Co.) businesses on Likiep during the period 1908 to 1919, they are historically and culturally significant. Their treatment may indicate a lack of interest in a past considered unimportant or more probably a lack of knowledge of their historical significance.

The conundrum remains—whose heritage is it and who pays? Two projects to preserve the Joachim deBrum house (1976 and 1984) on Likiep Island were funded through the U.S. National Park Service. No funds were obtained from Germany despite its obvious close historic connections.

Marshallese generally feel that satisfying present-day community and family needs is more important than preserving a disused building in very poor condition and apparently without value. For example, a severe tropical storm damaged many homes on Likiep Island and extensively damaged a building comprising the dining room and kitchen of the Joachim deBrum house. Despite being listed in the United States National Register of Historic Places, material from the dining room was salvaged and used to repair some of the damaged homes while the deBrum House dining room and kitchen were never repaired. All that remains are badly deteriorated concrete foundations. Although nominally part of the historic site and despite its high significance from both architectural and historic viewpoints, it was excluded from preservation projects in 1976 and 1984 and left in disrepair. This exclusion strongly implied the building was considered to be worthless and, consequently, when an urgent need for its material arose elsewhere, it was used without qualm.

Preservation of German colonial heritage in Micronesia depends for the most part on these small nation-states receiving sufficient resources from elsewhere. They simply do not have either the finances or the experienced personnel to preserve what remains. If it is to be preserved, then actions need to be taken now because deterioration is accelerating in a natural process. Although it cannot be stopped, it can be delayed sufficiently so that important historic property may be documented appropriately.

The major problem remains one of ownership. Germany displays little interest in extant *in situ* records of her brief time as a colonial power in the Pacific. Micronesians do not generally regard remaining German colonial property as belonging to them. They do not perceive it to be part of their heritage, they feel little sense of ownership or association, and have little desire to preserve it. It is unrealistic to presume they will use scarce local resources to preserve something nobody appears to want. Consequently, preservation strategies and practices that recognise the political and physical realities of a 21st century "Oceania" are needed if remaining heritage is to be preserved and documented.

Joachim deBrum's dining room can no longer be preserved. Is it also too late for other historic properties? Unless "owners" can be found and funding for preservation provided soon, extant historic property originating during Germany's colonial administration of Micronesia will disappear from the Pacific as precipitately as did Imperial Germany.

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William S. Ayres and Emensio Eperiam

Training in Pohnpei, Federated States of Micronesia

Protection of archeological and historic sites poses significant problems for decision makers who must decide what we most want to conserve from the past. Such sites and materials reflect cultural forms as they existed in the distant past and as they have been shaped historically, and so they continue to be central today to maintenance and reconfiguration of cultural identity. This is especially true in the newly independent and rapidly changing countries within the former U.S. Trust Territory of the Pacific Islands, Micronesia. While decisions about what to preserve must lie with islanders and their governments, continuing international cooperation in building the technical expertise for site recognition, conservation, and development is essential for successful long-term management. Pacific Island governments are becoming more and more dependent on their own staffs to do cultural resource management and local historic preservation programs are being expected to carry out basic survey and assessment as well as to manage the sites. Office staffs are overburdened and improved access to necessary information is needed to improve cultural resource management at a time when development and other land modifications are increasing.

Pohnpei State is one of four states within the Federated States of Micronesia, a new nation whose islands extend across nearly 3,200 km (2,000 miles) of the western Pacific Ocean. Pohnpei State, consisting of over 160 individual islands and reefs comprising six main islands, includes one large volcanic high island of approximately 310 sq. kilometers (133 sq. miles) and several low coral atolls. The tropical climate and natural environment pose special problems for documenting and conserving sites, which include stone ruins such as house foundations, tombs, agricultural features, and ritual centers such as the massive complex of Nan Madol, as well as historic sites from the colonial period, and cultural landmarks. The Historic Preservation Fund administered by the U.S. National Park Service has provided funding for historic and cultural preservation on Pohnpei since the late 1970s.

Pohnpei State Site Data

Archeological site information on the islands forming Pohnpei State has been collected systematically only within the last 25 years. Still, although most of the land is still unsurveyed, the total site inventory is approximately 1,000 sites at present (many of which are comprised of dozens of major architectural features). The first systematic effort to do intensive survey on Pohnpei in the late 1970s concentrated on sample land units on the main island;[1] as well, site recording was accomplished on And, an atoll near Pohnpei,[2] and detailed surveys have been conducted on Kapingamarangi, but not on the other Pohnpei State atolls. Intensive field studies have been done since the 1980s by William Ayres at Nan Madol, which represents an internationally recognized element of the world's cultural heritage; it is listed as a U.S. National Historic Landmark.[3] Other traditional sites, historic sites from the colonial period, and landmarks and cultural landscapes are still viewed as fundamentally important by the island residents. The efforts of Rufino Mauricio, a Pohnpeian, now with a Ph.D. in archeology and the National Historic Preservation Officer for the Federated States of Micronesia, were critical to much of this early work.

Archeological and ethnographic studies conducted in the Salapwuk area of Kiti Municipality were undertaken in1989-90 by the University of Oregon and the Pohnpei Historic Preservation Office staff as part of the Micronesian Resources Survey to provide a case study of appropriate methods and procedures for cultural resource inventory, assessment, and conservation. Specifics for the current training program come from the earlier surveys and the guidelines developed from the Salapwuk project by Ayres and Mauricio.[4]

Training Projects

Recent University of Oregon archeological training projects on Pohnpei and Palau thus far have included field survey, site recognition and definition, various levels of mapping, site description formats, and database development. The training projects conducted on Pohnpei in 1998 and 1999 concentrated on a residential complex at Nanimwinsapw, Sokehs, a traditionally important area on the island's north coast. This extensive site has elaborate stone features such as paved walkways, enclosures, house foundations, and ritual architecture extending from the shoreline well into the interior. In addition to dozens of prehistoric features, the area also includes a German colonial period road dating to the early-20th century and extensive Japanese military fortifications dating to the 1940s. Features were described and mapped in an effort to provide basic documentation before the site is further damaged.

Other training projects included detailed GPS point survey locations and mapping in the well-known Nan Madol site on Pohnpei's east coast. As well, we developed a cooperative plan to create a comprehensive site record database. Thus, the interaction involved both collaborative archeological research and cultural resource management.

Site Management Systems

Increased applications of new technologies such as Global Positioning Systems (GPS) and Geographical Information Systems (GIS) have expanded the nature of archeological investigation in recent years and this has raised debate about the best means to manage locational data. A basic issue is whether the spatial locational aspects of site management are so fundamental that GIS should be used, or that instead a true Relational Database Management System (RDBMS) is required as the basic technical system.[5] A computer-based system introduced as part of the Micronesian Resources Survey to the islands in 1989 featured specially created software for site management; however, this was not effective because of complex user demands and lack of continuity and training. In much of Micronesia, GIS land management is being developed just now by natural resources departments and major issues are yet to be resolved that will affect how different kinds of land use information will be integrated. For example, in Pohnpei's case, varied environmental zones representing mangrove swamps, dense historic coastal settlement, and upland secondary forest, among others, pose issues for recording sites using either GPS or traditional surveying methods. However, GPS is in regular use now on Pohnpei and it will be employed even more in the future for site recording.

Another complication for the site database is the varying nature of the descriptive data available for sites after locations have been established. Much of this information for Pohnpei exists in differing formats and levels of detail and, for example, many sites are known only as an oral history reference while many others have UTM coordinates, ecological zone and other environmental data tied to them, and have voluminous descriptive detail, especially as at the Nan Madol site. We argue that Pohnpei must address these issues as there is no functional, comprehensive site inventory database at present.

Recommendations

- The Pohnpei State Historic Preservation Office needs to update its record system for archeological and traditional sites and improve access to site distributional data. The authors are working together in an effort to achieve this and to create a hard copy and computer-based archeological and historic site database. It would be integrated with land use management systems, including Arc View and CAD programs, employed by the Division of Land's surveying and cartographic division. Three basic levels of access to site records are proposed through which office staff could sort and analyze historic sites, landmarks and landscape features, and land-use information.
- A relational database management system should be set up for historic preservation management, perhaps with Internet access to a central database for all four states of the Federated States of Micronesia.

The historic preservation staff of Pohnpei State, in cooperation with the historic preservation office of the national government—as the responsible government agencies—will need to continue to refine and update the site records system. A major function will be adding new site data as these become available from continuing archeological field projects and on-going cultural resource management work.

The site documents available for Pohnpei represent an extremely valuable cultural resource asset. The sites represent a wide range of types and the stone ruins are some of the most remarkable in the entire Pacific area. To influence land-

use planning and to meet the needs of long-term management, a readily accessible management system is increasingly critical. Thus, three main arenas for attention include developing the technical skills of the HPO staff; improving the site inventory system; and using the research and site documentation results provided by outside researchers to help achieve office goals.

Among the many known sites in Pohnpei State, few have been assessed relative to U.S. National Register status, or something equivalent for Pohnpei, and having a way of keeping track of and comparing sites for assessment purposes is essential. Beyond the inherent value of the hundreds of known archeological and historic sites in Pohnpei State, there are thousands more yet to be recorded. Much progress in establishing cultural resource management in Micronesia has been made through substantial commitments over the last 30 years in funding and personnel training; however, much remains to be done. Clear assessment and coordination of training needs and an increasingly active historic preservation program in Pohnpei State will be required.

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Felicia R. Beardsley

Jungle Warfare 2000

Historic preservation in Micronesia is as much about keeping an encroaching jungle at bay as it is a race to document a precious heritage before it succumbs to the forces of man and nature. Whether it is the pressures of development or benign neglect, the demise of historical resources is accelerating. Plant growth and rising sea levels promote chemical degradation of historic building materials, while economic demands for modernization encourage the demolition of traditional properties without benefit of documentation. Small budgets, few in-place conservation policies and legislation, and raw inertia of governments conspire to check progress on heritage preservation. But the picture is not as bleak as it sounds. Recent archeological work in the Federated States of Micronesia (FSM) demonstrates the potential for historic conservation in the region, and the pride in community that arises as a lost heritage is viewed once again. It also demonstrates the fragile state of these resources, where work one year is easily undone the next.

Within a global perspective, Micronesia covers a vast expanse of the western Pacific. It is comprised of hundreds of small islands, each with its unique history of settlement and occupation, and each facing similar problems in conserving and preserving that history. That the heritage of the tropical western Pacific is in peril is undeniable; it is the resolution to these problems that is more difficult. The demands of heritage preservation are often seen as too costly and impeding progress; with limited personnel and financing, there is simply not enough money to go around. A fully funded heritage conservation program is a fata morgana.

In a young, independent country like the FSM, recently emerged from a century of colonial dominance, precedence is given to establishing a post-colonial government where administrative priorities are concentrated on infrastructure development and those goods and services directly affecting the health and welfare of the community. Medical services, schools, clean water, roads, and communications receive top priority. And what about culture; its survival and transmission to succeeding generations; its role in the persistence and continuity of a unique identity among a people? Is culture waning as traditional practices fragment in response to globalization?

Cultural memory, the very essence of cultural survival, is stimulated and nourished by the properties embedded in tangible and intangible traditional resources. Historical sites and landscapes, oral histories, dances, songs, chants, and other forms of traditional activities are the symbolic agents of culture, the means by which it is transmitted, projected, and ultimately coalesced. This is the heritage of a people and a place, its historical character and the very fabric of its existence. Ennui, denial, lack of interest, or just plain neglect can dramatically tilt the fragile balance of continuity toward an erosion of resources, until the loss of both knowledge and practice is complete.

Island states like Kosrae and Yap in the FSM have recognized the critical need to preserve their heritage. Local historic preservation offices, established during Trust Territory times, serve as stewards of that heritage. They are charged with developing, maintaining, and preserving a bank of traditional knowledge no longer recorded in the memories of younger community members, as well as documenting, recording, and managing the sites of their ancestors. But their responsibilities are daunting. They are faced with limited budgets, a lack of training, and diminishing assistance as the economic Compact of Free Association with the United States comes to an end; they are also facing the ever-persistent and unalterable forces of nature, as well as the inevitable demise of older generations who were the cultural archives in the past.

Today, the region's historical sites and properties are obscured and hidden by heavy vegetation, if not by the jungle then coastal mangroves. This is a part of the world where vegetation growth is extraordinary; a tree cut down one day is sprouted to its full size the next, or almost. It is a place where the features of a site are continually displaced, distorted and gradually lost through the movement of roots, rotation of vegetation regimes, shifts in stream channels, subsidence and uplift, tidal fluctuations, changes in sea level, and the actions of man. Sites are in a constant state of transformation. During their original occupation, pioneering vegetation was held in check as sites were maintained, renovated, and rebuilt. Upon abandonment, however, these same sites were rapidly overtaken by the very vegetation held at

bay for so long; they became subject to the interplay of post-depositional forces, including gardening, materials scavenging, and other uses.

In 1999, during a four-month period in Yap, the jungle was cut away from Dinay Village, an old site by all accounts where names of platforms were no longer recalled (an indication that lineage ties were long forgotten). It is one of the earliest settled villages, according to oral history, the place where pottery and fire were introduced to the people by the spirits. Little remains of the site other than foundations distorted by time and vegetation growth, and the accumulation of later remnants of traditional ditch gardens, Japanese occupation, and defensive fortifications. Dinay is a small, complex village with a network of stone paths, a formal entrance, a series of platforms and compounds, a community well, and a community meeting place. Recording, mapping and documenting the site was a difficult task for the HPO staff, especially keeping the jungle at bay. By the time fieldwork came to an end, the jungle had nearly closed in on the site, once again obscuring it from view. During that brief time the jungle was held in check, community members visited the site, first out of curiosity and then pride at seeing and experiencing a significant part of their history. As of this writing, the jungle has reclaimed Dinay. Limited budgets and personnel and demands for heritage preservation throughout the state preclude continued maintenance.

At the opposite end of FSM, Kosrae is facing a similar problem: the maintenance and conservation of Leluh, its most significant site. Leluh is an artificial island with massive stone constructions, canals, tombs, and living compounds. During the later part of the island's prehistory, it was the center of the paramountcy; it is here the first Europeans were welcomed to the island. Today, it is not only fluctuating tides that promote chemical degradation of building foundations and materials, but also occupation of the site by mangroves and jungle. Unlike Dinay, Leluh is the focal point of tourism; it plays a key role in the economic cycle of the island. The task of maintaining the site and cutting away the vegetation on a daily and monthly basis has been taken on by the community in partnership with the HPO. Other sites on-island, unfortunately, do not receive the same attention. Some have been scavenged for building materials, others have been swallowed by the jungle and now languish in a near-primordial state.

Heritage preservation, management, and stewardship in the FSM and throughout Micronesia are a challenge. How do you stem the growth and advance of vegetation? How do you protect a site from the ravenous forces of nature? How do you manage a site in light of more pressing community needs? Ultimately, heritage management is an issue that must compete with other societal needs in the legislative and political arenas, where decisions are left to elected representatives. The preservation community, including the struggling island HPOs, must simply keep a sharpened machete in hand.

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