ARCHAEOLOGICAL TRAINING PROGRAMS IN EMERGING MICRONESIAN ISLAND NATIONS

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Archaeological and historic preservation training projects conducted in the Pacific Islands provide an opportunity to evaluate critical aspects of site conservation and interpretation relevant to cultural heritage. Recent projects, set up by Historic Preservation Programs of Micronesian states and supported by the Sasakawa Foundation (SPINF, Japan), the University of Oregon, and the Micronesia Area Research Center of the University of Guam, have helped preserve and augment a sense of cultural identity for Micronesian through recording, maintenance planning, and interpreting cultural and historic sites. These efforts, primarily in the Federated States of Micronesia (especially Pohnpei State) and the Republic of Palau, have also improved systematic archaeological study, helped meet the aims of recording the history and achievements of the Micronesian people and aided planning for conservation of historic sites and other cultural objects. Archaeological fieldwork and professional training done thus far in Micronesia have provided new insight into the past, but more such studies are needed in order for island governments to effectively manage historic and cultural properties.

An increased awareness of the fragility of the archaeological and material record that documents past cultural achievements in Micronesia is evident in both international and local efforts. Because decision making about conservation of this record increasingly falls to island governments, several training programs in archaeological methods and historic preservation have been conducted in recent years in Micronesia.

The projects aim is to preserve and augment a sense of cultural identity for Micronesians by helping preserve and interpret cultural and historic sites important for heritage management; this in turn helps foster economic development and independence. I have organized training projects centered thus far on the Federated States of Micronesia and Palau in the Caroline Islands of Micronesia; I have conducted similar ones in Polynesia (Samoa and Rapa Nui). The training in archaeological mapping and related aspects of site recording helps meet the established aims of the these newly independent island governments to: 1) assess and record the history and achievements of the Micronesian people as reflected in historic districts, sites, buildings, structures and other cultural objects in the islands; 2) aid municipalities and local administrators in the preparation of comprehensive preservation planning; 3) assist in the preservation of the tangible reminders of history; and 4) extend to all such properties a degree of protection by ensuring compliance with procedures whenever and wherever the law applies (Fitzpatrick and Kanai 1997; Ayres and Eperiam 2001).

The most recent projects, discussed here, were administered cooperatively by the Micror
nesia Area Research Center, University of Guam, and the University of Oregon and the field training was done by staff from the University of Oregon. I acknowledge the generous support of the Sasakawa Foundation (SPINF), Japan, and the University of Oregon.

**HISTORIC PRESERVATION AND CULTURAL CONSERVATION**

A basic concern for historic preservation and archaeology is training people to accomplish, locally, conservation of places, things and ideas from the past that we recognize today as important. This is a global issue addressed through various forms of education and practical experiences. There are some special considerations in the Pacific Islands, including the obvious logistical ones but also the potential for incorporating indigenous skills and ideas of conservation into short and long-term planning and implementation. My projects have been primarily about training in field archaeology as a fundamental component, but also have included linguistics and oral history.

An underlying issue is whether the advent of a global modernity poses a problem for cultural maintenance. Questions include what the implications of modernity are for culture diversity and change and how much we have to preserve to maintain cultural traditions. How to document cultural diversity is an important concern, especially in the face of trends towards uniformity, as is how to protect it. Should we be doing this or should we accept or even work toward uniformity and globalization?

Members of UNESCO have tried to hammer out a convention on the "protection and promotion" of cultural diversity (this was approved in a UNESCO General Conference in Oct 2005.) The drafters were concerned that "the processes of globalization...represent a challenge for cultural diversity, namely in view of risks of imbalances between rich and poor countries." The fear for some is that the values and images of Western mass culture, like some invasive weed, are threatening to choke out the world's native flora (as quoted in Appiah 2006). Some think that individuals rather than "cultures" should be the focus of thinking about diversity and many favor increased awareness of multi-culturalism but not preservation of "cultures." For example, Appiah (2006:2)—who favors increased cosmopolitanism—says: Societies without change aren't authentic, they're just dead. But preserving cultural attributes—in the sense of authentic cultural artifacts and knowledge—is different from preserving "cultures," and is a preservation goal. Often this conservation takes the form of "triage," in which case only selected aspects can be preserved (Ayres and Mauricio 1992). Thus, a major concern of historic preservation training is conserving and developing information to allow for cultural survival—in an optimal way. Beyond this, international recognition of the significance of all cultural traditions as distinct human life-ways encourages study and conservation.

The basic issue, beyond the cultural impact of modernity, is preservation of the material and intellectual past. That is, conservation of the physical remains and the knowledge essential for cultural maintenance. Thus, for historic preservation efforts, our concern is with the material culture record as the fundamental building block and ultimately the most directly preservable aspect of the human past.

**THE ARCHAEOLOGICAL RECORD**

Considerable archaeological fieldwork has been done in Micronesia over the last thirty years, but much more has to be accomplished so that island governments can effectively manage known historic properties and record new ones. In particular, training of staff to manage archaeological and cultural resources is urgently needed.

Professional archaeological field studies in Pohnpei State, FSM, have been done cooperatively through the Pohnpei State Historic Preservation Office by the University of Oregon under the direction of William S. Ayres since the 1970s (Ayres 1979). Historic Preservation projects have focused on locations in Awak, Kitti, and at Nan Madol because of site features, oral traditions, and expected scientific results. Extensive site records and excavation data have been developed (examples include Ayres and Epriam 2001; Ayres and Fitzpatrick.
Archaeological training programs in emerging Micronesian island nations have been concerned with major construction undertakings where sites might be destroyed, such as the island’s circumferential road and various water line installations. An overall sequence based on archaeological and oral historical data that extends back to probably 2500 years has been developed for Pohnpei (Ayres 1990).

Archaeological research in Palau has had a long history beginning with Hisakatsu’s work in 1929 and Osborne’s research from the mid-1950s to the late 1960s (summarized in Osborne 1979). Numerous other archaeological investigations have been carried out in the past 30 years by researchers from Japan and the U.S., significantly contributing to what we now know of Palauan prehistory. A cooperative agreement between the Palau Division of Cultural Affairs (DCA; also known as the Historic Preservation Office) and Southern Illinois University in the 1980s had a major impact in increasing knowledge of Palauan archaeology (Gumerman et al. 1980). More recently, considerable archaeological work has been done by private contractors hired to do reconnaissance and more intensive investigations for large infrastructure projects such as the water system, fiber optic lines, and the Babeldaob road (for example, Beardsley 1996; Wickler 1996). Oral history related to archaeological sites has been recorded by the HPO staff in Palau as elsewhere in Micronesia (Spennemann 1993). The settlement record for Palau is projected back to nearly 4000 years ago based on archaeological and paleo-environmental evidence.

**Project Aims**

Because of a lack of financial resources and time, as well as other commitments, the staff members of the HPO offices often have had limited involvement in the fieldwork done by visiting archaeologists. With turnover in office personnel, increasing permit requests for development projects, and requirements to complete their own multi-year plans for archaeological site inventory, the HPO staffs are in need of learning or upgrading archaeological field techniques related especially to mapping, surveying, and site recording. The training projects have helped remedy this situation. With financial help primarily from the Sasakawa Peace Foundation and, previously, the East-West Center, Hawai’i, we set up a program that provided training as well as new archaeological data, focusing on the fundamental skills required for producing maps, recording other data, and effectively surveying archaeological sites. The organization of these projects fits into the long-range goals of the two island governments as well as serves to develop relationships between outside professional archaeologists and the islanders that can contribute additional resources and person-power.

Thus, the basic purpose of the training projects is to help build field archaeology skills useful for historic preservation and cultural resource management and at the same time to provide the new archaeological data on the prehistory of Micronesia that is essential for such site interpretation and management. Training of necessity includes conceptualization (why), implementation (logistics), and hands-on practice (how) components. The specific aim is to provide assistance for training employees in Micronesian governments whose responsibilities include developing and maintaining archaeological and historic site inventories, databases and records, conserving historic and traditional cultural sites, and approving permits for activities that potentially will affect
the archaeological, historic and cultural values associated with such sites. An effort has been made to include not only Historic Preservation officers and staff, but also community college students, and landowners—who often take a central role in site conservation—in the training.

**Project Background**

The projects have included field and office activities representing archaeological field survey, site recognition and definition, various levels of mapping, and site description formats. They have been coordinated by William S. Ayres, Professor of Anthropology, University of Oregon, Ms. Victoria N. Kanai, Head of the Division of Cultural Affairs, Palau, Mr. Emensio Eperiam, then Chief, Historic Preservation Office, Pohnpei State, Dr. Rufino Mauricio, Division of Archives and Historic Preservation, Federated States of Micronesia government, Pohnpei, and Hiro Kurashina, Micronesian Area Research Center, University of Guam.

Figure 2. Sokehs Rock from the coast at Nan Imwina'apw. Pohnpei Archaeological Training Project. (W.S. Ayres 2003)

The field projects have been supervised on Palau by Scott Fitzpatrick, then a PhD candidate in the Anthropology Department, University of Oregon, and on Pohnpei by Ayres and co-workers, including Christophe Descantes and Joan Wozniak. Fitzpatrick and many other students participated as part of the University of Oregon Department of Anthropology’s Cultural Resources Management Program, which has a long history of working with Pacific Islanders and Native American tribal groups in managing cultural resources. Specifics for the training come in part from guidelines developed by Ayres and Mauricio (1997) from the Salapwuk, Pohnpei, project done in 1989-90 as part of the Micronesian Resources Survey program funded primarily by the U.S. National Park Service. From 2000 to 2003, four projects were administered through the University of Guam’s Micronesian Area Research Center, then directed by Dr. Hiro Kurashina. Dr. Yoshihiko Sinoto, Bernice P. Bishop Museum, Honolulu, was the overall coordinator and advisor for these projects.

The University of Guam/University of Oregon training program for 2002/2003 supported by the Sasakawa Foundation (SPINF) had successful training in both Palau and Pohnpei and focused on archaeological data recovery, including excavation procedures and mapping. This builds on efforts over the past several years in which the University of Oregon has been involved with numerous training projects.

**Recent Projects Undertaken**

For the final year of the Sasakawa-funded training project, we conducted four-week sessions of field survey and office training on Pohnpei and in Palau. These concentrated on historic materials from the period of Japanese administration and on underwater sites in Palau and on prehistoric sites and site inventory databases in Pohnpei.

Micronesian islands have a diversity of archaeological site types, including many prehistoric stone or earth architectural remains, requiring special mapping and recording skills. In addition, there are many existing buildings and sites of historical interest. The training sessions specifically addressed these needs in field mapping at varying levels, in written and photographic site recording, and in developing computer-based site inventory and map data. The latter included integration of GIS (Geographical Information Systems), site databases, and cartographic representations. The training program considered several field recording steps, including reviews of 1) HPO procedures for site identification, documentation, and mapping, 2) map production stages based on field mapping using a theodolite to generate
computer-based graphic representation and database development, and 3) site recording and its integration with efforts of other government agencies, especially the Land and Surveys offices in both island governments.

**Pohnpei Survey and Site Database Project**

The Pohnpei training has concentrated on field studies at the Nan Imwinsapw area of Sokehs (especially 2002-2004), mapping at Nan Madol, the massive stone architectural complex on Pohnpei’s east coast (especially since 1994), and various site management projects. Increasingly, the training has linked the efforts of surveyors from the Lands and Surveys Office and the Historic Preservation Office staff. The most recent training project done on Pohnpei included site definition and feature descriptions at a large residential complex at Nanimwinsapw, Sokehs, a traditionally important area spanning time periods from prehistoric (beginning more than 1500 years ago), the era of early outside (European) contact from the 16th to the late 19th centuries, and subsequent colonial periods (Spanish, German, Japanese, U.S.), and a late historic period (ca. AD 1950-present). This extensive architectural site has numerous stone features including paved walkways, enclosures, house foundations, artificial islands, and ritual architecture extending from the shoreline well into the interior of Sokehs Island. In addition to dozens of prehistoric features, several of which were described and mapped, the area also includes the base of a German colonial period road dating to the early 20th century and Japanese military fortifications of stone walls, pits, and gun emplacements dating to the 1940s. Both prehistoric and historic features were described and mapped in an effort to provide basic documentation in this area before additional construction and development causes damage to archaeological features.

Training projects in 2003 included a number of continuing and new aspects of the overall training program, including site clearing and mapping; integrating oral history with archaeological survey; developing the site recording system and computer database; and consulting about historic preservation activities in the other FSM states. The oral traditions component of the training included discussion of how such information can best be incorporated into historic preservation site databases, and a new form was developed for systematizing basic information about oral traditions. We worked with local landowners in the Imwinsapw case to develop some of this information and collected family history relative to the land. A major part of the in-office training addressed issues of site records and computer database development, a cooperative project with the University of Oregon. Overall, the interaction involved training in several critical aspects of cultural resource management and the following geographical areas and sites were investigated in Pohnpei State: Nan Madol (a site complex), Awak (a settlement area; Peinais and Ledek Nahs sites); Sokehs area (Nan Imwinsapw site), and Mwoakilloa (Mokil) Atoll.

**Specific Pohnpei Training Project Results**

The training included several different critical aspects of present-day conservation needs for archaeological, historic, and cultural sites and knowledge in Pohnpei.

**Nan Imwinsapw Site (MiECPoS2-2)**

The greatest effort was devoted to recording at the Nan Imwinsapw site (PoS2-2) located on the north shore of Sokehs Island, Pohnpei. The complex nature of this multi-component...
site (not uncommon on Pohnpei’s coast) provided a location where many differing aspects of site recording and site conservation could be studied over three field seasons at a single site complex. We cleared and mapped parts of the complex of stone terraces, enclosures, house foundations, walls, wells, and trails (Features 1-40). A mostly-hidden section of the ca AD1910 German road—presently buried under the existing gravel road at the shoreline in this area—was discovered. Trainees learned a range of mapping and surveying skills and improved considerably in their abilities to represent archaeological information in map form. Test excavations to sample sub-surface materials were productive in that they showed the participants some of the basic ideas behind archaeological excavation.

We continued training related to recording oral history about the Nan Imwinsapw site complex and the personal history of those older residents of the area or living elsewhere on Pohnpei who had family and life histories related to the archaeological remains. Information was gathered about clans living on Sokehs Island, including the Sou en Souleti subclan of the Dipwinmen Clan which is important in several areas of Pohnpei. We discussed and reinforced the idea that local knowledge is critical in providing context and meaning for many kinds of relatively recent archaeological sites. A critical aspect of educating local residents about various kinds of site values and the importance of preserving sites was linked to the site documentation process through the work with oral history.

The professional land surveying staff from the Lands and Surveys Office located several features within the large Nan Imwinsapw site using surveying equipment (Electronic Distance Measurement system). Site datum points were established as were the locations of twelve specific architectural features. We relied on a GPS system to establish map coordinates for the Nan Imwinsapw and Dewen Kiek sites,
and for future work it is expected that both systems can be used to great advantage. The Pohnpei Lands and Surveys office is attempting to make its land survey crews available to help accurately locate archaeological sites and this is a very positive development that is crucial to the longer term effort to integrate archaeological and historic sites and to provide information for the government's land use planning.

Nan Madol

Training at the Nan Madol site was aimed at assessing several preservation concerns, including the current efforts to make the site more amenable to tourism, the numbers and types of site visitors, and the ability of the government to manage and conserve the site successfully in the long term. We also addressed specific items such as areas of architectural erosion and collapse and changing sediment deposition patterns within the Nan Madol canals. Of particular concern was furthering a program of systematic monitoring of site conditions—particularly architectural soundness—at Nan Madol. This included documentation at the artificial islands called Dauahdpeidak (DPK), Pahnwi (PWI), and Nan Douwas (NDA). Observations and measurements of the impacts of tidal fluctuations have been made at Dauahdpeidak islet over a 15 year period. These monitoring and maintenance concerns are major issues for long term preservation of Nan Madol and other coastal sites throughout Pohnpei and Micronesia.
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Site Recording and Databases:
The training project included work in the staff offices on a comprehensive site record database and re-establishing computer site data files and other documentation about sites. We re-configured some office computer functions, including failed software essential for record management and imaging. The loss of information about sites and site distributions from computer failure poses a major difficulty for the historic preservation office. A digital camera acquired by the HPO was made useable so that images could be downloaded on the new computer and photographs from the field sites were taken and set up in a file. We also integrated the office’s formal site record form, a feature description form, and a photographic record form into computer databases. In addition, the trainees spent time collating the information and synthesizing it into a digital format, so that they can create electronic site records from previous field observations. They have begun a related oral history document (incorporating digital photographs) of site names and their significance.

In addition to the work on procedures and methods, the training project contributed to the supplies and hardware needed for the functioning of the Pohnpei Historic Preservation Program. Maintaining electronic databases of sites and map continues to be a fundamental problem everywhere.

Figure 10. Entryway into main tomb, Nan Donyas, at the Nan Madol site, Pohnpei. (W.S. Ayre)

Recent Archaeological Training Projects in Palau
Archaeological training in Palau has been similar to that done on Pohnpei and builds on earlier field research, particularly by Scott Fitzpatrick. A close working relationship was developed with the Division of Cultural Affairs.

Past projects in Palau have included the mapping and recording of site damage at Uluang, Ngermelengui State (1997), site mapping at Milad, Malo’s Tomb, and Omis Cave (1998), installation and training for a computerized Geographic Information System (GIS; 1999), and intensive investigation of two Yapese stone money quarries at Omis Cave (1999) and Chelechol ra Orrak. The training led by Scott Fitzpatrick has focused on transferring skills and updating technical expertise for DCA staff who are responsible for recording information about Palau’s cultural and historical resources (Fitzpatrick and Kanai 1997). In 2000, a multi-component project was initiated at several locations in the Palauan archipelago. Our training projects have included archaeologists and ethnographers from the Palau Division of Cultural Affairs (DCA), historic preservation staff from other Micronesian States (e.g., Yap, Pohnpei, Kosrae), and students from the University of Oregon.

Palau’s Historic Preservation Program in recent years has been concerned about the preservation and protection of historic buildings and features associated with the Japanese administration from 1914-1945. During WWII, large-scale construction of defensive fortifications and military infrastructure was instigated by the Japanese Imperial Army (see, e.g., Denfeld 1988). The invasion of Palau by American forces during Operation Desecrate One in 1944 led to the destruction of military hardware on both sides, much of which is still visible, especially underwater. The increasing popularity of Palau as a tourist destination, especially for recreational diving, has severely affected many of the underwater historic resources; at the same time terrestrial sites show intensified results of both natural and cultural impacts and erosion of surface features.
In discussions with DCA archaeologists following the 2000 and 2001 training projects, it was agreed that the next step in archaeological survey and mapping for the training program would be to focus on historic resources and intensive archaeological survey. Additional training with GIS software and integration of site data into a newly installed database were also planned. A national government plan to relocate the capital from Koror to Melekeok over a five-year period makes this kind of recording even more crucial, because many of the buildings in Koror now occupied by government agencies (e.g., Supreme Court, Congress, DCA) were once used by Japanese administrators. Helping to find adaptive re-uses for these buildings in the near future is a necessary part of preserving this period in Palauan history.

The training program in 2002 consisted of an intensive archaeological project at the site of Chelechol ra Orrak (beach of Orrak Island) and an introductory underwater course focusing on the documentation of WWII shipwrecks and other underwater historic remains.

**Chelechol ra Orrak**
Archaeological fieldwork at the Chelechol ra Orrak site began in 2000 to investigate habitation material left by probable Yapese Islanders who visited the site to carve their large limestone disks of “money”. During excavations a long sequence of occupation was discovered, including evidence of human burials dating to approximately 3,000 years ago (Fitzpatrick 2002). This site shows some of the earliest evidence for burial activity in Palau and represents one of the earliest human occupations of Oceania. The summer 2002 project continued at Orrak to collect information on the later periods of site activity that dates to around 2000 B.P.

**Underwater Investigation of Historic Sites**
The second phase of the latest Palau project included Open Water SCUBA certification and preliminary investigation of underwater wreck sites. The overall goal of this phase was to train students and staff from Historic Preservation Offices (HPOs) in Micronesia to locate, record, and monitor these historic sites, many of which are losing artifacts to looting and natural disintegration over time. The staff of these offices, who have jurisdiction over these historic sites, are currently not in the position to respond regularly to reports of looting and accidental damage to these wrecks. It is therefore prudent that their offices be equipped with the proper training in SCUBA and GPS survey to ensure there is a timely response to any reports of theft, destruction, or neglect. The goal of this project was to certify participants for diving and to record basic information about some of Palau’s lesser known wreck sites, most of which date to the WWII period. Participants learned through field trips and classroom activity. Open water testing and certification took place during the first phase of the program. During the second phase, we learned about the specific history of several wrecks, dived some of the better known wreck sites, and began the first phase of a multi-year project to locate and record many of the lesser known wrecks.

Overall, Micronesian government staffs in Pohnpei and Palau have become increasingly responsible for monitoring construction and other land and sea use affecting archaeological and traditional cultural resources. The Historic Preservation Offices are becoming more and more dependent on their own staff to do cultural resource management and, with independence and reductions in outside funding, they are being required to conduct more of the basic survey and assessment work. Training projects are helping to provide assistance pertinent to those immediate needs.

**Summary and Assessment**
During training projects on Palau and Pohnpei we developed new site survey and other archaeological evidence related to early settlements and improved site documentation and management skills for the project participants. The trainees often agreed that the field experience and the interaction with the visiting archaeologists were timely and helpful. As a result of this, participants became increasingly aware of their own past from the perspectives of archaeology, in addition to the well-known oral means of passing on their traditions.
Archaeological results include improved map databases, new site documentation and record keeping, and systematic evaluation of pre-contact prehistoric and historic period sites. In particular, new evidence about the important past settlements such as Nan Imwapsapw and Nan Madol in Pohnpei and Chelechol ra Orrak and Omis Cave in Palau is significant. Because historic preservation staff are interested in integrating increased scientific knowledge of Micronesia’s past and perspectives from traditional sources of understanding, such as oral history, in what they do, we will continue to foster collaborative research opportunities for the Historic Preservation Office staff in Micronesia.

In the time frame of the recent three-year training project more than 25 individuals were engaged in the training projects in Pohnpei and Palau. Some staff members increased the depth of their experience by participating in multiple training sessions and others were included as new personnel in each training session because of changes in the HPO office staff. This highlights a need for continued training efforts as new staff are integrated into the day to day operations of the very active Historic Preservation programs.

During the final year of the original three-year project, we synthesized results of prior training efforts, discussed with the HPO staff their needs and the main problem areas for the future. Consultations with various organizations on Pohnpei should lead to greater involvement with historic preservation and cultural conservation. Jointly, we greatly facilitated cooperative interaction among government agencies, including the community colleges, in the long term conservation and expanded use, including tourism, of historic and cultural properties.

Important results of Historic Preservation training in the Pacific everywhere, beyond the conservation and management of archaeological and historic remains, include that it provides for the discovery of new archaeological and historical evidence. Documenting prehistoric pottery manufacture and use on Pohnpei (generally unknown to residents of the island today); new dates for settlement of atolls such as Mwoakilloa, and in Polynesia new information about early pottery in Samoa and new stone statue art on Easter Island are examples. Modern threats to knowing the past are offset by the education, the process, and the results of doing historic preservation training, and given present day concerns about cultural diversity, cultural identity, and global modernity’s impact on cultural maintenance, historic preservation seems ever more essential. It should be clear that multicultural awareness is incomplete unless we understand cultural diversity represented by those living in the past as well as in the present.

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