

A Place to Learn: the Underwater Cultural Heritage in American Samoa

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Abstract

The five inhabited islands (Tutuila, Aunu'u, Ofu, Olosega, and Ta'u) and two distant coral atolls (Swains Atoll and Rose Atoll) of American Samoa have a diverse maritime past. Consequently, maritime heritage properties reflect different aspects of history in Samoa, such as historic shipwrecks, World War II naval aircraft, fortifications and coastal pillboxes, and archaeological sites associated with the ancient past. Importantly, specific coastal and marine locations, geological features usually categorized as "natural," clearly have cultural significance in Samoa, being familiar "landmarks" of legend and myth, critical to maintaining cultural identity. This is challenging to the familiar management emphasis solely on historic properties.

The National Oceanic and Atmospheric Administration's (NOAA's) Office of National Marine Sanctuaries (ONMS) seeks to discover, assess, and protect significant maritime heritage resources throughout its 14 sites, and assist partner programs and agencies in the general preservation of the underwater cultural heritage (UCH). NOAA has completed a document-based inventory for American Samoa and will propose field surveys for specific locations in the future as part of its overall effort to better understand and preserve special resources. The Sanctuary System's Maritime Heritage Program supports work in the Pacific, and has the ability to offer Nautical Archaeology Society (NAS) courses in maritime archaeology surveying techniques. Encouraging collaborative training opportunities, and better understanding the diversity of the UCH in the Pacific region, are two important ways to increase capacity in this field.

Introduction

The Pacific Island region (henceforth referred to as the Pacific), within the world's largest ocean, is one of the last areas for the introduction of the field of maritime heritage preservation. As such, the region presents many opportunities and obstacles to the discovery and preservation of underwater cultural heritage (UCH) resources. Locations are remote, equipment and platforms used for UCH survey are rare, and in many places deep ocean (no continental shelf) lies adjacent to high-energy coral reef environments. Furthermore, warm waters promote the *Teredo navalis* or shipworm, and deterioration of wooden remains is high. Though beyond these difficulties lies a more interesting challenge to what has become, more often than not, strictly historical shipwreck archaeology. Not everyone places equal value on the material fabric of the wreck itself. For example, the shell of post-western contact is sometimes the marker of traumatic social experience. Of course, cultural contact and the advent of resource exploitation, colonization, and militarization (World War II) have shaped the region in many ways and these forces have left their indelible stamp on the sea floor. But for indigenous cultures who have resided in these islands for millennia, intimately connected to the sea, there may be a deeper meaning to the UCH. It may be time to reexamine some of our definitions of cultural heritage resources

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in the Pacific, to adapt to and learn from the people of American Samoa themselves.

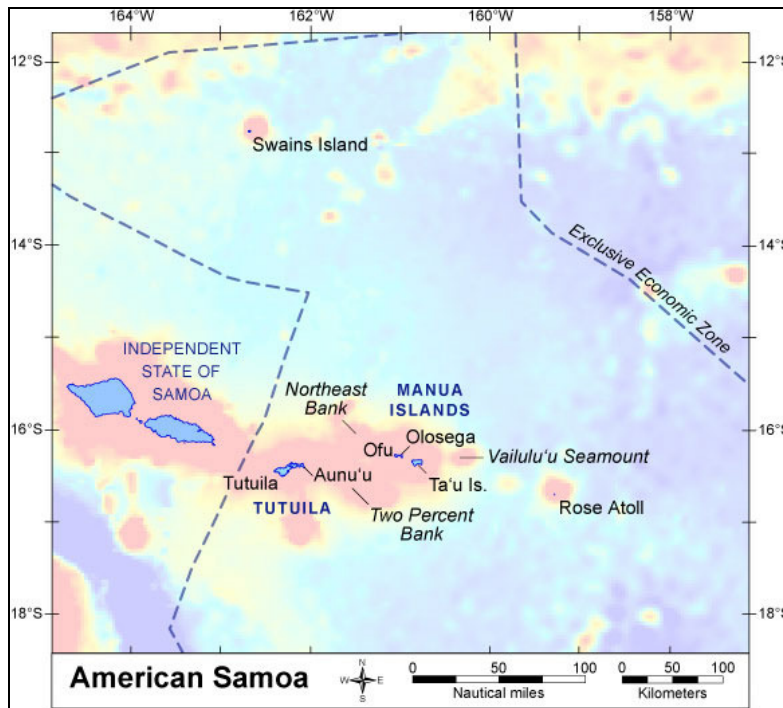


Figure 1: Map of the seven main islands of American Samoa (courtesy NOAA ONMS).

American Samoa and the Palagi

American Samoa is located about two-thirds of the way between Hawai'i and Aoteroa (New Zealand). It consists of five inhabited volcanic islands with rugged peaks (Tutuila, Aunu'u, Ofu, Olosega, and Ta'u), and two more distant coral atolls (Swain's Island and Rose Atoll). The Samoan people are descendants of the original Polynesian voyagers. These people were skilled Pacific navigators who arrived in the islands sometime between 3,000-3,500 years ago (Howe *et al* 1994: 10). The construction of open-ocean voyaging canoes and the knowledge of non-instrument navigation as well as the ability to sustainably exploit near shore and deep water marine resources, can only be understood today as impressive advancements in seafaring and marine resource management. Many scholars now interpret the colonization of the islands of the Pacific as the last and greatest of human migrations, one that demanded an entirely new technology and way of life (Howe 2006: 21).

Dutch captain Jacob Roggeveen is credited with the western "discovery" of the Samoan Islands in 1722. This was followed by Bougainville in 1768, the London Missionary Society in 1830, German trading firms in 1857, and Robert Louis Stevenson in 1894. In 1899 the Samoan Tripartite Convention divided the islands between Germany and the United States of America (U.S.). Between 1900 and 1950 American Samoa was administered by the U.S.'s Department of

the Navy. Pago Pago, on the island of Tutuila, was recognized early on as one of the best natural deepwater harbors in the South Pacific. Today the islands are an unincorporated territory of the U.S..

Palagi or Papalagi (pronounced *paalangi* or *papalangi*) is the Samoan word for foreigners, particularly European white foreigners. The word may have derived from a combination of “pa” (breaker) or “papa” (flat board) and “lagi” (sky or heaven), referring to the “sky breakers,” or perhaps to the tall wooden masts of western ships (Milner 2003: 140). It has since been adopted by other cultures in the Pacific. The entire post-western contact or Palagi period represents about 10% of American Samoa’s long history.

The Slowly Emerging Inventory

Many archaeologists and preservationists at this 2011 meeting of the Asia-Pacific Regional Conference on Underwater Cultural Heritage will be familiar with the logistical challenges of conducting maritime archaeology in the remote Pacific islands. Locations are distant, facilities and equipment scarce, training opportunities rare to non-existent. Nonetheless, the UCH in specific areas is being considered. In 1986 the NOAA’s ONMS established a sanctuary at Fagatele Bay, American Samoa. The sanctuary system’s mission is “to serve as the trustee for the nation's system of marine protected areas, to conserve, protect, and enhance their biodiversity, ecological integrity and cultural legacy.” (NOAA National Marine Sanctuary site <http://sanctuaries.noaa.gov/about/welcome.html>) In June 2007 sanctuary system staff completed an initial maritime heritage resource document-based inventory for American Samoa (Van Tilburg 2007). Maritime heritage resources, similar to the UCH, consist of cultural, archaeological, and historical properties associated with these marine areas. Fagatele Bay sanctuary, on the island of Tutuila, is considering the expansion of its heritage resource efforts. Within American Samoa sanctuary management plans are developed with the input of local villages and community members and reflect the need for greater stewardship of coastal and marine resources.

Historic Shipwrecks

According to the available sources 39 ships are known to have gone missing in American Samoan waters. Potentially ten of these vessels, which are dated to the 19th to early 20th century, are of greater historical or archaeological interest. The brig *Phoebe* went ashore at Tutuila in 1828. It was sailed by Australian convicts via Huahine in French Polynesia. The whaler *Metacom*, named for the chief who led a war against the Puritan settlers in New England, was lost in 1860. The destroyer USS *O’Brien* was torpedoed during WWII, and the tanker USS *Chehalis* burned and sank in Pago Pago harbor. The more contemporary ship losses represent a collection of modern longline fishing vessels. These potential sites may link the islands of American Samoa to British colonization efforts in the Pacific, to whaling heritage, and to naval activities in World War II. Except for the USS *Chehalis* in Pago Pago, none of these wrecks have been located.

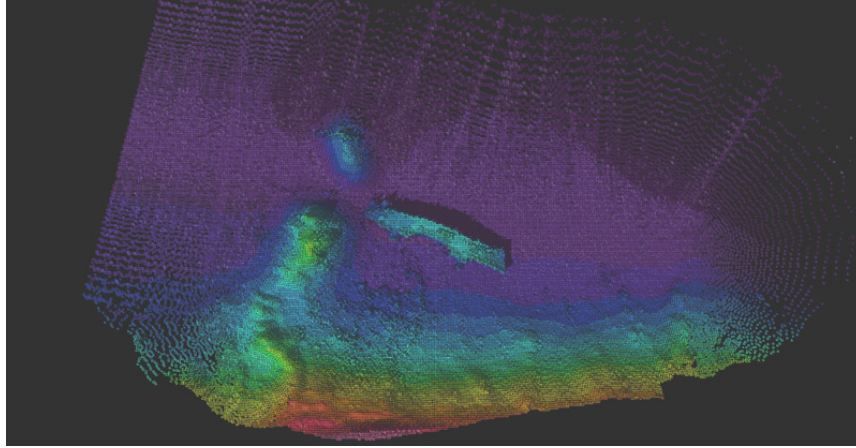


Figure 2: Multibeam image of the USS *Chehalis* sunk in Pago Pago harbor (courtesy NOAA Coral Reef Ecosystem Investigation).

Historic Aircraft

During world War II, the U.S. naval air station on the island of Tutuila supported up to 60 fighter aircraft and 12 long range bombers at any one time. As a consequence of intensive training and patrols 43 naval aircraft are reported as having ditched or crashed into American Samoan waters between 1942 and 1944, principally in the vicinity of Tutuila. Some of these sites may be war graves; all remain property of the U.S. government and fall under the protection of the *Sunken Military Craft Act* of 2004. None have been located though local divers report possible plane debris near Pola Island, Tutuila.

The waters around Tutuila also possess one of the most famous commercial aircraft crashes in Pacific history. On January 12th 1939 Captain Edwin C. Musick, along with his crew, suffered a fatal explosion and crashed into the ocean northwest of Tutuila. Musick had inaugurated the Panamerican Flying Clipper service in the Pacific, the first trans-oceanic air link in the region. Surface search efforts were conducted by the USS *Avocet* for the Sikorsky-42B "Samoa Clipper," but only traces of debris were ever found.

Coastal Fortifications

The remnants of numerous concrete pillboxes along the shoreline, gun emplacements, bunkers, Tafuna and Leone air bases, the naval hospital, radar stations, radio stations, foundations are some of the more visible reminders of the World War II period in American Samoa. Joseph Kennedy, principal investigator with Archaeological Consultants of the Pacific Incorporated, recently completed a separate inventory of all World War II coastal defense structures on Tutuila Island, documenting 132 coastal sites, many being impacted by coastal erosion (Kennedy 2005). Some of these locations, such as the six-inch guns at Blunts Point along with their emplacements and ammunition lockers, have been designated as National Historic Landmarks. The pillbox sites, some built prior to the American declaration of war in December 1941, are associated with the U.S. Marines and with the local *Fitafita* (Samoan soldiers). The Samoan Marines were

the first ethnic brigade to be incorporated into the Marine Corps Reserves (Kennedy 2005: 90). The defense structures that dot the perimeter of Tutuila are a testimony to the military role of the islands during a pivotal period in the region's history.



Figure 3: Empty WWII pillbox near Alao village (courtesy NOAA ONMS).

Fa`a-Samoa and the Underwater Cultural Heritage

The broad cultural heritage of American Samoa has developed over the past 3,000 years. It emphasizes human connections to the sea and is reflected in Samoan traditions and lifestyles or *fa`a-Samoa* (the Samoan Way). Samoans try to observe traditional ways on a daily basis, perhaps more than in any other Polynesian culture. *Fa`a-Samoa* is therefore a very real and acknowledged perspective, one that is integral to relationships with the environment and with marine areas. Two specific types of cultural heritage resources reflect certain elements of these longstanding traditions and lifestyles: coastal archaeological sites, and specific marine and coastal locations associated with the legends and myths of Samoa.

Archaeological Sites

There are a wide variety of archaeological artifacts and sites in American Samoa related to the ancient past, such as star mounds, inland forts, raised roads, quarries, house foundations, and pig enclosures. Samoan archaeological artifacts and sites associated with the marine and coastal setting include: pottery, whet stones or grinding stones, petroglyphs, grinding holes in the reef shelf (also used as bait cups) known as *foaga*, lithic scatters (stone tool manufacture) of

sinkers and lures. Other marine sites may include stone fish weirs called *pa*, or piles of stones to attract fish, like *atule* (fish species) stones (Herdrich and Armstrong 2009: 14, 30). Some of these features are located on semi-emergent reef shelves, awash at high tide. In some instances sites such as coastal villages have been the subject of archaeological investigation and excavation. The potential for additional information from further study of marine and coastal archaeological sites in American Samoa remains high. These sites record critical information about the ancient past. Currently 21 sites are listed in the maritime inventory report (Van Tilburg 2007), but more research is needed. Field data from numerous surveys exists at the American Samoa Community College and the American Samoa Historic Preservation Office.



Figure 4: *Foaga* or grinding holes in the reef at Fagatele Bay (courtesy NOAA ONMS).

Legend and Folklore Sites

There are a large number of legends and stories represented by prominent natural features or specific locations within the coastal and marine context. The Samoan word *tupua* refers to special rocks or formations which represent ancient humans. Specific locations underwater, such as fresh water springs or passages in the reef, can also be associated with ancient events, legends, or stories of tragic loss. From the resource management perspective traditional cultural properties (TCP) have partially been defined as locations associated with the traditional beliefs of a tribal or indigenous group about its origins, its cultural history, or the nature of the world (Parker and King 1998: 1). These “properties” are different from historic structures or artifacts. Should these types of UCH sites be included in a resource inventory? Considered as marine resources meriting

attention? Can they be defined by any of the same criteria or described by boundaries? One example is representative of many, the Dolphins of Fagasa:

The boat came from the west and called at Fagasa for a rest. It was the boat of Li'ava'a, the king of Fiji, who was on a voyage with his daughter Sina...While they were in Fagasa, Li'ava'a asked Sina if she had filled her water bottles.

The girl answered, "No." So Li'ava'a sent her to draw water. The girl took the coconut bottles and went to the spring...When the Fijians were about to resume their journey, Li'ava'a asked whether Sina had returned. The crew answered that she was asleep...Li'ava'a ordered: "Raise the anchor and let us go." When the canoe was far out in the sea, Li'ava'a suddenly said, "Awaken Sina..." but the girl was not to be found. Li'ava'a now knew that she had been left behind in Fagasa. Then Li'ava'a took hold of the *paletua* (a stick for the steersman to lean against) and beat the men. The crew cast themselves into the sea and begged Li'ava'a to spare their lives. He answered, "No, you shall die this very day." Then he threw bananas at them. The crew said, "Li'ava'a, please command what we are to do." Li'ava'a replied, "Be changed into dolphins and rise in Fagasa Bay every year."

When Sina had finished...she stood on the beach. She looked, but there was no boat. Only the mast could still be seen in the distance. Then the girl cried and one of her water bottles cracked. A spring bubbled up which exists to this day. It is called Tufu. Then the girl waded into the sea with the other coconut bottle. She stood on a rock in the sea. She waved her white fan, but no one saw her. The boat was too far away. She cried again and the other bottle cracked. A spring bubbled up from under the rock in the sea. Even at high tide its water is fresh to the present day...

In Fagasa there still are two rocks known as "Sina's Rock" and "Li'ava'a's Rock." And to this very day the dolphins appear every year in the Bay of Fagasa. (Herman 1955: 6-7)

In a very pragmatic manner the features of the landscape and seascape themselves are visible touchstones of oral history, a cultural landscape of memory. For the people of American Samoa, "these sites are of extraordinary significance to Samoan culture. Compared to all of the archaeological and historic sites that the Historic Preservation Office (HPO) tries to protect, these sites are seen as the most significant to local residents." (Volk *et al* 1992: 40) But is legend enough to be considered a significant underwater heritage site? Existing definitions lean towards locations of actual events, activities, or cultural observances. Public comments received by Fagatele Bay National Marine Sanctuary emphasized the need to consider Samoan legends as important sources of information, even for outreach and tourism in American Samoa.

The Existing Standards and the Broader Cultural Landscape

The U.S. federal preservation program relies upon the National Register of Historic Places to define criteria which measure site and resource significance (National Park Service site <http://www.nps.gov/nr/>). Cultural heritage sites are initially assessed by four criteria: A) associated with events contributing to the broad pattern of our history; B) associated with the lives of persons significant to our history; C) embody a distinctive characteristic or type; and D) have yielded or may be likely to yield important historic or prehistoric information (Hutt *et al* 2004: 9-10). These standards are well-established and widely acknowledged in the

cultural resource management community but admittedly they only work well for certain types of properties and have been less successful in including living cultures and associated sites or resources.

NOAA's National Marine Protected Areas (MPA) Center, through its cultural heritage resources working group, is currently considering a broad approach to cultural heritage resources within the national MPA system. This approach would maintain the standards and criteria of the National Register approach but add additional consideration for tribal and indigenous host culture perspectives, and human use areas. The current working group definition highlights "the broad array of stories, knowledge, people, places, structures, and objects, together with the associated environment, that contribute to the maintenance of cultural identity and/or reveal the historic and contemporary human interactions with an ecosystem." (NOAA Marine Protected Areas Center 2011) This perspective allows for greater recognition of the interaction between cultural resources and the natural environment (ecosystem management). It is more suitable for understanding cultural landscapes, areas where human activity intersects with specific marine environments, resulting in distinctive cultural and ecological imprints. This cultural landscape approach may be useful in American Samoa. The importance placed on natural marine features in American Samoa speak directly to a mythic land and seascape and challenge the existing definitions of the U.S. National Register and the social scientific concepts that originated in the 1960s.

Even more challenging to current heritage preservation practices, many tribal and indigenous groups recognize certain marine species (such as turtles, sharks, or whales) as cultural resources. This identification of the cultural aspects of natural resources emphasizes the critical relationship between humans and these species over millennia. Most tribes and indigenous cultures have legally recognized and/or inherent authority to designate areas of cultural importance to their people. In most cases these authorities will not extend beyond their own members. However, designation of culturally important heritage sites and resources by native peoples, whom should be recognized by others as relaying their importance of those areas and species, should be a vital component of understanding the richness of the maritime heritage of what is now the United States and its territories.

American Samoa, UCH, and Climate Change

Like natural resources, UCH resources may also be affected by climatic change. Such effects may differ in magnitude when compared to climate impacts on large-scale natural ecosystems but depending on the location and character of the resource, significant damage to or complete loss of cultural properties can occur. Therefore, it is important to consider the possible impacts to these non-renewable resources. The ONMS has initiated a "Climate Smart Sanctuary" effort, looking forward some 50 years at potential impacts that climate change may have on sanctuary resources (Cheng and Gaskin 2011). Fagatele Bay sanctuary in American Samoa is the first location to include cultural heritage resources as a part of these studies.

Since they are located in the high-energy coastal impact zone Samoan coastal archaeological sites and locations associated with myths and legends may be particularly vulnerable to climate change, such as an increase in short-term events like tropical storms or tsunamis. A survey of coastal archaeological sites and artifacts exposed by the September 2009 tsunami in American Samoa has recently been conducted. Fifty new lithic sites were exposed and damaged by the destructive waves, which reached over 17 meters in height at some locations (Addison *et al* 2010: 35). And the threat is not just to the cultural aspect of these resources but to our potential understanding of environment and climate itself. Archaeological sites often contain material crucial for understanding past climate regimes. Furthermore, locations which help maintain family and village cultural identity may have great social importance in the face of climate-driven cultural change (Samoan Studies Institute 2009: 4).

Training Opportunities

The NAS is an avocational organization which provides resources and training in maritime archaeology to the public. The Society's training and standards have been recognized at an international level. In May 2006 NOAA's Maritime Heritage Program initiated its involvement with the NAS by co-sponsoring (with the U.S. National Park Service) an NAS course in Honolulu, Hawai'i. The following year eight of NOAA's maritime heritage staff were certified as official NAS course instructors. Since then the Maritime Heritage Program has provided an annual level 1-2 NAS public course in different U.S. city locations (Key West, Alpena, Seattle, Juneau, Anchorage). The course not only provides training in the technical aspects of site surveying but also introduces a whole new perspective on heritage resource preservation and the marine environment. Such a course might be suitable for American Samoa in the future.

NOAA's Maritime Heritage Program also has a long standing collaborative relationship with the University of Hawai'i's Marine Option Program (MOP), which provides hands-on marine science experiences to undergraduates throughout the state. NOAA and University of Hawai'i's MOP have together been providing annual field surveys. Its initiatives entail documenting the UCH in Hawai'i and training undergraduates in site surveying techniques through these "Maritime Archaeology Survey Techniques" (MAST) courses. The university has recently established a MOP presence at the American Samoa Community College. NOAA and University of Hawai'i staff are currently discussing ways in which these maritime heritage efforts might be expanded to American Samoa, potentially benefitting marine science students at the community college by providing a cultural heritage component.

Localizing Stewardship

True stewardship of marine resources, including the UCH, must begin at the local level. Learning more about the historic resources, the known shipwrecks and aircraft and coastal fortifications which are scattered throughout American Samoa, can raise local awareness of their inherent historical and archaeological values. Such sites can provide training opportunities for students in heritage

preservation and maritime archaeology. That being said, these Palagi resources still originate from only the most recent 10% of Samoan history. The existing interest in specific marine and coastal locations related to legend and folklore suggests that we reexamine our definitions of cultural heritage resources in the Pacific. The single most important lesson when considering the UCH in American Samoa is that the effort to discover and preserve these resources must adapt to and learn from the people of American Samoa themselves.

Faafetai

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