

WRITTEN TESTIMONY  
OF  
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REPRESENTATIVE  
17<sup>TH</sup> NORTHERN MARIANAS COMMONWEALTH LEGISLATURE  
CHAIR, STANDING COMMITTEE ON NATURAL RESOURCES

AT THE HEARING BEFORE THE HOUSE SUBCOMMITTEE ON NATIONAL PARKS, FORESTS AND  
PUBLIC LANDS  
ON H.R. 4686

A BILL TO AUTHORIZE THE SECRETARY OF INTERIOR TO STUDY THE SUITABILITY AND FEASIBILITY  
OF DESIGNATING PREHISTORIC, HISTORIC, AND LIMESTONE FOREST SITES ON ROTA,  
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS, AS A UNIT OF THE NATIONAL PARK  
SYSTEM.

APRIL 27, 2010

The Island of Rota is part of the Commonwealth of the Northern Mariana Islands (CNMI). The relationship between the U.S. and C.N.M.I. is defined in the 1976 Covenant between the two governments. The 2004 reconnaissance survey of Rota determined the natural and cultural resources present on the island to meet criteria of national interest. The significant resources present here on Rota are not adequately represented in the National Park System and the survey determined these resources to be feasible as additions to the National Park Service.

Rota was the only major island in the Mariana Archipelago left largely unscathed by the destruction of WWII. This resulted in the preservation of the native limestone hardwood forest on Rota, and left much of its 3000 year-old heritage intact. Rota contains the most well preserved and exceptional examples of the ancient Chamorro culture.

Rota contains the best examples of remaining Latte Stone from the "Latte Phase" of the cultural tradition of the Chamorro people. The Latte Phase is named for the distinctive stone architectural rudiments that appeared throughout the archipelago nearly 1000 years ago. This phase commenced in approximately 1000 AD and lasted until the early 1500s.

The CNMI Legislative Delegation for the island of Rota, the local government officials and many residents believe that their island is presently at a crossroads for making long-term decisions about future land use. During the reconnaissance survey prepared by the National Park Service, Pacific West Region, Honolulu, for the Commonwealth of the Northern Mariana Legislature on August, 2005, it described in detail the significance of Rota's natural resources and as having the most numerous, most intact, and generally the most unique prehistoric sites of any of the islands in the Mariana Archipelago. The

Reconnaissance Survey also included a preliminary evaluation of the suitability and feasibility of nationally significant areas or sites being included in the national park system.

The detailed description of Rota's Prehistoric Sites, Historic Sites, the Native Limestone Forest and Rota's Natural Resources was taken from the National Park Service, Pacific West Region-Honolulu, Draft Reconnaissance Survey of the Island of Rota, August 2005:

### **Significant Prehistoric Sites**

The island of Rota contains the best remaining examples of what is known as the Latte Phase of the cultural tradition of the indigenous Chamorro people of the Mariana Islands. This phase commenced roughly in 1100 AD and lasted until the initial European contact in the early 1500s. The Latte phase is named for the distinctive stone architectural elements that began to appear throughout the archipelago roughly 800 to 1000 years ago.

**Mochon Latte Stone Village.** This ancient Chamorro village is located on the north coast of Rota and has been locally designated an archeological district. The district contains 46 individual latte stone assemblages, extensive pottery and artifact scatters, and stone-lined water wells. The latte stones are arranged in two parallel rows and originally capped by domed shaped stones. The columns are believed to have served as the foundations of traditional Chamorro houses at the time of European contact.

Archeological testing within the district indicates that Mochon revealed cultural strata down to a depth of eight feet. A radiocarbon sample recovered in 1983 from an early stratum yielded a date of 2920 BP (Before Present), attesting to the great antiquity of portions of the Mochon site.

The Mochon Archeological District encompasses both the earlier and later periods of prehistory in the Mariana Islands. Based on radiocarbon determinations, it is possible Mochon may have been among the first locations to be settled on Rota. The area may have had a continuous occupation until the beginning of the eighteenth century. The profound changes which took place in the traditional Chamorro life-style resulting from Spanish military and religious policies caused Mochon to be abandoned during that time

The Mochon Archeological District remains in an excellent state of preservation. There was some impact on the site during the Japanese period when trenches were dug here as part of the island's defense system. The trenching caused the destruction of small portions of the site's subsurface deposits and a few of the latte stones. The stones may have been utilized for strengthening the defensive positions. After World War II, a local family took up residence in the area, constructing a small house, a storage shed and a chicken coop. The family carefully maintained the integrity of the Latte stones.

The Mochon Archeological District is significant for two reasons:

(1) It is the most extensive and best-preserved ancient Chamorro village site in the Mariana Archipelago. Since the site was occupied continuously for nearly three thousand years and contains extensive subsurface cultural deposits, Mochon is potentially valuable for the scientific study of a number of aspects of the earlier period of Marianas prehistory, including the time period and geographic origin of the first Chamorro settlers. The Mochon Archeological District is listed on the National Register of Historic Places.

2) Latte stone houses are judged to be the most spectacular tangible remnants of the ancient Chamorro culture. Since few intact latte stone villages still exist in the Marianas, the Mochon Archeological District has enormous potential as a site to interpret the Chamorro culture, not only to the people of the CMNI but to international visitors.

**Chugai Pictograph Cave.** This natural limestone cave is located in the eastern portion of Rota on the rim of a plateau immediately above the second terrace inland from the coast. The cave consists of a single passageway about 185 feet in length and averaging about 15 feet in width. The cave is accessible via a rock stairway constructed by the Japanese during World War II. Within the cave approximately 90 pictographs of prehistoric origin have been painted on the walls. The drawings were executed in what appears to be a black, dark gray, and brown charcoal-based pigment. Most of the drawings are linear or rectilinear, possess a geometric character, and do not appear to be representations of natural subjects. Some of the drawings do exhibit anthropomorphic and zoomorphic characteristics; two are well-executed drawings of sea turtles and one drawing is of a large billfish measuring more than a yard in length.

The Chugai pictographs were undoubtedly created in prehistoric times by the ancient ancestors of the present day Chamorros, however, very little information exists concerning ancient rock art in the Marianas. Individual pictograph sites also have been documented on Guam, Tinian and Saipan. The Chugai pictographs have not been analyzed through radiocarbon dating as this method would require the destruction of some of the images to acquire datable material. The fact that rock art on Rota tends to be located near latte settlements suggests it was produced relatively late in the prehistoric sequence.

Near the entrance to the cave are the remains of Japanese quarters dating from the World War II period as well as scattered Japanese artifact material.

The pictograph cave at Chugai contains one of the most impressive examples of ancient Chamorro rock art documented in the Mariana Islands. The pictographs on the cave walls derive their significance from the presumed association with ancient Chamorro religious systems, particularly ancestor worship. The pictographs are suspected of being directly linked to the activities of Chamorro shaman. The pictographs represent an indigenous art form that no longer is practiced and about which there is little scientific knowledge.

Further study of the Chugai Pictograph Cave is likely to yield information important to increasing the understanding of Chamorro prehistory. In 1998, the CNMI Office of Historic Preservation nominated the Chugai Pictograph Cave for listing on the National Register of Historic Places.

**Taga Latte Stone Quarry.** This site where the quarrying of latte stones took place is located in the As Nieves area of the island near the eastern end of the airport runway. The site consists of several latte stone columns and capstones in various states of being cut away from the solid coral limestone. The edges of the columns and capstones have been separated from the limestone rock by excavating trenches. The site consists of eight columns (each column approximately eight by twenty feet) and eight capstones (approximately twelve feet in diameter) in varying states of having been quarried out of the rock. One capstone has been elevated to nearly the surface of the ground.

It is believed basalt tools, possibly in combination with fire, were used to dig out the huge latte stones from the solid rock. Today, erosion has back-filled all of the trenches to some extent and some of the stones have been split, either during quarrying or by subsequent earthquakes or root actions.

The site on Rota is the best preserved and largest known latte stone quarry in Micronesia. Archeologists have described the Taga Latte Stone Quarry as the most unique cultural site on Rota. It is listed on the National Register of Historic Places. The quarry represents tangible evidence of the engineering skill attained by the ancient Chamorros.

The latte stone structures at the Taga site are somewhat larger than the latte stones connected with the "House of Taga" on Tinian. The Tinian site is the legendary home of Taga, the great unifier of the Marianas. It is not known if the stone latte being quarried at As Nieves on Rota were intended for shipment to Tinian as tribute or if they were to be erected on Rota by a rival clan or perhaps as the initial step in moving the capital to that island.

**Dugi Archeological Site.** The latte stone site is located atop the highest of three consecutive terraces in the northern portion of Rota. The 16 individual latte structures at Dugi are badly weathered and three have been heavily disturbed. Most of the base stones have fallen and none retain their capstones. Several stone mortars are scattered around the site. Archeologists believe Dugi may represent a relatively late Latte Period settlement resulting from population pressure or warfare.

Dugi's significance is due primarily to its geographical location--it is one of the few inland latte sites to have survived the agricultural development of Rota by the Japanese in the 1920s and 1930s. The site is likely to contain information valuable to understanding the prehistory of the Mariana Islands. The Dugi Archeological Site is listed on the National Register of Historic Places.

**Alaguan Bay Ancient Village.** This ancient Chamorro village is located in a heavily vegetated valley along the southern coast of Rota. The village site is extremely rich in surface material, very extensive covering about 25 acres, and contains more than 60 latte. Although visited by several archeologists who attested to the abundance of the surface scatters, the true size of the site and the number of latte present remained unknown until an intensive survey was conducted in 1988. After weeks of survey and substantial clearing in some areas, three 12-pillar, six 10-pillar, and 42 six- or eight-pillar latte were found. Based on

the distribution of these latte, seven distinct residential groups were identified by archeologists. A subsequent two-phase excavation was undertaken to sample each of the seven residential units. About 15 cubic yards of deposit were excavated. Based on the dating of charcoal samples taken during the excavation, it was determined that Alaguan was settled between 700 and 900 years ago.

The Alaguan Bay site is believed to be the largest, best preserved ancient Chamorro village in the Mariana Archipelago. The site's isolation--surrounded by tall-canopy limestone forest and inaccessible by roads--has allowed the archeological features to remain in an excellent state of preservation.

### **Historic Sites**

Historic sites remaining on Rota date from the Spanish Period (1521-1898), the German Period (1899-1914) and the Japanese Period (1914-1945).

**Japanese Period.** Following World War I, the League of Nations awarded Japan a mandate over the Northern Mariana Islands. In the 1920s and 1930s, the Japanese developed phosphate mining and sugar plantations on Rota. Later, during World War II, they built defensive fortifications on the island.

**Ginalangan Japanese Defensive Complex.** These fortifications are located just to the south of the present-day village of Sinapalo. The complex consists of a network of natural and man-made caves and tunnels set within a cliff face. Individual features include a parapet, pillbox, revetment, a rock-faced terrace, stone steps, and a stonewall enclosure. Compared to the defensive fortifications built by the Japanese on Guam and Saipan, these are small in scale. Nearby and connected with the fortifications, archeologists have documented live and spent ammunition, tools, mechanical equipment and domestic refuse.

Since Rota was not invaded by the U.S. during World War II the complex did not sustain major damage and is in an excellent state of preservation. Documentation has been prepared by the CNMI HPO to nominate the Ginalangan World War II Defensive Complex for listing on the National Register of Historic Places.

**Nanyo Kohatsu Kabushiki Kaisha Sugar Mill, Japanese Coastal Defense Gun, Japanese Hospital.** A mill to refine cane sugar was built in 1930 on the west side of Songsong Village. Some remains of the mill still exist. A hospital built by the Japanese is located on the west side of Sasanhaya Bay. A well-preserved swivel-mounted cannon is set into the side of the cliff on the south side of the island. These features are all separately listed on the National Register of Historic Places.

**German Period.** There are only a few minor buildings remaining on Rota associated with the German Period. These include a school and a small chapel. None of these features are judged to be of significance to the history of the U.S.

**Spanish Period.** Two buildings, the Commissioner's Office and the Rectory, both related to the Spanish period are located in Songsong Village and believed to date back to the 1700s and both are listed on the National Register of Historic Places. The two buildings are judged not to be of significance to the history of the U.S.

## Natural Resources

The limestone forests of Rota are the best and most extensive examples of primary, native limestone forest remaining on any island in the Mariana Archipelago. Moreover, the tall-canopy portions of Rota's limestone forest are the most extensive, most intact example of that particular type remaining in the archipelago. This intact limestone forest sustains threatened and endangered bird, bat and plant species.

The integrity of Rota's limestone forest is a major reason why numerous rare and endangered animal species continue to exist here. Rota's forests provide and sustain important habitat for two endangered bird species, a threatened species of fruit bat, and numerous species of invertebrates that are proposed for listing as threatened or endangered. Several of these species are endemic to Rota. Rota's limestone forests provide about 94 percent of the designated critical habitat for the endangered Mariana crow.

## Native Forest

**Lower Limestone Terraces.** In drier northeastern Rota where the terrain is more level and less rocky, small to medium size *Intsia bijuga* is common. The forest here is relatively low and scrubby with *Hibiscus tiliaceus* and *Pandanus* spp. being common. Other species here include *Guamia mariannae*, *Guettarda speciosa*, *Eugenia* spp., *Morinda citrifolia*, *Maytenus thompsonii*, *Triphasia trifolia*, *Polyscias grandifolia*, *Cycas circinalis*, *Flagellaria indica*, and *Caesalpinia major*.

The lowest terrace along Rota's north coast still possesses remnants of a strand forest type of *Hernandia nymphaeifolia*, *Thespesia populnea*, *Hibiscus tiliaceus*, *Barringtonia asiatica*, *Pandanus tectorius*, *P. dubius*, *Neisosperma oppositifolium*, *Pisonia grandis*, *Guettarda speciosa*, and other trees and shrubs. Below the terrace, on the spray-swept coast, *Tournefortia argentea*, *Scaevola taccada*, *Excoecaria agallocha*, *Pemphis acidula*, and *Sophora tometosa* are more abundant. Landward from the coast through the strand forest various other plants are encountered such as *Cycas circinalis*, *Terminalia catappa*, *Laportea*, *Macaranga*, *Mammea*, *Premna*, *Morinda citrifolia*, *Hernandia nymphaeifolia*, *Allophylus*, *Melanolepis*, *Pipturus*, *Ficus tintora*, *Albizia lebbek*, *Pithecellobium dulce*, and *Muntingia calabura* as the forest gradually changes to the subxerophytic forest of the lower terraces. The last three plants in the list are introduced species that have become completely naturalized in this area. *Cynometra ramiflora* is the dominant or exclusive species in this dry area, especially on cliffs and rough areas.

Botanists report that a substantial portion of the lower terrace on the southeastern corner of the Sabana contains native forest in good condition, with examples of the extremely rare *Serianthes nelsonii* and *Heritiera longipetiolata* and other unusual trees.

The endangered endemic herbaceous plant *Nesogenes rotensis* is found in the coastal spray zone at the southwestern base of the Sabana. Its nearest relatives are found in southeastern Polynesia, the Cook Islands, and the western Indian Ocean.

**Mid-elevation Limestone Terraces.** A substantial portion of the limestone terraces of the Sabana contain native forest in good condition. Species found here include: *Serianthes nelsonii*, *Heritiera longipetiolata*, *Artocarpus* spp., *Hibiscus tiliaceus*, and *Osmoxylon mariannense*. Understory species include *Macaranga thompsonii* and *Pipturus argenteus*. Epiphytes are abundant and include *Freycinetia reineckeii*, *Asplenium nidus*, *Davallia solida* and other ferns; *Coelogyne guamensis* and other orchids; and mosses.

**Upper Limestone Terraces.** At the higher altitudes, the forest changes to a wetter type which is very luxuriant and has a full canopy. In these wet parts the principal trees are *Elaeocarpus joga*, *Hernandia labyrinthica*, *Fagraea berteriana*, *Pandanus*, *Guettarda*, *Ficus prolixa*, *F. tinctoria*, *Artocarpus mariannensis*, *Pipturus*, *Laportea*, *Guamia*, *Claoxylon*, *Osmoxylon*, *Macaranga*, *Pisonia umbellifera* and others, with *Psychotria*, *Piper*, *Discocalyx*, *Maesa* and other shrubs and many ferns in the undergrowth. *Freycinetia* and *Alyxia* are common lianas. Epiphytic ferns and orchids are abundant.

Mixed in with the *Elaeocarpus/Hernandia* are a few *Ficus* spp., *Artocarpus* spp., *Hibiscus tiliaceus*, and *Osmoxylon mariannense*. Understory species here include *Freycinetia reineckeii*, *Asplenium nidus*, *Davallia solida* and other ferns, *Coelogyne guamensis* and other orchids, and mosses.

A considerable area on the southwestern summit of the Sabana Plateau is pitted and pinnacled, the result of phosphate mining during the Japanese period.

The native forests of the Sabana, the high plateau in the southwestern part of the island, are an association of the endemic *Hernandia labyrinthica* and *Elaeocarpus joga* interspersed with *Pandanus thickets*. The Sabana is often shrouded in clouds and mist. A number of native and endemic species grow here, both in the understory or as epiphytes. These include the giant fern *Angiopteris evecta*, the magenta flowered *Medinilla medinilla*, the pendant *Lycopodium phlegmaria* var. *longifolium*, and *Coelogyne guamensis*, an orchid with large white blossoms. The large fern *Historiopteris incisa* also occurs in this area. (NPS, Pacific West Region, Honolulu, August 2005)

It is important to note, however, that the vast areas of Rota public land in the proposed unit of the NPS does include critical habitat for threatened and endangered species that will be hereby preserved. Concerns for our endangered species will be alleviated.

NPS will have a potential effect on existing and future land use and conservation. It also has the potential to protect our valuable resources for generations to come. Public lands within critical habitat that were homesteaded and/or approved to be homesteaded for agricultural purposes prior to the 2004 federal designation of

critical habitat should be returned so that Rota may engage in adequate agricultural endeavors that will support our community.

Therefore, the National Park on Rota should be used as mitigation with the U.S. Fish and Wildlife Service for the return of approximately two-hundred and forty –four (244) agricultural homestead lots that lie within the designated sites in As Nieves, I-Chenchon, Gampapa and Dugi. This includes public land located in Mua, Rota, containing 25 – 30 hectares designated for village homesteading and other relatively flat or gently sloping public lands for commercial purposes that will support the establishment of the NPS.

Furthermore, the establishment of a NPS Unit on Rota Island will greatly enhance our potential for economic growth. A National Park established on Rota will enable eco-tourism, promote visitor enjoyment and create jobs within the community.

Although there are several examples of tropical ecosystems found in existing units of the national park system (Virgin Islands National Park, the National Park of American Samoa, and Haleakala National Park), there are no units currently in the system containing noteworthy examples of the native limestone forest of the Mariana Islands. There is currently no representation of the limestone forest tropical ecosystem of the Pacific islands in the national park system. That the limestone forests of Rota also provide important and even critical habitat for several species of endangered plants and animals provides addition justification for adding this tropical ecosystem to the national park system.

The present level of protection appears to be inadequate for the long-term protection of Rota's native forest, its threatened and endangered species, and its significant archeological sites. Thus, we know that the NPS would employ appropriate treatments and techniques to protect these sites and their cultural values from deterioration, overuse, theft and vandalism without compromising their integrity.

As a valuable addition to the NPS, Rota will serve as a benefit to both the National Park System and the Commonwealth of the Northern Marinas by providing a rich heritage for all to enjoy for many years to come. Having said this, I will thank you once again for recognizing the island of Rota as a valuable commodity and welcome you to share our island's rich cultural and historical heritage.



Draft Reconnaissance Survey, Significant Natural Areas and Cultural Sites  
Island of Rota. August 2005