# The Further Development of National Parks and Reserves in Western Samoa

Report of a visit from 19 to 28 January 1982

by

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# Introduction

The South Pacific Commission has been providing advice and assistance to the Government of Western Samoa in its national parks and reserves programme since its inception in 1974, and this visit therefore follows much previous work. Special thanks go to Iosefatu Reti, Chief Forest Officer, Kalati Poai, National Parks Superviser, and Ian Armitage, Forestry Adviser, for their major contributions and assistance. Useful discussions were also held with Tupuola Tavita, Acting Director of Agriculture, Vensel Margraff, Western Samoa Visitors Bureau, and John Worrall, General Manager of the Electric Power Corporation.

This visit was requested by the Government of Western Samoa to advise on further national park and reserve development, and the major part of this report treats that subject, although the broader issue of environmental management has been added at the request of local officials.

# Status and Management of existing Parks and Reserves

Western Samoa has made excellent progress with its park and reserve programme and continues to be one of the leaders in the South Pacific in this area. Much was accomplished under the New Zealand aid project, and advances have continued, if at a slower rate, since the programme has been entirely under Samoan direction. The small but capable staff in the National Parks section have performed admirable in maintaining the large areas under their responsibility in spite of a shortage of casual workers which has made it difficult to undertake major improvements. The work force must be increased if the potential of the reserved areas is to be realized. Further training of supervisory personnel will also be needed.

Because of the heavy commitments of the present park staff, a further aid project should be considered with two principal aims:

1) the construction of major trails and visitor facilities in 0 le Pupu Pu'e National Park, and

2) the development of further educational and interpretive activities in all the parks and reserves.

Such aid might well be available through New Zealand and the South Pacific Regional Environment Programme.

One major priority for the existing parks and reserves is their formal declaration and gazetting under the 1974 National Parks and Reserves Act. Although the Togitogiga Recreation Reserve, Palolo Deep Marine Reserve, and Botanical Garden have been approved by Government, they have not been formally gazetted, and cabinet submissions to this effect should be prepared as soon as possible. The O le Pupu Pu'e National Park cannot be gazetted until the boundary survey is completed. A previous New Zealand-supported survey project found the terrain very difficult and was unable to complete its work. This should be followed up as soon as possible, as the lack of surveyed and marked boundaries increases the danger of encroachment, and makes the planning of park trails and facilities difficult.

It is also apparently still necessary for the Minister to gazette the regulations and restrictions that apply in each park and reserve before these can be enforced.

The following are the immediate needs in each reserve:

## TUSITALA HISTORIC RESERVE and MT. VAEA SCENIC RESERVE.

The present development is adequate for the moment, although some further signs could be added explaining natural and historic features. The previously planned expansion of the reserve should be pursued to protect the reserve more completely.

#### VAILIMA BOTANICAL GARDEN.

The existing network of trails is good for the present, although some need improved gravel surfacing so that the garden will be more accessible to the elderly. Some benches and other simple facilities could also be added. The staff has a talent for landscaping that should be encouraged. An early priority should be the labelling of known plantings with their scientific, Samoan and English names, their country or region of origin, and (for trees) the date of planting. The signs should be of whatever can be easily made (and replaced) locally.

The major requirement for the botanical garden at present is to prepare a map and inventory of ecological conditions and plantings, as the basis for the development of a master plan for the garden. The master plan should identify the best location in the garden for different plant groupings. Plantings of indigenous Samoan trees can provide the basis for recreating typical Samoan forest types. Exotic plantings could be grouped by continent of origin, or be landscaped for their horticultural interest. Some trees planted in large numbers will eventually need thinning to make space for other plantings. The garden should attempt to collect and grow all of the native plants of Samoa, preferably in their natural groupings or associations. It should also demonstrate the beauty and horticultural interest of appropriate introduced trees and flowers. Small-scale trials of plants of economic interest (spices, fruits, etc.) should also be included as appropriate. Once the master plan shows which plots or parts of the garden should be devoted to different uses, the staff can go ahead with plantings as the opportunity arises. The goal should be a garden that is both beautiful in its landscaping and instructive in its naming and demonstration of the possibilities of different plants.

As the botanical garden develops, it can start exchanges of plant materials and information with other botanical gardens in the region such as the Pacific Tropical Botanical Garden in Hawaii and those in Lae (Papua New Guinea), Noumea (New Caledonia), and Tahiti. Further staff training in botanical garden operation will also be needed.

## PALOLO DEEP MARINE RESERVE.

This successful reserve has demonstrated how reserves can contribute to tourism development. It also shows the importance of the interest and support of the adjacent villagers. The village has received economic benefits through the employment of caretakers and some rental of masks and fins. They also constructed entirely on their own initiative an island with shelter and viewing pier at the edge of the deep for the convenience of visitors. This took place during the public service strike when there was no supervision of the reserve. The island was built largely of living coral boulders (Porites), and this had an inevitable impact on the reef flat, but now that the damage is done, it might as well be maintained as a useful visitor facility. Otherwise, the reefs in the deep are in good condition, with only a few large corals damaged since my last visit, and much healthy coral growth and fish life. While a path could be cleared by hand out to the deep, care should be taken to avoid any damage to corals or change in water circulation patterns. A bulldozer should not be used in the reserve.

Some further explanations of coral reef ecology and reserve management should be given to the caretakers, and supervision of the reserve should be improved to prevent coral collecting and fishing.

The brochure is presently the only interpretive material available on the reserve. Some exhibits and a map could be developed at the reserve entrance, and the underwater nature trail could be re-established when adequate local expertise is available to maintain it (see my 1978 report for details). The persistance of some temporary markers after 4 years shows the feasibility of a marked trail in Palolo Deep. Further advice on this aspect can be provided when required.

## TOGITOGIGA RECREATION RESERVE.

The popularity and heavy use of this reserve by both Samoans and tourists shows the real need for developed public recreation sites in Samoa. Togitogiga seems close to its capacity, and enlargement of the area will be difficult because of the private coconut planting on the adjacent land. Attempts to enlarge the reserve to make space for large groups should be continued, and the present reserve area should be fully developed. However, the only real solution will be the development of other recreation reserves to take some of the pressure off Togitogiga.

#### O LE PUPU PU'E NATIONAL PARK.

While a good start has been made with the park facilities, the present staffing will permit only very limited new developments. Work should continue on the restoration and landscaping of the headquarters area, with the installation of toilet facilities, and some changing and expansion of exhibits in the Visitor's Centre as the old ones wear out. The existing trails including the access to the sea and the trail along the O le Pupu cliff should be maintained and improved. When manpower permits, development should start on a loop nature trail and on a trail crossing the park from the sea to Mt. Fito. Further interpretive material for the park can be based on the UNDAT survey report.

There are eventual plans for a high voltage powerline to cross the park, as alternative routings are not available. An underground line of the necessary capacity is probably not feasible. The powerline could follow the existing road, but it would be an unsightly addition to the park. The alternative would be a separate right-of-way out of sight of the road. This should only be considered if the effect on undisturbed native forest would be minimal and the line can pass through existing disturbed areas. Otherwise visual disturbance along the road is preferable to destruction of natural forest in the park.

# Further park and reserve development

Western Samoa's national parks and reserves are becoming increasingly important in the country's tourism development, as well as meeting local recreational and educational needs and protecting important resources. The development of parks and reserves thus helps to bring in foreign exchange by making Samoa more attractive and encouraging visitors to stay longer. However, the park and reserve system should not grow faster than staff experience and resources permit.

### UPOLU.

It is already clear that more recreation reserves and tourist sites are needed on Upolu. The end of the Mulinu'u Peninsula would be a logical choice for its historic associations and recreation possibilities, and a project for a reserve there should be developed. The early lake Lanato'o project should be re-examined, at least with respect to those parts on public land. Negotiations should be undertaken with those having claims to Namu'a Island to try to clear the way for its development as a recreation reserve as a first step towards a Nu'utele Islands National Park. A beach recreation reserve could be included in a reafforestation lease at Mata'utu Lefaga. Other beach and recreation sites should also be considered.

#### SAVAI'I.

There has not as yet been any development of parks and reserves on Savai'i in spite of the great conservation interest of sites there. With the rapid development of forestry activities there, it is important that forest conservation areas be included in parks or reserves before major conflicts develop. Already some outstanding examples of Samoan forest which had previously been spared from logging because of their conservation interest have now been cut to keep the sawmill supplied. Since it is estimated that the merchantable areas of natural forest on Savai'i will all be cut within the next ten years, it is clear that reserving a representative example of lowland forest on Savai'i must now take high priority. This could be through creating a National Park at Tafua, or linked to a major Mount Silisili National Park that would also include the highly significant montane areas in the centre of the island. Since the Silisili and Palauli drainage basins also require protection for their potential hydropower and water resources, it may be appropriate to extend the Silisili National Park or other reserve protection down those catchments. These could be linked with tourism and recreation area development on the South coast that could benefit from the creation of the national park. Discussions should begin with the customary land owners on the importance of conservation action on some of their unused lands to protect the natural heritage and essential water and forest resources and to provide a tourism resource.

Once the customary owners have shown some initial interest, a scientific survey should be made of the area to determine those parts of greatest interest for protection. The survey should be made by a team including a botanist and zoologist, as well as a hydrologist or geologist. Support for such a survey could be sought from sources such as IUCN, UNDAT and SPC. The result might well be some zoning of areas with potential for national parks, water reserves, forestry, agriculture, and tourism and recreation, which could be used as guidelines for the customary owners in their own long-term interest.

As the road improvement programme continues on Savai'i, development pressures will increase rapidly, and other areas of natural, historic or recreational interest should be given priority for protection if they are threatened by development.

#### AMENDED LEGISLATION.

It is clear that the existing National Parks and Reserves Act 1974 is too limited for the present conservation needs in Western Samoa. By allowing parks and reserves to be created only on public land, it creates pressures for the government taking of land (which is unacceptable in most Pacific Islands), and prevents freehold and customary owners from benefiting from the advantages that National Park and Reserve creation can bring them. More appropriate legislation has been developed elsewhere in the Pacific allowing customary owners to create parks and reserves on their own land, and amendments along those lines to the Western Samoan Act would be culturally most appropriate and would reinforce customary ties to the land.

The following principles should apply in any amendment to the National Parks and Reserves Act concerning private or customary land:

the land remains the property of the owners,

the consent of the owners to park or reserve status is essential,

this consent is revokable with certain safeguards for any government investment,

management and supervision of the area would be undertaken as far as possible by the owners,

the conservation states of the land would be legally recognized and enforceable under the National Parks and Reserves Act,

government assistance would be available in the development and maintenance of the park or reserve,

any direct economic benefits from the area would go to the land owner,

public use (including conservation) of an area and its resources should not be a burden on the private owner, and should not threaten the value of his resources.

If the concept of this legislative revision is accepted, the educational activity of the National Parks section would increase greatly, in order to increase extension activities, particularly among land holders owning sites of national interest. The National Parks section would need personnel to work with landowners to define how they want to protect their land and to work out acceptable reserve limits and management policies. These could then be legally-recognized and declared under the amended legislation.

In addition to national parks and reserves whose status and protection would be nearly comparable to those established on public land with the present legislation, it would be appropriate to create a new category perhaps called National Heritage Sites. Sites and features in this category would be recognized as a significant part of the natural or cultural heritage of Western Samoa without in any way affecting their ownership or creating any legally-binding government authority. The National Parks and Reserves section would with the owner's permission be able to put up signs and perhaps undertake some simple maintenance and improvements to visitor access, but the only real protection the site would have would be that of public opinion. The destruction of a site on the National Heritage Register could easily create a public outcry, and this has saved sites in other countries where this approach is used. The simple registration of sites in this way would be most appropriate for many of the historical and cultural sites (such as Vae 0 Moso and Giant Blow Hole) and possibly some scenic and recreation sites where the more formal reserve status was not possible or appropriate.

With these amendments to the National Parks and Reserves Act, Western Samoa would be able to develop a more flexible and culturally-sensitive conservation programme able to protect a large share of the rich cultural and natural sites with which the country is endowed. This should at the same time reinforce other efforts at tourism development, and thus strengthen the country's economy, as well as create potential business and employment opportunities in the rural village areas where they are most needed.

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