

III. Research Methodology

Documentary Phase.

The documentary phase of the research was conducted primarily in the Pacific Collection of the University of Hawaii's Hamilton Library. We also obtained reports and recent material pertaining to Park areas from the National Park Service office in Pago Pago and from the American Samoa Department of Marine and Wildlife. However, the University of Hawaii Library probably houses the most complete collection of materials on American Samoa in the world. A bibliographic search turned up numerous journal articles and technical reports, as well as the more familiar published works. As far as possible, the team concentrated on sources specifically relevant to the American Samoa Park areas. However, some background notes were taken from general Samoan ethnography to set the context and to clarify local cultural practices and resource use.

The documentary sources fall into two major categories: ethnohistorical writings and twentieth-century ethnography. The ethnohistorical literature on Samoa is heavily weighted toward the larger western isles, which in historic times have contained approximately 80 percent of the Samoan population. The first missionary contacts occurred on Savai'i and missionary efforts remained concentrated in the west. Apia became the commercial and diplomatic center of the chain, and nineteenth-century political struggles--notably, the dynastic wars and the kingship dispute--were focused on Upolu and Savai'i. The four high chiefly titles that constituted the Tafa'ifa, the ceremonial ruler of all Samoa, were all based in the west. After the division of the chain in 1900 global attention continued to focus on Western Samoa because of political events such as the Mau rebellion against New Zealand.

The anthropological literature too has been weighted toward Western Samoa because of its apparently more "traditional" lifestyle. The most authoritative ethnographies of American Samoa were authored by Margaret Mead, who spent six months in Manu'a in 1926, living mostly in Fitiuta, and Lowell Holmes, who also worked on Ta'u in the 1950s and '60s. In addition, non-anthropologists have produced a number of journal articles and technical reports on the flora and fauna of American Samoa. These span the twentieth century and are useful for documenting changes in animal populations and in local resource use and classification.

Field Research.

A month of fieldwork was conducted in American Samoa,

primarily by graduate assistants Leslie Lang and Timothy McCormick. Professors Linnekin and Hunt joined them for the last week of the research. Field assistants were recruited locally on an as-needed basis. Three to four days of fieldwork were scheduled in each village having lands within the Park. The Tutuila villages were surveyed first, then Ta'u, and finally Ofu and Olosega. In both the documentary and field research, our major data categories were: marine resources, land use and agriculture, foraging (including medicinal plants), forest resources (including bush fauna and hunting), and culturally significant sites. Survey-type questionnaires were distributed before or during the researchers' visits in all of the villages except Fitiuta and Faleasao. The surveys employed a "freelist" technique (described further below) to elicit the crops, fish, animals, and gathered plants found within Park areas (see sample surveys in Appendix 1). With the surveys, which were distributed through local matai or a field assistant, we aimed to reach as many people as possible. These were followed by structured interviews with a smaller number of people in their homes. Unfortunately, no surveys were returned from Pago Pago, Fagasa, or Afono; the data for those villages were obtained during on-site interviews.

Informants were recruited by seeking referrals from Park Service personnel or local matai, by networking, and at times by happenstance. Thus the field data reflect a "convenience sample" rather than a random sample of the target population. We asked respondents to refer us particularly to neighbors and relatives who use Park areas. We actively sought to obtain data from a range of informants--men and women, older and younger people, titled and untitled--in order to cover the varied uses of Park areas and to document different perspectives within the communities. We also asked informants to refer us to locally recognized experts in specific activities, such as reef fishing and medicinal plant use. However, the pool of respondents is still weighted toward male matai. There also may be an overrepresentation of informants from the Church of Latter Day Saints, because one of our most helpful contacts belongs to that denomination and tended to introduce us to fellow church members. While on Olosega, the research team also walked out to the site of Sili village in order to interview the last family remaining there. Table 1 shows the distribution of our informants (persons interviewed) by Unit, village, and gender. Table 2 gives a breakdown of surveys returned to us, by village, topic, and gender. Self-identification and specification of gender were voluntary on the surveys. There is therefore some overlap between these two pools of informants.

The initial structured questioning often led to more free-form discussion with the same informant. In other words, structured and semi-structured questioning were often combined in

the same interview, since it was seldom possible to schedule more than one meeting with each informant. Wherever possible, the students made visits to the Park areas and conducted follow-up interviews on particular places and Samoan practices within them. This was not always possible, however, because of the remote, wilderness quality of most Park lands in American Samoa. Samoans themselves no longer frequent many areas that were used in former times. In some localities, notably in the vicinity of Faleasao, the Park begins at such a high elevation that it is effectively inaccessible to nearby residents.

The field surveys and ethnographic interviews used some of the methods of "cultural domain analysis." This is a "cognitive" approach in contemporary anthropology; it includes a set of methods for investigating what people know and to what extent that knowledge is shared by members of a community. Cultural domain analysis is ideal for investigating local knowledge on particular areas of activity or 'domains,' such as fish, crops, and plants. The first step is usually a 'freelist' task, where one asks informants simply to "list all the X that you can think of." One can then ask subsidiary questions about items on the list. Taking cues from the documentary research findings and Samoan ethnography, our surveys and structured interviews were organized around the 'domains' of fish and shellfish, agriculture and the bush, animals and birds, and medicinal plants. After eliciting an initial list of, for example, "the different kinds of fish you catch on the reef," the researchers posed follow-up questions such as: "which ones you catch the most?" and "which one are the best to eat?"

The freelisting technique is very efficient for capturing the sorts of survey data that were requested in the Work Plan for this study. Normally the freelist is the basis for a series of other elicitation techniques; one can ask informants to rate, rank, and sort into categories the items on the list, according to various criteria. These further steps allow one to investigate local distinctions and classifications, and to compare informants' knowledge of a given cultural domain. Given the time constraints of this study it was not possible for us to follow up with these other methods. However, several revealing analyses can be applied to the freelist data alone, and these will be presented below.

Limitations of the Research.

The canons of ethnographic fieldwork stress the importance of residing in one place for an extended period. Given the funds allotted and the specifications of the Work Plan, the time available for our fieldwork was very short--a few days in each village. Lining up informants, traveling between households, and waiting for respondents makes ethnographic interviewing a time-

consuming process. While in the villages, the researchers often found their productive time further curtailed by local events such as Bingo games, and by Sunday church activities. The graduate assistants nevertheless maintained a very full work schedule, using nights and Sundays to type up interview data. But the time constraint largely precluded follow-up interviews, which would have helped to clarify local classifications and distinctions among freelist items. Freelist data can be used as the basis for a series of cognitive questionnaires, but it was not possible to take the analysis further in the present study.

We were uncertain beforehand whether it would be possible to administer a written survey, given the considerable logistical support this would demand from National Park Service personnel and/or field assistants. When it became evident that a survey was feasible, the graduate assistants composed the forms in Pago Pago, in English, using their interview schedules as a guide. In retrospect it would have been preferable to compose a bilingual form, Samoan on one side and English on the other, but our students do not know Samoan and were under a time constraint. Although surveys were distributed in all four villages on Tutuila, they were returned only from Vatia, apparently because of transport and communication problems. Regrettably, the graduate assistants were unable to distribute surveys on the island of Ta'u for similar, logistical reasons.

We had hoped to be able to recruit local field assistants to translate when interviewing non-English speakers and to aid in data collection. National Park Service personnel were very helpful on Tutuila, and we recruited a superb field assistant on Ofu. However, we were unable to find an assistant who was available for more than a couple of days on Ta'u, and this impacted data collection. Unforeseen contingencies added to the difficulties on Ta'u. The graduate assistants could not secure a reliable vehicle and driver, and the road between Fitiuta and Faleasao was closed every day except for a couple of hours at set times. Only three interviews were conducted with Faleasao people and almost no useful data were obtained. However, Faleasao's Park land appears to be the least accessible of any of the Park Units. Though limited, our interviewing indicates that there is little to no present-day use of Park areas by Faleasao residents. Even though surveys were not used, Fitiuta was well covered through interviews. The graduate assistants spoke to someone from nearly every household on the side of Fitiuta that has land rights in the Park.

Since the graduate assistants do not speak Samoan, their interviews on Tutuila and Ta'u were conducted in English or assisted by an interpreter. They found that sometimes their translators would influence others' responses or interject their own answers. This underscores the importance--but also the

difficulty--of finding an ideal field assistant. During the last week the students were joined by Linnekin, who speaks some Samoan, and by Hunt. Subsequent interviews on Ofu and Olosega were conducted partly in English, partly in Samoan, and were facilitated by a reliable local assistant.

We noted above the gender and, to some extent, age biases in our sample of respondents. We found that wives tended to defer to their husbands when both were present during an interview. Younger and untitled people similarly tended to defer to older matai when the latter were present. The gender division of labor is also such that men tended to respond to questions about agriculture and fishing, two major areas of interest to us, while women appeared to be the experts on reef gathering. Women outnumbered men, however, as informants on the domain of medicinal plants. This is an area of special expertise that, if not skewed toward women, is at least more balanced between male and female practitioners.

Lastly, we wish to emphasize that our techniques were ethnographic, rather than botanical or zoological; our data reflect local residents' perceptions. What people view as the 'most important' species in an area may not always be the most numerous. A period of residence and participant observation in the villages would be necessary to determine the relationship between perceived significance and actual frequencies. The following report describes in detail how Samoans see the productive resources and cultural significance of areas lying within the National Park.

Table 1. Informants by Village and Gender.

PARK UNIT: VILLAGE	MALE	FEMALE	TOTAL
Tutuila: Pago Pago	3	1	4
Tutuila: Fagasa	6	1	7
Tutuila: Vatia	11	4	15
Tutuila: Afono	6	1	7
Ta`u: Fitiuta	9	9	18
Ta`u: Faleasao	2	1	3
Ofu: Ofu	5	6	11
Olosega: Olosega	2	2	4
TOTAL	44	24	69

Table 2. Surveys by Village, Topic and Gender.

VILLAGE SURVEY	MALE	FEMALE	UNKNOWN	TOTAL
VATIA Fish	1	1	1	3
Medicinal plants	3	0	2	5
Animals/ Birds	1	1	1	3
Crops	2	0	0	2
OFU Fish	3	3	0	6
Medicinal plants	2	5	0	7
Animals/ Birds	2	3	0	5
Crops	2	4	0	6
OLOSEGA Fish	2	1	0	3
Medicinal plants	1	1	0	2
Animals/ Birds	2	1	0	3
Crops	2	1	0	3
TOTAL	23	21	4	48