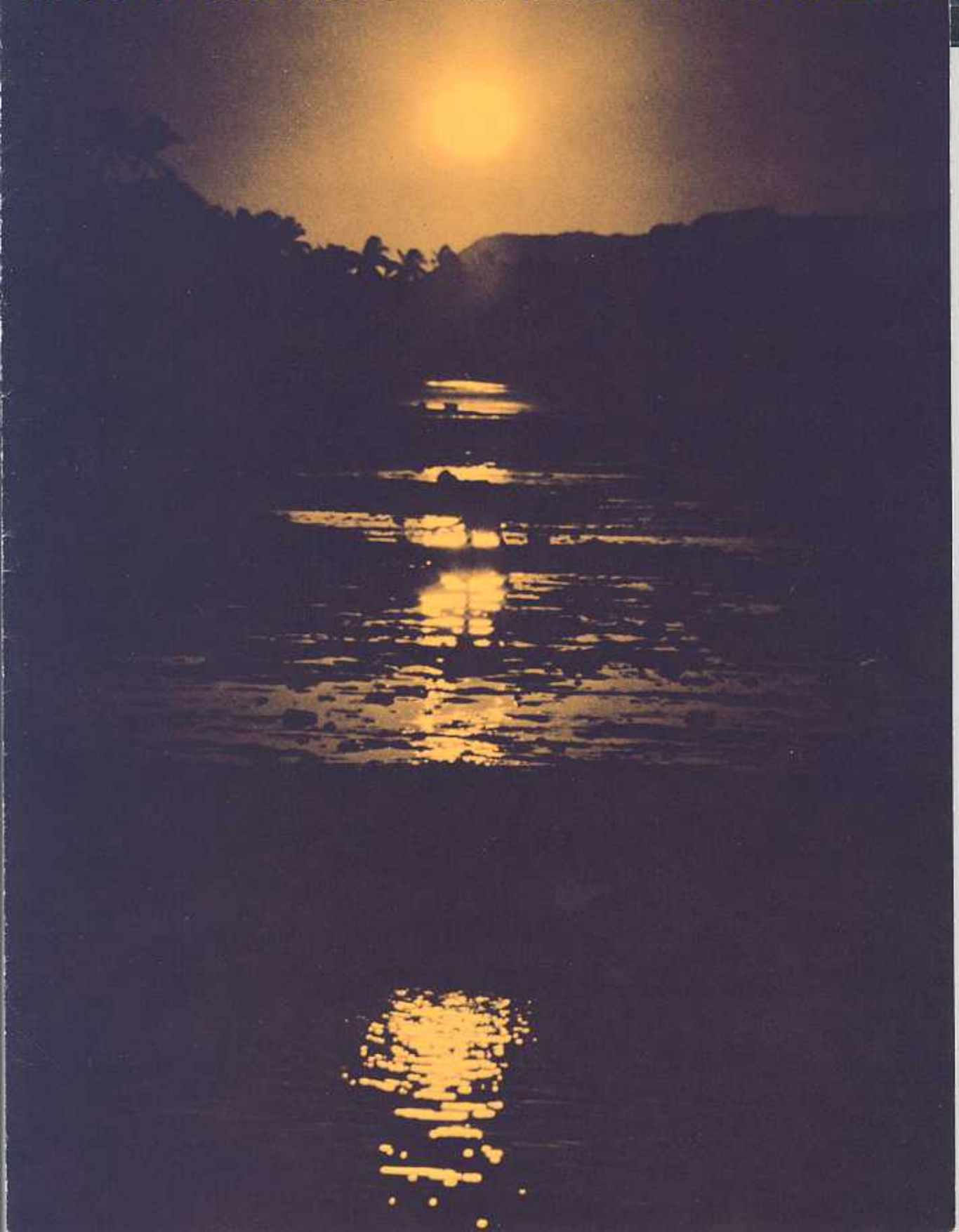


ANCIENT HAWAI'I IN HARMONY WITH THE SEA



IN HARMONY WITH



The early Hawaiians, living on islands born from the sea, existed in perfect harmony with the ocean that surrounded them. In old Hawaii, most of the people lived along the coast and were in constant touch with the sea. They were excellent swimmers, navigators, and fishermen.

The ancient Hawaiians divided their land so that parcels extended from the mountain to the outer edge of the reef. The ocean was relied upon as a highway, a playground and as the main source of food. The majority of the population's protein came from i'a or marine life, with only a small amount coming from the animals of the land. Fish was the favorite food of the early Hawaiians; they ate everything that was edible from the sea.

In those olden days, everyone from the keiki to the kupuna fished, either as play, as sport, or as work. The keiki played in tide pools, catching crabs and pipipi, learning the ways of fishing by imitating

their elders; the ali'i made a great sporting event of fishing for the man-eating shark, Niuhi, and wahine spent days wading on the reef collecting fish and limu in calabashes. In old Hawaii fishing was a way of life.

It is hard for us to comprehend today that these early Hawaiians fed a population of well over 200,000 persons with the food they harvested from the sea.

The Hawaiians' relationship with the sea and the i'a was also a spiritual one. They worshipped Kū'ulakai, the god of fishing, and erected fishing shrines or ko'a along the shore. In addition to Kū'ulakai, fishermen also had personal fishing gods called 'aumakua. The 'aumakua usually took the form of a specific plant or animal such as a shark or an eel. A fisherman would give prayer and tribute to his 'aumakua and offer his first fish to the god at the simple ko'a shrine.

In important ceremonies, priests offered certain

H THE SEA



fish to the gods. Red and white fish were used most frequently. Since all land animals had counterparts in the sea, the fish that were the sea equivalent of pigs, called pua'a-o-kai, were offered to secure the gods' favor.

Before the coming of the Europeans to Hawaii, there was an abundance of fish resources in the surrounding sea. Although we will never know how rich these resources actually were, the few reports we have from those times indicate that there was an enormous supply of seafood. Some records report of feasts with tens of thousands of fish. Others tell of hundreds of aku being caught in a single day with the bait from one small malau or live bait canoe. Still others report of net fishing expeditions that would fill as many as twenty canoes with fish; sometimes fish supplies were so plentiful that they were fed to pigs and dogs, or used as fuel for the fire.

The question we must ask is, "How were the

Hawaiians able to continually harvest so many fish, generation after generation, and feed such a large population?" The answer—the Hawaiians had a thorough knowledge of the sea and its living resources, and they knew exactly how to manage those resources.

In old Hawaii, the experts of fishing were the po'olawai'a or professional fishermen. A po'olawai'a could be a chief or a commoner, but in either case he was a man of great knowledge and was highly respected. With knowledge covering all aspects of fishing, such as gear manufacture, fishing techniques, fish behavior, spawning cycles, schooling behavior, and sea bird and ocean state interpretation, the po'olawai'a was extremely important to the ohana. Since nothing was written, the knowledge of the po'olawai'a was handed down verbally and through personal instruction to his apprentice, whom he chose very carefully. Each new po'olai-

STONE IDOL OF KU'ULAKAI

This stone idol, located on the island of Molokai, represents Ku'ulakai the god of fishing. In old Hawaii the conservation of marine resources was considered to be the will of the gods.



wai'a would learn new things about the sea and the fish from personal experience, and so the body of knowledge would grow.

The Hawaiian's thorough knowledge of the sea life was one factor that enabled them to harvest so much from the sea. The real secret of their success, however, was that they applied their extensive knowledge to the management of the islands' fish resources. *The early Hawaiians were the great conservationists!*

In old Hawaii, the conservation of marine resources was acknowledged as the will of the chiefs as well as the will of the gods. The Hawaiians recognized that all sea life was a resource that had to be carefully managed and conserved. To do this, they developed a complex kapu and morés system concerning the harvesting of i'a. One type of kapu regulated the amount of fish and the size of the catch that a fisherman should take. Recognizing that there was a limit to the amount of fish that could be taken from



KO'A FISHING SHRINE

This fishing shrine, or ko'a, is located at Hale o lono on Molokai. Fishermen, in ancient Hawaii, would give prayer to 'aumakua, or personal fishing gods, at simple ko'a shrines such as this.



Kahuna photo
from *Kaui: Tōngōroa*, 1975.
Hawaii Committee for the Humanities

an area before it was no longer productive, fishermen often would enrich a fishing hole by spreading pumpkin or sweet potato in the water to enlarge and fatten the stocks. Then, when the hole was fished, only a few fish were taken at a time to make certain the resource was not over-harvested and destroyed.

Other kapu prohibited the taking of certain fish during their spawning season. Fish such as 'ōpelu, aku, mullet, and squid (mollusk) each were made kapu during their spawning seasons until their young had been born.

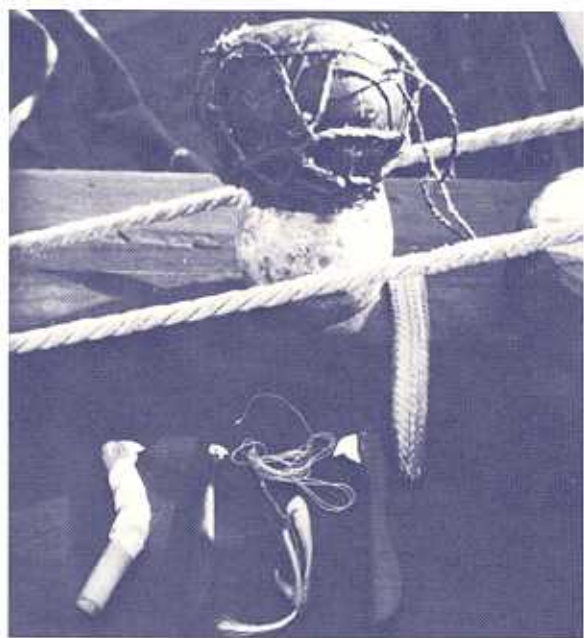
In some cases, whole areas were managed by the Hawaiians. It is reported that in Ka'u, for example, the inshore reef area was kapu during the winter while the deep-sea was open for fishing. During the summer, the reef and inshore area was then open, and deep-sea fishing was kapu. By managing entire areas like this (and having the kapu cover all living things, fish, shellfish, and limu), the Hawaiians would allow the whole system to regenerate itself.

At the end of the kapu period, the kahuna would carefully study the growth of the plants and animals in the area to determine if they were again ready for harvesting. If he found that the area had been properly rejuvenated, he would so inform the chief who would then lift the kapu.

Fishing kapu rarely was broken in old Hawai'i where discipline was strict and punishment often severe. If a man violated a kapu and was detected, he quickly would be punished by the konohiki or chief's agent. The penalty for even small offenses often was death. Strict enforcement was not the only reason that few fishing laws were broken. People knew that even if their unlawful act went undetected by the konohiki, the gods (or their personal 'aumakua), from whence came their good luck, would be aware of the violation and would take offense.

The conservation and management of resources was one of the main principles of Hawaiian society.

Perhaps this was true because the finite limits of the island society's resources were obvious to all. Unlike other areas of the world, where societies could expand into new regions, and leave behind them exhausted and despoiled resources, the Hawaiians had to develop management and conservation practices that recycled and renewed their finite resources. As a result, the Hawaiian culture produced a body of conservation ethics hundreds of years before the western world.



REPLICAS OF ANCIENT FISHING ARTIFACTS

These replicas of ancient Hawaiian fishing artifacts were crafted by the crew of the *Ho kule'a*. The three knives (right, left, and left center) are made from shark's teeth and koa, while the fishing lure (right center) is crafted from the jaw bone and tail hair of a pig, and mother of pearl. The artifacts are carried in the gourd container above.



THROW-NET FISHERMEN

Many new fishing techniques were brought to Hawaii with the influx of different cultures. The throw-net was unknown in Hawaii until the Japanese introduced it in the 1890's.

—HVL photo

What then has happened to our marine resources here in Hawaii, once providing food for over

200,000 now scarcely enough to provide sport for recreational fishermen?

With the influx of new cultures into Hawaii during the 1700's and 1800's, the Hawaiians experienced a cultural upheaval and a breakdown of their old social systems. In this new society that was created, the Hawaiians were no longer in perfect tune with their environment and the sea; they had lost much of their ocean orientation. The great sum of knowledge embodied in the po'olawai'a was lost as the old generations passed away and kupuna no longer taught apprentice. This new hybrid society also signaled the breakdown of the tried and true kapu systems and the spiritual beliefs that complemented them.

The first new government regulations that replaced the old kapu system were not as effective in conserving the marine resources because they weren't based on an intimate knowledge of the sea and its creatures as was the old system.

Many of the new racial groups which had become a part of the Hawaiian society had high competitive and commercial instincts and lacked the conservation ethics that were so engrained in the Hawaiian people.

As a result of these drastic changes in Hawaiian society, fish stocks were over-harvested, new fishing techniques depleted fishing grounds, and many fish that were once plentiful were now uncommon. By the early 1900's, the supply of fish in Hawaiian waters had been seriously depleted.

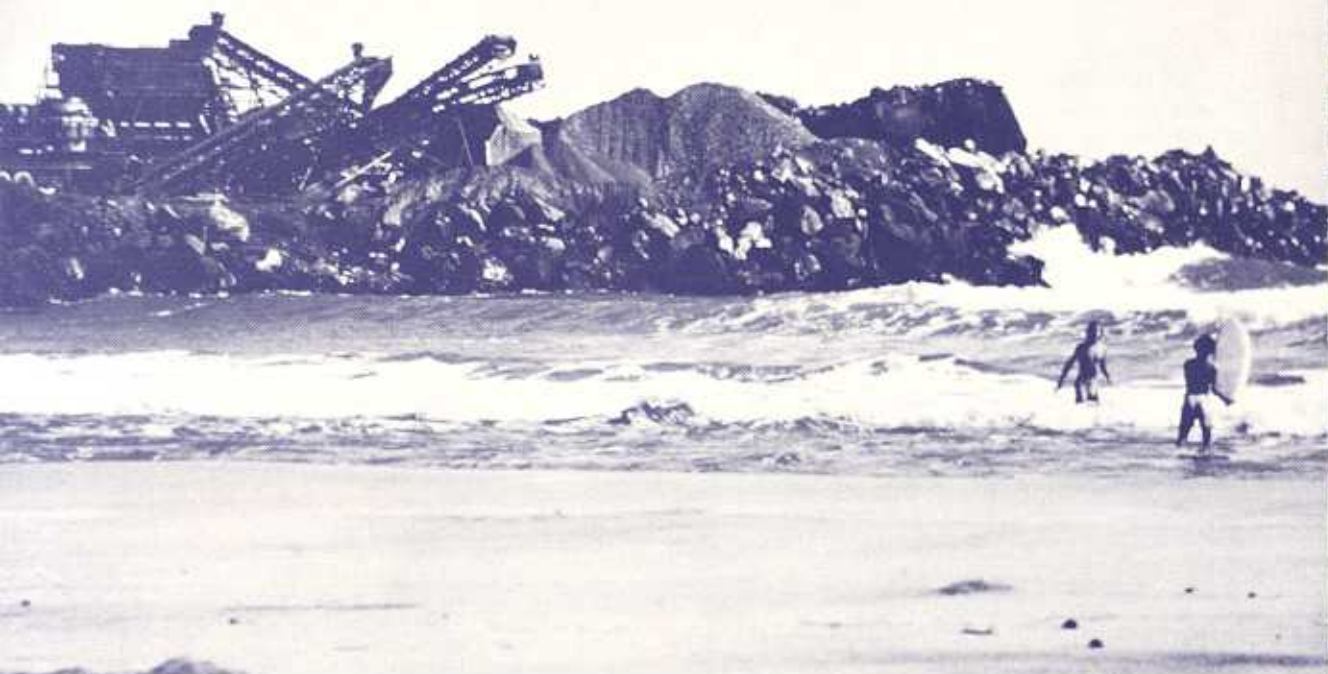
The present day residents of Hawaii have only a fraction of the knowledge and the understanding of the sea and the i'a that the Hawaiians of old had. The relationship between today's Hawaiian society and the sea has deteriorated greatly. We have become land-oriented and have lost touch with the ocean. We no longer live in harmony with the sea as part of its ecosystem. Instead, we have attempted to remove ourselves from the system and as a result have become strangers to the sea.

We destroy our shorelines, pollute our waters with sewage, and kill our reefs with silt coming from



CITY OF HONOLULU

Massive urban development of many of Hawaii's coastal areas has resulted in the deterioration of marine resources throughout the state. Hawaii no longer lives in harmony with the sea.



STONE QUARRY, KILAUEA, KAUAI

The destruction and overharvesting of Hawaii's marine resources need not continue. Hawaii's people can regain the conservation ethics of ancient Hawaii and hand down to tomorrow's keiki a rich and well-managed resource.

housing and hotel development. We have lost the management and conservation beliefs of the old Hawaiians. The respect for the old ways is gone. As a result our marine resources, the i'a, are being rapidly depleted. We can no longer feed our population from our waters and we must import most of the seafood that we consume.

The over-harvesting and destruction need not continue. Our waters once again can be plentiful with fish, and we can hand down to our keiki a rich and well managed resource.

To do this we must regain the conservation ethics of the old Hawaiians. We must carefully obey the fishing laws of the land and develop new and better

laws as our knowledge grows, for it is these laws that represent today's kapu system.

If you are interested in learning more about Hawaii's marine life and its conservation and management, *Native Use of Fish in Hawaii* by Margaret Titcomb is an excellent place to start. The following selected reading list will provide you with additional information on various aspects of the marine environment.

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ANCIENT HAWAII: IN HARMONY WITH THE SEA

Jeremy Harris



This pamphlet is produced by the State of Hawaii Department of Land and Natural Resources, Division of Fish and Game, and the University of Hawaii Marine Advisory Program, funded through grants from the State of Hawaii Marine Affairs Coordinator, Governor's Office and by the N.O.A.A. Office of Sea Grant, Department of Commerce under Grant No. 04-158-44114. The U.S. Government is authorized to produce and distribute reprints for governmental purposes notwithstanding any copyright notations that may appear hereon.

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ANCIENT HAWAII

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Ancient Hawai'i in Harmony with the Sea

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1977

Second Printing — January 1980



University of Hawaii
Sea Grant College
Marine Advisory
Program

by Jeremy Harris

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*Kahuna Photo from Kauai Tomorrow, 1975,
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Many new fishing techniques were brought to Hawai'i with the influx of different cultures. The throw-net was unknown in Hawai'i until the Japanese introduced it in the 1980's. —HVB photo

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