

## HERITAGE



This surfing beauty was sketched by Jacques Arago in Hawaii about 1819 and appeared in his account of a tour around the world

PART III

# PREHISTORIC HAWAIIAN SURFBOARDS

By Chuck Shipman

By the Fifteenth Century, as we reckon time, Hawaiian surfboards had reached an excellence which would not be surpassed until very recent times.

The prehistoric Hawaiian surfboards are clearly and distinctly different from the well publicized "renaissance redwoods" ridden by such greats as Duke Kahanamoku, Dad Center, George Freeth, and Tom Blake during the early 1900's. The early boards of these pioneers were primitive attempts to recapture and restore the art after almost one hundred years of decline and degeneration.

Waikiki Bay was the cradle of the rebirth of surfing. As a result, the "redwoods" were shaped for gentler, flatter, and longer rolling waves than are commonly found around the various Hawaiian Islands. The typical "redwood" was longer, wider, thicker and much heavier than the commonest prehistoric boards. The "redwood" had a flat deck, a flat bottom, no fin and thick, squarish rails. These characteristics made the "redwood" a fine board for moderate surf at Waikiki and San Onofre, but very difficult to handle in the critical sections of steeper, faster surfs.

Most of the prehistoric Hawaiian surfing took place at areas that had steeper, faster, and harder breaking waves than Waikiki. Consequently, the prehistoric surfcraft developed along foils and lines that would function best in these conditions.

The population was differently distributed in ancient Hawaii. For example, many more people, and therefore surfers, lived on the "North Shore" of Oahu than at Kou (Honolulu) and Waikiki. Like the surfers of today, the ancients wanted a board that would function best in the various surfs nearest their homes.

The ancient Hawaiians called surfing

"he'e nalu" which meant "wave sliding." "Kaha nalu" was body surfing. "We'a ho'e nalu" meant canoe surfing or a canoe especially designed for wave sliding. The surfboard was called "papa he'e nalu."

There were two classes of "papa he'e nalu," the "alaia" and the "olo." "Alaia" surfboards were used by male and female surfers of all ages and classes. The "olo" boards were monopolized by the "alii" or chief class. "Olo" boards were mostly ridden by mature men as they were heavy and hard to manage in anything except large, fast, long-breaking deep water waves.

The "papa he'e nalu" were usually made from "wiliwili," "ulu," or "koa" logs. "Koa" was the dense wood used for making spears, warclubs and "wa'a" outrigger canoe hulls. "Ulu," or breadfruit wood surfboards were lighter and not as strong as "koa" boards. "Wiliwili" was the most popular wood for making surfboards. Smaller "wiliwili" logs were prized for use as the "ama" or outrigger floats and fish net floats.

"Wiliwili" (*erythrina*) is a light, very bouyant, easily shaped native Hawaiian wood resembling male balsa wood. The advantages of "wiliwili" in the building of a lighter, more maneuverable surfboard are obvious. The disadvantages of this wood were the relative scarcity of trees large enough in diameter to make a surfboard, the extreme fragility of the surfboard compared with "koa" ones, and the extra care that the surfer had to take in preserving his "wiliwili" wood boards.

Most of the surviving prehistoric surfboards are of "koa" because of its great durability, however, the observations of Lt. King and William Ellis suggest that "wiliwili" surfboards were very common in the old days.

The logs that were to become surf-

boards were first thoroughly dried, then charred and hewn with stone adzes. Fine shaping was accomplished with rough coral sanding blocks. The "papa he'e nalu" were polished with "oahi" stone rubbers much as canoe hulls were smoothed. A preservative coat of dark stain was added. The stains used in this process include juice from pounded ti root, kukui bark and banana buds. The oily soot of burned kuki nuts and pandanus leaves were often thrown into the secret recipes of the master board builders of old Hawaii. These resinous coatings helped keep even the spongy "wiliwili" surfboards water-repellent.

When the stain was dry, a dressing of kukui oil was applied as a final gloss coat.

After a surfboard was used, the serious surfer carefully dried it out in the sun, rubbed cocoanut or kukui nut oil on to reseal the pores, wrapped the surfboard in tapa cloth and suspended it inside his home.

The "alaia" type of surfboard was by far the most common type of prehistoric surfboard. The "alaia" still in existence range from three to nine feet in length, ten to twenty-two inches in width, and one-half to one and one-half inches in thickness.

The average ancient Hawaiian surfboard was about six and a half feet long, sixteen inches wide, one inch thick, and, if made of "wiliwili" wood, under ten pounds in dry weight.

The deck and bottom were rounded in a convex, parabolic curve, coming together to form radically thin, knife-edged rails.

The narrow "alaia" with their short length, light weight, and extreme maneuverability were ideal for riding the steep, hollow and fast-breaking waves which abound around the Hawaiian Islands.

The Hawaiians were never hung up with keel or skeg-like fins. The scythe-like rails of the "alaia" effectively gripped the walls of even the steepest waves, while the rolling bottoms of well-shaped boards provided fine degrees of controlled release for the experienced surfers of old Hawaii. The only functional maneuvers that the ancient surfers would find to be very difficult or impossible are controlled stalling on the tip and nose-riding.

The short, narrow, thin and light "alaia" were basically "pocket rockets" in that they performed efficiently only around the curl or on a steep wall. The "alaia" surfboards had a number of disadvantages when compared to the fantastically perfected surfboards of today. Some of the disadvantages were that the "alaia" lost much of its speed and control when a wave flattened out due to backwash, a bowl, or because the surfer shot too far out onto the shoulder. Also, the "alaia" rider had trouble paddling for and dropping into really large waves.

Recognizing these problems, the prehistoric Hawaiians developed a second type of surfboard exclusively for riding huge deep water surf. These boards, called "olo," were monopolized by the chiefs because of the scarcity of "wiliwili" trees big enough and the effort required to shape them correctly. Many of these "olo" were made of "koa" wood and approached one-hundred fifty pounds or more in dry weight. The smaller "olo" made from "wiliwili" were much lighter and more maneuverable. The "olo" were from eight to sixteen feet long, from fourteen to twenty inches wide, three to six inches thick in the center and tapering to very sharp edges.

These boards were highly directional, extremely fast, and built up tremendous momentum, which would carry them rapidly across bowls and long flat sections into the next rising peak. It is virtually impossible to control an "olo" on a wave much smaller than eight or ten feet, depending on the size and weight of the board. The board must be angled slightly on the take-off and never should the rider attempt to go straight-off for the "olo" will pearl dive and the surfer be tossed forward.

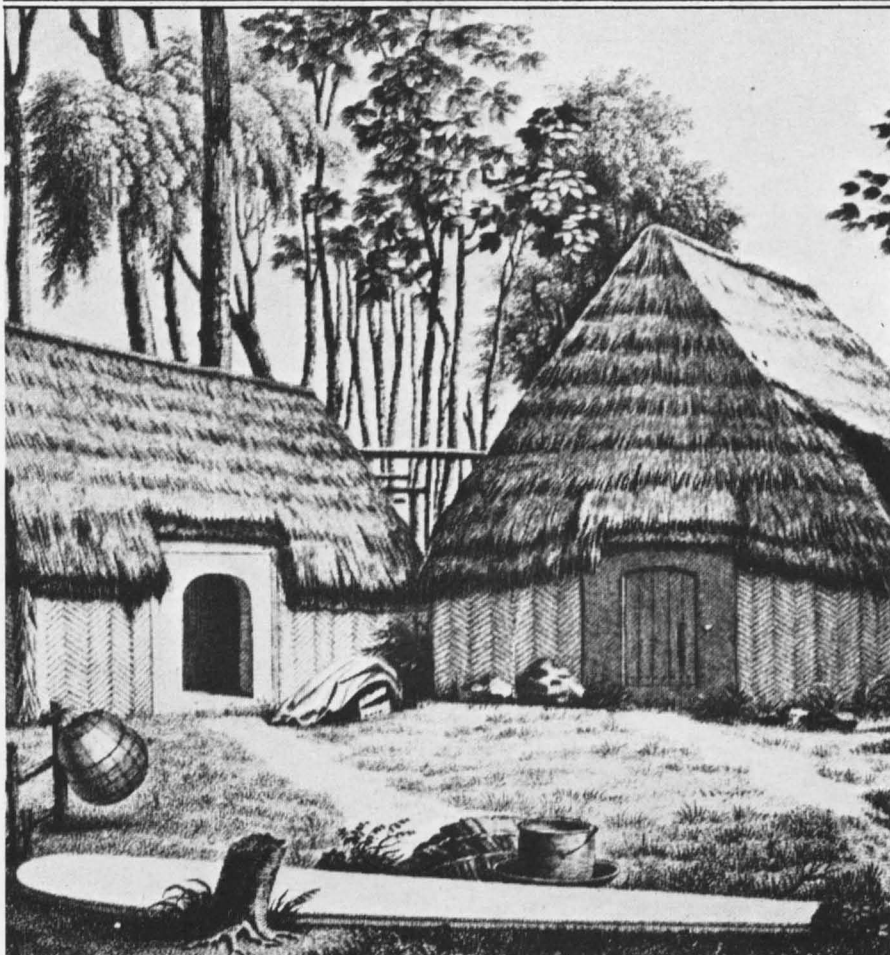
The "ali'i" or chiefs prided themselves in excelling in all of the native games. For matters of honor and pride, the "saving of face," the chiefs had to out-do the common people. In surfing this meant that the chiefs had to ride more beautifully, take more chances, and above all, catch the biggest waves. This explains why there were schools of surfing, that chiefs had honored tutors, and why they supported the best board builders. The giant surfs of old Hawaii, such as "Maliu" in Kohala, "Pua'ena" in Waialua, Oahu, "Ka-unu-nui" of Niihau, "Aai-wohi" and "Ka-lehua-wehe" (big Castles) at Waikiki, "Ka-haha-wai" at Wai-he'e, Maui, and the legendary "Infinities" of old Hawaii, "Kapoi" which began at the mouth of the Honolii stream on the Big Island, were all deep-water, fast-breaking waves with many long bowls and sections. The "alaia" (pocket-rocket) surfboards were not as effective in those long, high surfs as the "olo" (ballistic missile) boards. This is probably the real reason that the

chiefs confiscated all of the "olo" type "guns." Their monopoly of this type of board assured that they would out-shine even the best of the lower class surfers in the spectacular giant surfs of old Hawaii.

We should know one more fact to fully understand how competent the good surf-riders were in those days. The prehistoric surfers learned to surf in somewhat the opposite progression than is common in our time. We usually begin surfing on an oversize board and gradually work down to a smaller one. The ancient Hawaiians always began by learning to "kaha nalu" (body-surf). Then they were

ancient times. Only recently in our surfing culture have boards become light and small enough for women to really enjoy and excel in surfing.

Incidentally, according to most of the early observers that we have quoted in these articles, virtually every household near the sea had at least one "alaia" type surfboard. The "alaia" was often used as a swimboard when a native desired to travel from point to point along the coast or across a large bay. After all, they loved the sea and much preferred to arrive at a girl friend's house freshly bathed than hot and tired from a long hike across dusty lava fields. Many a sailor has writ-



Surfboards were among the prized possessions of Hawaiian *ali'i*. This engraving, which appeared in 1819 in Freycinet's

*Voyage Around the World*, shows the houses of Kalaimoku, a ruler on the island of Hawaii.

taught the use of the small "alaia" (bodyboards and knee machines). Some of the ancients, like George Greenough of our time, preferred these forms of surfing because of their purity and intimacy with the wave. Most surfers desired to be competent in the use of the larger "alaia" upon which a rider could kneel, sit, and stand. Even a great chief would not dare to ride the "olo" before he had progressed competently through the other forms of surfing. Because they learned to surf on tiny boards first, the old Hawaiians were content to ride smaller, lighter and narrower boards than we are accustomed to today. This is also why so many women were good surfers in the

ten, after the discovery of Hawaii, how multitudes of natives, including many attractive, nude young girls, would paddle out on "planks" to greet the foreign ships.

It is true that the canoe was the "automobile" of the Old Hawaiians, the sea was their "highway," and the surfboard was their "bicycle" to be used for short personal trips.

The prehistoric surfboards began to disappear by the 1840's as the population was literally decimated by warfare, slavery to ruthless chiefs, and foreign diseases against which the natives had no immunity.

