The Hawaiian Canoe, Part V

By Tommy Holmes

Within the canoe building profession "the class of royal experts was different from the class of common experts." The best canoe builders were traditionally employed exclusively by the highest chief. Lesser ali'i also had personal canoe builders if they could afford them. The builders of the commoners' canoes were not necessarily less skilled than the canoe builders of the chiefs; rather, reputations established themselves, and just as today certain craftsmen, artisans, or artists are held in higher esteem than others, so it was of old.

Upon finding what appeared to be a suitable tree, the presiding *kahuna* either retired to his *mua* or slept right at the base of the tree "to learn in dreams from his deity as to the suitableness of the tree in question. If there appeared to him in his dream a man or a woman standing naked before him, when he woke he would interpret the dream as meaning that the timber of the tree was unsound; and he must look further. But if there appeared to him a shapely man or woman decently girded and robed, he arose with the assurance that the tree was a good one."

At the base of the tree to be felled an offering was made to the gods, including prayers, a small black pig, coconut, red fish, and sometimes banana, sugar cane, and other items such as a red *malo* were included. On the following day the pig was cooked in an underground oven *(imu)* and eaten within the immediate vicinity of the tree.

The length of time it took to chop down a *koa* tree with stone adzes varied according to the size of the tree and the number of people assisting. Canoe builder Koakanu notes that, "It would take one man almost a week to fell a tree; if many hands at work, it could be felled in two days . . . Nowadays we have iron axes and a strong man can cut down a *koa* tree in half an hour." While probably an exaggeration, the fact remains that iron axes and adzes greatly reduced the time it took to build a canoe.

Canoe builders and overland travelers often made use of rough-hewn canoe hulls as interim water catchments. The earliest recorded instance of such a use came in 1779 when a party of very thirsty men from Cook's crew, while attempting to climb Mauna Loa, ". . . at last found some rain water in the bottom of a canoe which although the color of red wine, was to them a very agreeable sight."

Some 50 years later, Commander Wilkes and his party from the U.S. Exploring Expedition traveling in the same general volcano area found themselves in dire need of water. Wilkes "was informed that there was within two miles, an old canoe which would be found full of water. On our arrival at it we found that the natives who had preceded us, after supplying themselves had emptied out the rest." When Wilkes and party caught up with his advance party of Hawaiians later in the day he found them "hawking water about the camp at half a dollar the quart," in the finest western entrepreneurial fashion.

Canoe hauling was at every stage a very laborious and dangerous undertaking. A canoe that was to be hauled to shore might be two to five or more inches thick on the sides and six or more inches thick on the bottom. Judging from the weight of rough-hewn canoes today, a 40 to 70-foot rough-hewn log might have weighed anywhere from 5 to 20-thousand pounds. The hauling of a rough-hewn canoe log to shore was often a major event with sometimes an order for "every male inhabitant of one or more villages to retire to the woods and bring it down." Given the enormous investment required in time, people and resources—especially food for the haulers—only an *ali'i* or a large cooperative could afford a large canoe.

Rough hewing usually began with the rough shaping of the exterior of the hull, its mouth facing down (keel-side up). The log was tapered at each end, giving the outer hull the first suggestion

of its ultimate contours. The sides and keel were trimmed down to the point where the canoe had its exterior sides and bottom rough shaped. The log was then rolled over on its keel and the top side flattened.

If manpower was lacking or a log was particularly large, a long lever stick with a rope attached at the top was employed when it was required to turn a log over. In some cases it was enough to simply angle the stick under the log and pull on the rope till the log turned. Leverage, however, was limited with this method sometimes necessitating that one "make a hole where the opening of the canoe should be and take the stick and insert it into the log and pull" on the rope tied to the end of the stick. By this latter method one man could turn over a log weighing several thousand pounds.

The head *kahuna kālai wa'a* would then determine where the side projections or comb cleats for the seats, and U-shaped spreader would be located. These protrusions were an integral structural part of all ancient Hawaiian canoes and of many Hawaiian canoes made well into the 20th century.

The hollowing-out of the canoe was directly overseen by the head *kahuna*, usually "under the special patronage of the goddess Lea." A series of oblique cuts were made from stern to bow, "across the surface of the part to be hollowed out . . . [and with] this done the triangular pieces bounded by the cuts were removed by a wedgelike use of the axes." "When the center of the canoe was roughly hollowed, then the sides of the sections were cut downward . . ." The side projections were blocked out, and the interior of the canoe roughed out to a stage ready for hauling to the ocean. Different canoe builders by preference employed a slightly different sequence of steps in rough-hewing a canoe. As far as is known, fire was never used in hollowing out a Hawaiian canoe, as it was in other Polynesian island groups.

Always a *maku'u*, or neck, was hewn out at the stern, and occasionally at the bow. This neck, knobbed at the end, was absolutely essential, providing the point for attaching the hauling and restraining ropes. At this stage, canoes were either hauled to shore or left up in the mountains for curing and future retrieval. Upon reaching the shore the unfinished canoe was carefully put in a covered canoe shed called a *hālau*. There canoes were mounted on wooden blocks carved to fit the bottom of the canoe. Here the canoe was allowed to cure. If the log was already sufficiently seasoned, work commenced immediately.

With the rough-hewn canoe log resting mouth up, the canoe builder usually began working on the exterior upper sides, shaving the rim of the canoe down to its final form. Then the lower exterior sides were shaved down as finely as possible with an adze. Next the hull was turned over, and shaped and faired. The bottom was rounded and the bow and stern sections were given their final curves. The pronounced neck of the stern where the hauling ropes were secured was mostly removed, always leaving a small projection extending just beyond the end of the stern.

The hull was then turned over again to rest on its bottom, and the "hollowing out of the interior completed." When the width of the hold toward the bow and stern became too narrow for the employment of ordinary adzes, the socketed or swivel-headed adze was used. After all the adzing had been done, stone and coral rubbers of varying roughness and density were used to smooth and polish the canoe, primarily its outer surface.

These tools, made of coral and stone of different grades of coarseness and fineness, took the place of today's rasps, planes, files, and sandpaper. Almost any stone or piece of coral of desired size and coarseness would suffice for an abrasive. In some cases pieces of coral were picked up off the beach, used as long as they kept their roughness, and then discarded. With these primitive rubbing and polishing tools the ancient Hawaiians achieved finishes on their canoes that prompted early European visitors to Hawai'i to make comments such as: "Our cabinet makers do not polish the most costly furniture better; and without planes or any of the tools employed by our workmen, those of Hawaii are capable of competing with the best artisans in Europe."

While many Hawaiians were quick to adopt western forms of marine craft, some traditional canoe builders were slow to let go, continuing to build a modest number of old-style canoes through the 1800's and finally tapering off in the early 1900's.

Memorial Service

By Pat Olds

Due to members' enthusiastic response last year, the Club again will hold Memorial Day services on the beach by the Hau Terrace on Monday, May 31. The Rev. William Kaaina will officiate at the brief and moving ceremony.

It is suggested that members gather before the 9:30 a.m. service in order to arrange the flowers to be spread at sea by the paddlers. Those who cannot attend may leave flowers or leis at the front desk that weekend.

Attention Skaters

Rollerskating and skateboarding are fun—and sometimes good means of transportation—but please—not on the Club premises. Club rules strictly prohibit their use thereabouts, so parents, warn your youngsters to put their wheels aside when they arrive at the Club entrance.

If this rule is violated, first offenders will receive a warning. If the use continues, the skates or skateboard will be taken for the parent to claim. A third offense will incur a 30-day suspension!

Paddlers Meet

Twenty-three upper-division paddlers turned out for the first meeting of the canoe-racing season. Coach Steve Scott spoke to the group, stressing the importance of training as well as overall body conditioning and flexibility.

Training has now begun three evenings a week at the Ala Wai. Don Mailer is chairman of the canoe-racing committee.