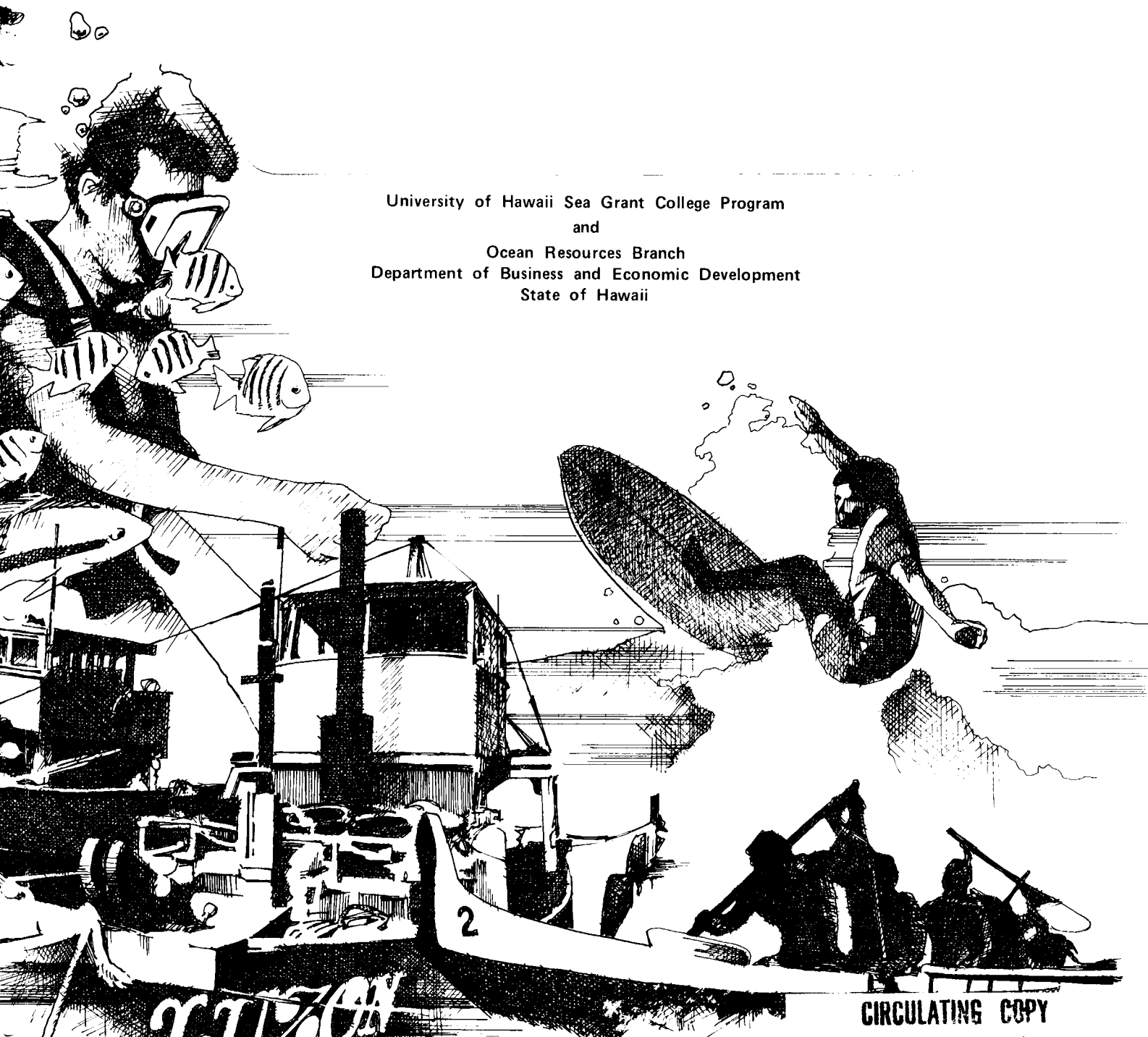


Studies on Marine Economics

University of Hawaii Sea Grant College Program
and
Ocean Resources Branch
Department of Business and Economic Development
State of Hawaii



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**OUTRIGGER CANOE RACING IN HAWAII:
ITS ECONOMIC IMPACT**

Mike Markrich

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Sea Grant Marine Economics Report

July 1988

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Ka Ho‘ohanohano

*Ka ho‘ohanohano nei kēia palapala i ka hana nui a
John Peter Kapua, Jr.*

*Ua hā‘awi aku ‘o ia i kona manawa he nui i nā ‘ōpio
o Hawai‘i ola mau ai ka pā‘ani kahiko o ka hoe wa‘a i
Hawai‘i nei.*

This report is dedicated to the memory of John Peter Kapua, Jr.

He gave much of his time to the youth of Hawaii so that the
ancient sport of Hawaiian canoe paddling might live.

ABSTRACT

Outrigger canoe racing competitions in Hawaii have direct and indirect regional economic impacts that are conservatively estimated at more than \$6 million per year. On the islands of Kauai, Oahu, Maui, Molokai, and Hawaii, outrigger canoe racing events generate significant economic activities. The regattas and long-distance races held by the canoe racing associations attract large numbers of people and stimulate spending on sports equipment, clothing, food, hotel, and air transportation. They also encourage increasing numbers of U.S. mainland and international paddlers to come to Hawaii in order to compete. In addition to economic benefits, outrigger canoe racing provides social programs and activities for many economically disadvantaged young people. However, despite the sport's social and economic contributions, few facilities are available for the sport, and canoe club organizers have experienced difficulty in obtaining the infrastructural support necessary for further development.

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DEFINITIONS

Outrigger canoe regattas in Hawaii are all-day competitions involving the crews of a number of canoe clubs. In most regattas, the clubs are members of the specific canoe racing association that sanctions the event. Each association plans a yearly schedule of regattas (generally from May through August) and establishes its own rules and procedures.

The regattas are held in nearshore areas or lagoons where carefully surveyed race courses can be laid out on the water. The competition lanes are laid out over a preset distance, with the number of lanes determined by the number of active clubs within the sponsoring association. The lanes are marked with buoys and set so that several canoes can race abreast without colliding.

The heats in which canoe crews compete are known as events. Depending on the association, there are an average of 25 to 30 events in each regatta. The events are categorized according to skill level, distance, sex, and age (i.e., senior men's, junior women's). The winning canoe crew of each event contributes points to the club that it represents. The club that fields the greatest number of winning crews wins the most points and hence the regatta.

Regattas generally involve large numbers of people. The reasons for this are that (1) there are a large number of different events, (2) canoe racing rules prohibit paddlers from competing in more than one event, thereby increasing the need for more crews, and (3) many of the paddlers bring their friends and family members to the event as supporters. A paddler may wait most of the day to participate in one event. As a result social interaction at the regatta becomes an important part of the experience and many people come not to compete but to visit with friends and relatives.

Long-distance races are single category distance events that take place between two preset landmarks. These races are held in nearshore areas or between islands. They vary in length and expense from small-scale, inexpensive races to large-scale competitions, such as the 40.8-mile Molokai to Oahu race. Long-distance races attract fewer crowds than regattas. They are popular invitational events for canoe clubs and associations throughout the state. They have also done much to develop the international aspect of the sport and have attracted increasing numbers of competitors from other states and countries.

A SHORT HISTORY OF OUTRIGGER CANOE RACING IN HAWAII

The sport of modern outrigger canoe racing has its origins among the practices of the ancient Hawaiian nobles, or ali'i. Although there is little information on the role of canoe racing in pre-contact Hawaii, the writings of 19th century historians David Malo and Abraham Fornander suggest the races figured prominently in ancient Hawaiian gambling practices in which races, people gambled not only their worldly possessions but their lives. Malo wrote that racing canoes paddled far out to sea and then pulled for land. "If they touched the beach at the same time, it was a dead heat, but if a canoe reached the shore first, it was the victor, and great would be the exultation of those who won and the sorrow of those who lost their property" (Fornander, 1878). The winning of canoe races brought recognition

and status to chiefs in ancient Hawaii. It was therefore common for chiefs to seek champion paddlers among the men in their villages to develop crews capable of winning bets and meeting the challenges of rivals.

Interest in canoe racing remained high until Captain James Cook arrived in 1778 and western cultural influences began to grow. In populated areas, traditional racing and fishing canoes gradually gave way to European-style craft, and by the mid-1800s canoe races had completely disappeared. Missionaries encouraged this change. They acted forcefully to discourage the sport because of its connection with gambling. However, the missionaries were powerless to stop the popular regattas held in Honolulu Harbor by European and American ship captains, in which gambling also played an important part. The American and European captains did not make use of Hawaiian canoes. Instead, they used imported barges, sculls, and other racing craft from sources throughout the world in their regattas.

The harbor regattas were enjoyed by Hawaiians and foreigners alike. In 1875, King Kalakaua, who was enthusiastic about both ocean sports and Hawaiiana, included Hawaiian canoe racing as a small segment of a regatta he was sponsoring. Between 1875 and 1933, senior men's canoe racing and canoe sailing races were the only events regularly included in these competitions. Although this did not satisfy the desires of many interested paddlers, the inclusion of these events helped maintain canoe racing skills that might otherwise have been lost.

The first modern regatta held exclusively for canoes took place in the village of Napo'opo'o on the island of Hawaii in 1933. An estimated 20,000 people attended. A surge of interest in the sport followed, and for the next 4 years it grew steadily. Then, interest declined just as suddenly as it had begun. Football and baseball were the growing attractions, and canoe racing could not compete for public attention. The number of active participants in canoe racing dropped, and by the time World War II broke out on December 7, 1941, canoe racing events were no longer being held in Hawaii.

In 1943, a small revival of the sport took place. A group of paddlers received permission from the Islands' military government to hold a canoe race in the Ala Wai Canal. Interest resumed and grew steadily through the late 1940s. By 1950, the sport had grown to the point where the canoe clubs felt it necessary to form an organization that would establish a uniform set of rules and procedures. This organization was called the Hawaiian Canoe Racing and Surfing Association, a name later shortened to the Hawaiian Canoe Racing Association (HCRA).

Prior to World War II, all racing canoes were laboriously made from koa wood. The expense of acquiring koa and the difficulties involved in building traditional racing canoes limited racing to only the few clubs with skills and financial resources. In addition, the shortage of canoes made it difficult for the sport to expand because it limited opportunities for people wanting to compete. With canoes in short supply and six men to a crew, most of the competition in regattas was limited to a small group of paddles, primarily males.

During the postwar period, however, new means of building outrigger canoes were developed. Fiberglass technology made it possible to construct molds of popular koa racing canoes and reproduce them. Soon the number of canoes increased, and so did the number of

canoe paddlers. Participation expanded to include women, young people, and people from many ethnic groups and walks of life.

The sport grew steadily through the 1950s and 1960s. In the 1970s, the number of people taking part in it doubled. The rapid growth created a situation in which both the number of clubs and the number of paddlers grew faster than the HCRA's ability to maintain control. As a result numerous disputes developed within the organization over such issues as the use of koa canoes versus fiberglass canoes, neighbor island autonomy versus control from the Honolulu-based HCRA, and complaints that HCRA policies were too restrictive.

In 1973, a number of clubs formed their own association, the Hui Wa'a Surfing and Racing Association (now known as Na Ohana O Na Hui Wa'a Association, Inc.). Although largely Oahu-oriented, it included several clubs from the neighbor islands. The association held its own regattas and championships until 1976, when its members agreed to participate in the HCRA-run state championships.

In 1979 the HCRA was restructured in response to requests from neighbor island clubs for more control over their own affairs. Centralized control over state canoe races from Honolulu was abandoned in favor of an organization of interconnected but semi-autonomous canoe club associations on Maui, Oahu, Kauai, Molokai, and Hawaii. The restructuring brought a further growth in participation.

As the sport developed, it began to take on new forms. Whereas the first regattas were simple affairs in which nearby clubs would gather for informal competitions, regattas evolved into carefully planned day-long tournaments that involved hundreds of people and took months to organize.

In 1952, the Molokai-Oahu Canoe Race marked the development of a new kind of competition: an open-water race between set points on two different islands. This type of race differs from regattas in that it calls for a crew of nine people instead of six. It also involves an escort boat. Only six people crew the boat at any one time, but at carefully paced intervals, three paddlers in each canoe change with three others resting in the escort boat. This ensures that the paddlers remain fresh over the entire 40-mile distance.

The Oahu-Molokai race developed into the popular Bankoh Molokai Hoe, which has become one of the best known canoe races in the world. As a result of its success, other long-distance races have become popular, and today long-distance outrigger canoe races of varying lengths are held throughout the state. These races attract entrants from Hawaii, the U.S. mainland, and several foreign countries.

The newest variation is the "ironman" long-distance race, an endurance event in which paddlers compete without crew changes or escort boats. These races have become increasingly popular because of their low cost. In addition, an effort is currently underway to integrate canoe racing with kayaking and other olympic paddling events.

The combination of regattas and long-distance races has made canoe racing one of Hawaii's most popular and visible summer sports. In recognition of this, as well as of the

large number of people involved in canoe racing, the Hawaii legislature passed a resolution in 1986 proclaiming canoe racing the state's official team sport.

METHOD OF DETERMINING RACE EXPENDITURES

The economic benefits of canoe racing competitions can be evaluated in terms of direct and indirect expenditures. Direct expenditures are those monies spent by canoe associations or member clubs on items related to a regatta or long-distance race (e.g., marker buoys, souvenir t-shirts, and security). Indirect expenditures are those secondary or tertiary expenditures that can be attributed to a canoe paddling event (e.g., spectators purchases). These are derived from direct expenditures by applying the standard .74 entertainment multiplier. The .74 multiplier is derived from the United States Department of Commerce tables and is used by the Hawaii Department of Business and Economic Development to determine the indirect effects of entertainment and recreational spending.

Information on canoe club and regatta expenditures was gathered by means of a survey of canoe club participants and canoe club organizers. The survey was conducted from October 1985 through March 1987. Canoe club association participants on Oahu, Molokai, Kauai, Maui, and Hawaii, were interviewed in person or by telephone. In the interviews, the participants were asked specific questions as to the size, nature, and frequency of canoe club activities.

Hawaiian canoe racing associations differ from sport-enthusiast organizations in other parts of the United States in that they look upon themselves not only as canoe paddlers but also as members of a select "ohana," or extended family. For this reason, many of the associations and clubs depend on the donations of their members and supporters for organizational needs. Items such as canoes or the use of escort boats are often donated, and expenditures are shared communally to reduce costs. In addition, items such as insurance, medallions, and benefit t-shirts are purchased collectively by the associations to cover the needs of individual clubs.

Expenditures included in this report include such items as insurance, officiating, lunches, etc., that are paid for by active club members and their supporters at or in preparation for canoe racing competitions. Many of these expenditures, such as officiating and insurance, are amortized over a season. As a result, per-unit listings are estimates. In addition, a distinction was made between regattas and long-distance races. Because regattas follow a standardized format, their expenditures are based on representative regatta costs for each of the island canoe racing associations that hold them. However, because long-distance races vary greatly their expenditures, distance, entry fees, etc., are listed individually by island association.

The expenditures of canoe paddlers are classified in terms of the competitions in which they participate. The figures for daily expenditures of out-of-state participants are based on estimates by the Hawaii Visitors Bureau, which says visitors from the mainland spend about \$100 per day.

CANOE RACING ASSOCIATIONS

Eight outrigger canoe racing associations are currently active in Hawaii. Several inactive associations also exist. Although the active organizations differ in size, location, and operating procedures, they share a common purpose: the promotion of traditional canoe racing as a modern sport.

All of the associations belong to the Hawaiian Canoe Racing Association (HCRA), the state’s largest canoe racing organization (Table 1). They are the Oahu Hawaiian Canoe Racing Association (OHCRA); Na Ohana O Na Hui Wa’a Association, Inc. (Hui Wa’a); Moku O Hawai’i Canoe Racing Association (MOHCRA); the Maui County Hawaiian Canoe Association (MCHCA); the Garden Island Canoe Racing Association (GICRA); the Molokai Canoe Racing Association (MCRA); and Na Opio, an Oahu-based high school canoe paddling association and Na Wahine O Ke Kai, a small organization which hosts a women’s Molokai-to-Oahu canoe race each year. The number of activities (regattas, long-distance races, etc.) held each year by the individual associations varies according to the number of active participants and the availability of adequate financial resources. Although these organizations are free to make their own decisions as to the way their regattas and long-distance races are conducted, they conform to standard HCRA rules when competing in the HCRA-sponsored annual state championship regatta.

TABLE 1. HAWAIIAN CANOE RACING ASSOCIATION MEMBERS*

Association	Regattas	Long-Distance Races	Clubs	Paddlers	Supporters	Events
OHCRA (Oahu)	7	4	16	2,800	4,750	31
Hui Wa’a (Oahu)	8	4	12	1,600	4,000	30
MOHCRA (Island of Hawaii)	7	6	11	1,300	1,000	25
MCHCA (Maui)	6	11	7	1,012	4,048	30
GICRA (Kauai)	6	6	5	300	600	31
MCRA (Molokai)	—	2	2	100	600	—
Total	34	33	53	7,112	14,998	147

*Na Opio and Na Wahine O Ke Kai are not included in the above table due to the specialized nature of their activities

Oahu Hawaiian Canoe Racing Association

The Oahu Hawaiian Canoe Racing Association (OHCRA) is the largest and most influential canoe racing organization in the state. It is made up of 16 active clubs and about 2,800 active paddlers. In 1986, OHCRA and its member clubs held seven regattas and four long-distance races. To pay the cost of these events, OHCRA and its member clubs sponsor fund-raising events such as the annual Blue Hawaiian Moonlight Concert. They also hold food and t-shirt sales. They collect dues from members and actively solicit donations of money, goods, and services from businesses and individuals. Because expenditures of canoe regattas and long-distance races differ from year to year, OHCRA organizers have developed different systems for putting on their regattas and long-distance races.

Regattas

The cost of putting on regular season regattas is shared by OHCRA and its member clubs (Table 2). The OHCRA commits to paying certain expenses at each regatta such as insurance, lane setting, refreshments for judges, surveyor's sound equipment, tents, and officials' shirts. It pays for these by conducting fund-raisers and raising money through its membership. It can be assumed that these expenditures averaged \$2,100 at each 1986 OHCRA regular season regatta.

TABLE 2. REPRESENTATIVE OHCRA CANOE REGATTA:
EXPENDITURE DISTRIBUTION CHART

Expenditure for 15 Active Canoe Clubs	OHCRA Association	Sponsoring Club	Participating Club	Paddlers	Supporters
Insurance	\$ 200	—	—	—	—
Security	—	\$ 225	—	—	—
Food/refreshments	250	—	—	—	—
Rental tents	80	—	—	—	—
Escort boats	525	—	—	—	—
Lane setters	600	—	—	—	—
Surveyors	150	—	—	—	—
Medals	—	1,200	—	—	—
Trophies	—	400	—	—	—
Equipment replacement	—	150	\$ 75	—	—
T-shirts	45	1,500	—	—	—
Gas	—	25	—	—	—
Entry forms	—	—	25	—	—
Entry fees	—	300	300	—	—
Sound system (PA)	250	—	—	—	—
Miscellaneous	—	—	—	\$ 15	\$ 10
Subtotal	\$2,100	\$3,800	\$6,000*	\$42,000*	\$56,000

*Total expenditures for all 15 clubs per regatta = \$109,900

Other expenses are borne by clubs within the OHCRA that agree to act as sponsors for OHCRA regattas. The sponsor clubs are expected to provide security costs, medals, and trophies. These costs amount to approximately \$2,300 per regatta. The greatest part of these expenses involve the buying of medallions and trophies. The medals are particularly expensive as they are imported from Italy.

Certain clubs agree to bear these costs in return for the exclusive right to sell t-shirts to the participants and spectators at the event. They do this in anticipation of making a profit on the shirts that they can apply to their canoe club operating costs.

Assuming that each sponsor club invests in at least \$1,500 worth of shirts, their expenditures average \$3,800 at each regular season OHCRA regatta event.

The expenses of participating canoe clubs can also be estimated. Each of the clubs spends approximately \$400 on entry fees, food, and miscellaneous equipment. Assuming that there are 15 clubs participating in each regatta, than \$6,000 is spent collectively by these clubs during the competition.

The 2,800 paddlers taking part in the regattas also have expenditures. The usual practice for athletes at a regatta is for each paddler to participate in one heat or racing event during the day. The remainder of their time is spent supporting their teammates. Since there are as many as 33 separate racing heats held during the regatta, an athlete spends considerable time at these regattas waiting to race or socializing with friends. Much of this time is spent eating or drinking soft drinks.

Assuming that each paddler spends \$15 per day on such things as either food and drinks sold at the event, a souvenir t-shirt, floral leis as gifts for teammates, or some combination of the above it can be estimated that they collectively spend \$42,000 at a typical regatta.

Additional expenditures are made by supporters who are the family or friends. Canoe club organizers estimate that supporters expenses vary at between \$5 to \$15. People come to these events either for a whole day to support a team or for a few hours to see a friend in a particular event. For example, some families buy food in large amounts for these events and serve two and three meals during the course of a day. Other people come as individuals and spend nothing.

Because the supporters are so transient they vary in both number and typical expenditures. Some buy souvenir t-shirts and foods in the same amount that paddlers do. Others spend only a few dollars on food, leis, or gas. Much of the food and drinks bought by supporters is said to be purchased at markets and convenience stores in the vicinity of the event.

Assuming that at least two supporters come to a regatta for each actual paddler and that each spends at least \$10 on food or leis, a conservative estimate of their expenditures at an OHCRA regatta totals \$56,000 during a regatta.

If all of the money spent at a regular season OHCRA regatta is totalled, expenditures are equivalent to \$109,900. Assuming that each of the six regular season regattas have approximately equivalent expenditures the total would be equal to \$659,400.

The end of season OHCRA championship regatta is underwritten solely by the association. The costs of this regatta are estimated to be \$6,900, which is \$1,000 more than an average regular season regatta. The increase is due to the increased costs of publicity, championship awards, and the use of a more elaborate sound system. If this amount is added, total OHCRA regatta expenditures can be estimated to come to \$770,300 during a typical seven-regatta season.

Long-Distance

In addition to the regattas, OHCRA sanctions four long-distance races each year. They are the (1) Dad Center Race, a women's race from Kailua Beach to the Outrigger Canoe Club in Waikiki (24 miles); (2) the Skippy Kamakawiwaole Race, men's and women's races from the Outrigger Canoe Club to Pokai Bay (31 miles); (3) the Duke Kahanamoku Classic, a men's race from Magic Island to Lanikai (26 miles), and a women's "ironman" race (no change of crews) within a triangle course in Kailua Bay (6 miles); and (4) the Bankoh Molokai Hoe, a men's race from Molokai to Oahu (40.8 miles).

The division of expenditures for OHCRA long-distance races is different from that for regattas. The OHCRA provides each of the races with the insurance protection required by law, race officials, one official escort boat, and sanctioning authority. This totals about \$425 per race. As with the regattas, sponsor clubs also assume part of the cost.

The clubs or institutions that sponsor the races are responsible for providing one or more official escort boats, gasoline for the boats, a percentage of each participating crew's entry fee, medals, trophies, and food for officials. Although the amounts paid out by the sponsor clubs are often the same from one year to the next, the amounts paid for particular goods and services change constantly because the clubs actively solicit donations and in-kind services to reduce costs. The donations enable the sponsor clubs to deal with increasing costs.

An example of how OHCRA sponsor clubs apportion their payments in long-distance races may be seen in the Duke Kahanamoku Canoe Race (Table 3). In 1986, the OHCRA spent \$425 on race insurance, official escort boats, and food for officials. The race sponsor, Lanikai Canoe Club, spent \$2,600 on the following: \$300 for medals, \$250 for security, \$1,750 for t-shirts, \$100 for a public address system, \$50 for lunch for officials, \$150 for gasoline for three donated escort boats, as well as \$50 for miscellaneous expenses.

Each participating crew spent approximately \$510 on its expenses. These expenses were \$400 for an escort boat, \$60 for gasoline, and \$50 for special high energy food supplements and drinks. Entry fees were \$40 for men and \$27 for women. This brings total cost per crew to \$537 for the women and \$550 for the men involved in the Duke Kahanamoku Canoe Race. If these expenditures are summed for the 39 men's and 30

TABLE 3. REPRESENTATIVE OHCRA LONG-DISTANCE RACE:
EXPENDITURE DISTRIBUTION CHART FOR DUKE
KAHANAMOKU, 1986

Expenditures	Association	Sponsoring Club (Lanikai Canoe Club)	Participating Crews
Insurance	\$200	—	—
Escort boats	175	Donated	\$ 400
Food	50	\$ 50	50
Medals	—	300	—
Security	—	250	—
Entry fees	—	—	27 (W) 40 (M)
Gas	—	150	60
T-shirts	—	1,750	—
Sound system (PA)	—	100	—
Subtotal	\$425	\$2,600	\$16,110 (W)* \$21,450 (M)†
Total			\$40,585

*\$527 x 30 = \$16,110

†\$550 x 39 = \$21,450

women's crews in the event, their combined expenditures equalled \$37,560. Total association, administrative, and participant expenditures for the Duke Kahanamoku Canoe Race can be estimated to come to \$40,585.

The Dad Center is a women's canoe racing event sporting a competitive field of 18 crews. Race costs include \$425 in administrative costs spent by the OHCRA and \$1,200 spent by its sponsor the Outrigger Canoe Club. The entry fee for the race is \$15. Expenditures for the crew costs covering escort boat rental, food supplements, and gasoline were approximately \$510 per crew and \$9,450 for 18 crews. Total Dad Center race costs can be calculated to be \$11,075.

The Skippy Kamakawiwaole Races is a pair of races sponsored by the Outrigger Canoe Club. It includes races for both men and women. In 1986, 24 men and 18 women crews participated. Its costs included \$425 in OHCRA costs and \$2,000 in sponsor costs paid by the Outrigger Canoe Club. Its entry fees are \$25 per crew. Per crew costs for gasoline, escort

boat rental, and food supplements are also \$510 and totalled \$22,470. Total Skippy Kamakawiwaole Races expenditures can be calculated to be \$24,895.

The above figures do not take into account the expenditures made by long-distance race crews practicing for the competitions. It is estimated that each of the crews participating in these OHCRA membership races spends at least 10 weekends per year practicing. During these practice sessions, it is customary for each crew to arrange for an escort boat to follow it as a safety measure. The boat owners donate the use of their boats and in return the clubs pay \$60 per race for gasoline expenses, per practice session and per race.

Assuming there are 18 women and 24 men crews competing in the OHCRA long-distance races on a regular basis, their total expenditures for practices during and prior to the canoe racing season come to \$25,000.

The Bankoh Molokai Hoe race, sponsored by Bank of Hawaii, involves OHCRA expenditures of approximately \$28,000 (1986 figure). It is the largest and most expensive canoe club race organized in Hawaii. The higher cost of the race is due to its length. The shorter races are 1-day affairs, but preparation and participation in the Molokai race can involve up to 3 days or more. Escort boats, for example, must be hired, driven across the Molokai Channel, and then driven back with the race. Besides the \$200 entry fees, each crew of nine participating in the 1986 Molokai race spent roughly \$2,000 each on food, overnight accommodations, barge transport for canoes, airfare, vans, a boat escort, fuel, and miscellaneous costs. Therefore, the 52 crews participating in the race spent approximately \$104,000 — a conservative estimate, since some crews were said to have spent more on hotel accommodations, escort boats, van transportation, and food.

In addition to these expenditures, there are those of the 10 or so teams of 12 paddlers each that come from out-of-state. In 1986, crews came from California, Illinois, and Tahiti. Most of these paddlers stayed in Hawaii at least one week. Assuming their expenditures immediately before and after the race were about the same as those of state teams, their race expenses can be lumped with those of the other teams. Their living costs for the additional 5 days they spend in Hawaii can also be calculated. Assuming that each of the 120 out-of-state outrigger canoe team members spend at least \$100 per day over a 5-day period in Hawaii, their additional expenditures total \$60,000. In addition, some out-of-state clubs spend an unspecified amount on canoe rentals. If these expenditures are added to those of the Bankoh Molokai race expenditures, its total economic impact can be estimated to have been \$192,000 in 1986.

The Bankoh Molokai Hoe has a significant impact on the Molokai economy. A number of Molokai stores, restaurants, hotels, and other businesses were informally surveyed for this report and asked what impact the race had on their business. All said that the Molokai race weekend, Christmas, and New Year's are their most profitable periods.

If the expenditures for the four OHCRA long-distance races, in terms of organizing costs, entry fees, and crew-related spending, are totaled, they amount to \$293,555. When this total is added to that of regatta-related expenditures, OHCRA-related expenditures are estimated to come to \$1,869,120.

Garden Island Canoe Racing Association

The Garden Island Canoe Racing Association (GICRA) is made up of four active canoe clubs. In 1986, GICRA clubs took part in four regular-season regattas, one championship regatta, six long-distance races, and the Prince Kuhio Invitational Long Distance Race.

Regattas

The regular-season regattas on Kauai are small-scale competitions that cost each sponsor club about \$100 per regatta. These costs involve spending for boat gasoline, ribbons, beer, and soda. There are no charges for security on Kauai, and all other services such as surveying, lane setting, and canoe hauling, are donated. An estimated 250 paddlers attended each of the four regattas sponsored by GICRA canoe clubs in 1986. Kauai canoe club organizers estimated that each paddler brought at least one supporter.

The single most expensive regatta is said to be the GICRA championship, which costs about \$1,250 to put on. The cost for the championship is higher because it involves expenditures for insurance, lane setting services, gasoline for two escort boats, food for officials, t-shirts for officials, and about \$550 for medals.

At each regular-season canoe racing regatta, the paddlers spend approximately \$15 apiece on food, gasoline, and leis. On Kauai, the clubs do not organize food concessions or regular t-shirt sales as is done in other areas. Because the Kauai paddlers sometimes travel long distances, they bring enough money for gasoline, leis, and two meals. Assuming that 250 paddlers attend each of the five regattas, their expenditures are calculated at the rate of \$3,750 per regatta or, \$18,750 for the five-regatta season.

Supporters were said to spend \$10 each at the regular-season regattas because they pay only for meals, leis, and refreshments. Assuming each paddler brings one supporter per regatta, supporter expenditures are estimated to be \$2,500, or \$12,500 for the five-regatta season.

If the expenditures per regatta for the sponsor canoe club, the paddlers, and the supporters are totaled, they come to \$6,350. Total expenditures for the four regular-season regattas come to \$25,400. The expenditures for the GICRA championship come to \$7,500. Total regatta expenditures come to \$32,900.

Long-Distance Races

In addition to the regattas, the Garden Island Canoe Racing Association generally puts on six long-distance races each year for GICRA members only. The races cost approximately \$200 each (\$1,200 for the six) and are paid for by the clubs that sponsor them. The outlay covers the cost of insurance, boat gasoline, and refreshments. There are no entry fees.

The largest canoe racing competition held on Kauai is the Prince Kuhio Long Distance Race, an invitational, that is open to off-island canoe clubs. It is currently the only GICRA race requiring entry fees. In 1986, it attracted a field of 14 crews from Kauai and six from the neighbor islands. Organizers estimated it cost \$2,000 to put on the event. This amount

covered the costs of insurance, security, officials, an escort boat, medals, t-shirts for officials, souvenir t-shirts, a public address system, refreshments, and an official party. The entry fees for the competition were \$50 for Kauai crews and \$100 for off-island crews. The fees totaled \$1,300. In addition, each of the six entering crews from off-island spent \$400 on round-trip barge transportation for their canoes.

Each crew brought six people and spent money on refreshments and boat fuel. Assuming these expenditures were \$110 per crew, the 20 crews spent \$2,200. The six off-island crews stayed at least two nights and spent about \$175 per person for airfare, hotel, transportation, and meals. Their expenditures came to approximately \$6,300. Thus, total Prince Kuhio race expenditures came to \$14,200. The amount spent on GICRA long-distance races is \$15,400. The total spent for both the regattas and long-distance races is \$48,300. If the \$670 spent annually by the GICRA association on food, travel, and other costs is added to this figure, it boosts the tally to \$48,970.

Na Ohana O Na Hui Wa'a Association, Inc.

Na Ohana O Na Hui Wa'a Association, Inc., (known henceforth in this report by its abbreviated title, Hui Wa'a) is one of the two largest canoe-paddling organizations on Oahu. It consists of 11 active clubs and about 1,600 paddlers. Each year the association puts on seven regular season regattas, a championship regatta, and four long-distance races of varying lengths (Appendix A).

Regattas

Hui Wa'a divides the costs of each of its eight regattas this way: the association pays \$1,900 for insurance, security, officiating, four escort boats, lane setting, and the use of race equipment (e.g., race flags and buoy markers); each sponsor club pays \$2,650 to cover refreshments for officials, equipment, souvenir t-shirts, medals, trophies, entry fees, and a sound system (Appendix A). For the Hui Wa'a championship, another \$1,000 is spent on a specialized sound system, trophies, publicity, and other expenses.

In addition to these regatta expenditures, there are those generated by participating Hui Wa'a canoe clubs. Unlike OHCRA, which charges each of its participating clubs an entry fee for a pre-determined number of participating crews, Hui Wa'a has a divisional entry system that allows its larger clubs to field as many crews as they choose. As a consequence, the amount each club spends on entry fees varies between \$80 and \$300, depending on the number of crews they enter. Assuming that miscellaneous food and equipment expenditures come to \$50 per crew, each of the 11 active Hui Wa'a clubs at every regatta spends an average of \$200.

Additional expenditures made at the regattas come from the spending of participating paddlers and their supporters. Hui Wa'a organizers estimated that roughly 4,000 supporters attend each regatta. Assuming that each of the 1,600 paddlers spent \$15 on two meals, a souvenir t-shirt, and leis, it can be estimated that their expenditures totalled \$24,000 per regatta. Hui Wa'a organizers estimated that the 4,000 supporters who came to the regatta

spent approximately \$10 each. Their collective expenditures can be estimated to come to \$64,000 per regatta.

If each of the seven regular-season regattas generates \$70,750 in expenditures and the championship generates an equal amount plus an extra \$1,000, total Hui Wa'a regatta-related expenditures come to \$567,000.

Long-Distance Races

In 1986, Hui Wa'a sponsored four long-distance races. These races were (1) the Waikiki Beach Boys' Long Distance Race from Magic Island to Diamond Head, (2) the Kamoe Canoe Club Pokai Bay Long Distance Race at Haleiwa, (3) the Sarah Kapua Long Distance Race in Waimanalo, and (4) the Manukai Canoe Club Haleiwa Long Distance Race. These races were shorter and involved fewer paddlers than those organized by OHCRA clubs. They ranged in length from 8 to 12 miles, or about half the distance of the OHCRA races. Each race involved expenditures by Hui Wa'a of between \$850 and \$1,000 for insurance, refreshments, officiating, four escort boats (fuel only), and transportation (vans, etc.). In addition, the sponsoring clubs spent about \$600 per race on gasoline for an escort boat, officials, refreshments for officials, awards, and medals.

It is estimated that each of the 178 men's and women's crews participating in these events spent at least \$35 on entry fees and \$50 on refreshments and miscellaneous items. Because of the shorter length of the races, escort boats for Hui Wa'a crews are generally donated. Assuming \$5,800 was spent putting on four races and \$15,130 by participating crews, \$20,930 was spent on Hui Wa'a long-distance races in 1986. Total Hui Wa'a outrigger canoe club-related expenditures for both regattas and long-distance races are estimated to be \$587,930.

Molokai Canoe Racing Association

The Molokai Canoe Racing Association (MCRA) is the smallest canoe racing organization in the state. It consists of three active clubs and about 100 paddlers. Being small, the organization lacks the financial resources to sponsor regattas and long-distance races of the size and number other associations sponsor. Its members participate in Maui regattas but hold none of their own. They do, however, sponsor three long-distance races in Molokai waters. In addition to these, individual crews from the three clubs participate in the Queen Liliuokalani, Bankoh Molokai Hoe, Duke Kahanamoku, and other long-distance races each year.

Regattas

The number of crews sent to participate in Maui regattas varies from one year to the next. The decision to send crews is based on the interest of club members and on the amount of money on hand. However, each year the three largest clubs on the island try to send at least one or two crews under the age of 18 to a Maui regatta so their paddlers will receive experience in regatta competition.

In 1986, nine crews were sent to participate in Maui regattas by Molokai canoe clubs. It cost each club an estimated \$500 to send two to three crews to a regatta on Maui. Costs included transportation, van rental, and overnight accommodations. To cut expenses, the crews (which included six paddlers, two alternates, and a coach) traveled to Maui by boat, ate communal meals, and spent the night at a Maui canoe club member's home. In 1986, the nine Molokai crews spent about \$1,700 traveling to and from the Maui canoe racing regattas.

Long-Distance Races

In 1986, the MCRA sponsored three long-distance races: (1) a Maui-Molokai race for men and women which extended from D.G. Flemings on Maui to Kaunakakai, Molokai, a distance of 23 miles; (2) the Frank Ka'ahunui Invitational Race (which, for women, extended 4 miles from Pukoo to Kamolo Wharf, and for men, from Kamolo Wharf to Kaunakakai pier, a distance of 10 miles); and (3) the Tony Castor Mokuoniki Ironman Race, which was a 12-mile circular race that extended from Honoliwai, around Mokuoniki, and back. The collective organizing cost for putting on these races was \$2,600 (Appendix B).

The Maui-Molokai race was the most expensive of the MCRA races. It cost MCRA about \$2,000 for the escort boats, t-shirts, miscellaneous administrative costs, a post-race luau, and awards. In 1986, this race attracted 23 crews, each of which spent \$150 on an escort boat, \$50 on entry fees, and \$50 on food and drinks. Thus the race involved total expenditures of about \$7,750.

As for the Frank Ka'ahunui Invitational Race, five crews participated in the women's race and seven crews in the men's. These were shoreline races that did not require escort boats. Organizing costs were \$300. Each crew spent at least \$50 on food and drinks, and \$12 on entry fees. In addition, the eight crews that came from Maui for the race spent \$500 each on canoe transportation and other expenses. Total expenditures came to approximately \$5,044.

The Tony Castor Mokuoniki Ironman Race was also estimated to have cost the MCRA \$300. In 1986, only three crews participated. Entry fees were \$50 per crew. It was an "ironman" race that did not require participating crews to hire escort boats for crew changes. Assuming that each participating crew also spent at least \$50 on food and drinks, expenditures for the Tony Castor race totaled \$600.

Total MCRA Molokai race expenditures were estimated to be \$13,394.

The MCRA organizers said that because so many of their goods and services are donated by Molokai residents, their listed expenditures actually underrepresent the costs of the long-distance races. For example, trophies that clubs on other islands must buy, are handcarved on Molokai. Such trophies would otherwise cost as much as \$400 per long-distance race.

The organizers say putting on races and attending off-island canoe racing events puts a strain on their financial resources. As a result, MCRA club members spend almost half the year raising funds (selling Portuguese sausage, sweet bread, etc.). One MCRA organizer said that Molokai paddlers spend almost as much time fund-raising as they do paddling.

Maui County Hawaiian Canoe Association

The Maui County Hawaiian Canoe Association (MCHCA) is the third largest in the state. It is made up of six active canoe clubs and about 1,000 active paddlers. In 1986, MCHCA clubs participated in six regular-season regattas, a pre-season regatta in Hana, and 11 long-distance races. It differs from other outrigger canoe racing associations in the state in that it includes its MCHCA championship regatta (The John M. Lake Regatta) as a regular part of its regatta season.

Regattas

MCHCA regattas are paid for almost entirely by the association. Money is raised for the association through benefit fund-raisers and set fees (approximately \$500 per club in 1986), which are collected from participating clubs at the beginning of the year. The association then handles the costs of such things as insurance, security, medals, trophies, gasoline for escort boats, and souvenir t-shirts. MCHCA organizers say the cost of each regular-season regatta, as well as the end-of-season championship regatta, is approximately \$1,600. Additional MCHCA needs are met through contributions by Maui County, which supplies canoe racing marker buoys, surveys the canoe race courses, and employs a part-time canoe racing specialist in its recreation department to help organize and coordinate canoe racing events. These services save the canoe paddlers hundreds of dollars each year.

Expenditures incurred by the sponsor club are about \$200 for refreshments, \$100 for gasoline for donated escort boats, \$2,000 for fund-raiser and souvenir t-shirts, and \$300 for entry fees and miscellaneous canoe maintenance costs. These expenditures come to \$2,600 per regatta.

Each of the participating canoe clubs spends an estimated \$350 on entry fees and gasoline for its boat. Assuming there are five participating canoe clubs in each regatta in addition to the sponsor club, their collective expenditures come to \$1,750 per regatta.

Each paddler spends about \$15 at each regatta for two meals, automobile transportation, and leis. Assuming there are 1,000 active paddlers at each regatta, their total expenditures are estimated to be \$15,000. MCHCA organizers estimate that each paddler brings between one and four supporters to each event. They cite two reasons for the large turnout: first, canoe racing regattas figure prominently in the summer activities of Maui residents; and second, the regattas have become popular visitor attractions. Assuming at least 2,000 supporters attend every event and each spends \$10, estimated spending comes to \$20,000 per regatta.

If these expenditures are totaled, each Maui regatta involves spending of about \$41,000. Assuming that there are six regattas per season, total MCHCA regular-season and championship regatta expenditures come to \$246,000.

Hana Regatta

The Hana Regatta is a pre-season competitive event held each May at the invitation of the Hana Canoe Club. It is the single largest gathering in Hana. Hotels, condominiums, and private rentals are booked weeks in advance. Unlike other competitive regattas sanctioned by the MCHCA, the results of the Hana Regatta do not count toward the overall standings of participating clubs. Expenditures on the regatta, which is made up of 28 events, are about equal to those of other regattas. The cost of setting up and running the event is roughly \$1,700. The entry fee for each of the estimated 500 participants is \$1 per event, half that of other regattas. However, because the Hana Regatta is unique in permitting participants to enter as many different categories of competition as they choose (all other regattas limit each participant to only one event), the entry fees total around \$800.

Seventy-five to 100 participants in the regatta come from Hana. The remainder come from the six other participating MCHCA clubs. Each of the visiting clubs spends about \$300 on food, transportation, and one night's accommodations. Assuming six MCHCA clubs participate in the Hana Regatta every year, their expenditures total \$1,800.

Some 440 adult paddlers and 60 paddlers under the age of 16 participated in the 1986 Hana Regatta. Each of the young paddlers is estimated to have spent \$10 and the adults \$30. The higher level of spending represents the purchase of two or more t-shirts on the day of the race as well as food, leis, and drinks after the regatta. Adult and young paddlers spent about \$13,800.

Other expenditures are made by around 1,000 supporters who go to the event each year. It is estimated that each spends at least \$25 for food, gasoline, and souvenirs during the event for a total of \$25,000.

Total expenditures associated with the Hana Regatta are estimated at \$43,100.

Long-Distance Races

Each year MCHCA clubs attend 11 separate long-distance races (Appendix C). The MCHCA-sponsored races include the Maalaea-Lahaina Long Distance Race, a men's race (27 miles); the John Kukahiko Relays, a combination men's and women's race (13 miles); the Queen Kaahumanu Race, a women's race (13 miles), and a men's race called the Great Kahakuloa Race (32 miles); the Kauikeaouli Race, men's and women's races (28 miles); the Molokini-Kihei Race, men's and women's races (30 miles); the Ben Abiera Race, a series of four 8-mile "ironman" sprints for men, women, and paddlers under 18; the Kahana Invitational Race, a series of "ironman" races from 1 to 13 miles for men, women, and paddlers under 18; and the Na Pili Invitational Double Hull Races, a specialty race series for double-hull canoes, 1 to 2 miles in length, with divisions for men, women, and children).

A breakdown of crew size, race distances, and estimated costs can be found in Appendix C for MCHCA long-distance races.

The organizational expenses for these races range from a low of \$300 to as much as \$1,800. In 1986, the total organizing expenses for the races came to \$8,000. Expenses for

participating crews varied according to the type of race and size of the crew. Representative expenditures for races involving nine crew members included \$12 to \$18 for entry fees, \$50 for drinks and high energy foods, and \$150 for an escort boat. Crews of six involved in "ironman" races paid \$12 in entry fees and \$50 for food and drinks. The crews in the double hull canoe race were estimated to have spent \$100 each for food and drinks. Approximate crew and organizational expenditures for all MCHCA-sponsored long-distance races came to \$30,714.

Total expenditures for the Maui County Hawaiian Canoe Association regular regattas, the Hana Regatta, and the MCHCA long-distance canoe races come to \$319,814.

Moku O Hawai'i Canoe Racing Association

Moku O Hawai'i Canoe Racing Association (MOHCRA) is the organizing body for 11 active canoe clubs on the island of Hawaii. In 1986, it was made up of an estimated 1,300 active paddlers and sanctioned seven regattas and five long-distance races.

MOHCRA differs from other state canoe racing associations in that it is a small organization within a large geographic area. The distance between events makes fund raising for the association difficult and creates significant transportation costs. As a result, much of the financial burden of putting on canoe racing events falls upon the individual canoe clubs that make up the organization. The clubs that sponsor regattas and long-distance races pay their entire costs. The MOHCRA pays only for the end-of-season championship regatta.

Regattas

MOHCRA organizers estimate that each of the seven regattas (including the MOHCRA championship race) costs about the same amount: about \$1,700 per regatta (roughly \$11,900 over the season). However, the actual figures are said to run much higher because individual canoe clubs depend upon barter, donations, and Hawaii County services to help defray expenses. Some organizers estimated that each regatta would cost as much as \$3,000 or more if they had to pay for the donated goods and services.

Regatta expenses in MOHCRA differ significantly from other associations in that so many of its expenditures are donated rather than paid for. MOHCRA regatta costs include insurance, food for judges, lane setting services, personal expenses of race officials, medals and trophies, and in some cases, fees for the use of state property. The cost of the medals, trophies, and insurance constitutes two thirds of each regatta's budget. Other goods and services, such as escort boat use, gasoline, food, and special skills, are donated. Savings are also realized through the contributions of Hawaii County, which uses its employees to survey the race courses and to pick up rubbish after each event. In addition, the County also sometimes allows the paddlers and their supporters to use tables and picnic equipment. However, these savings are offset by the costs of certain state requirements such as payment for the closure of Bay Front Highway in Hilo during the canoe regatta. (It is less expensive to pay for the state to close the road than it is for MOHCRA to assume the insurance costs of having people cross the road before and during an event.)

In addition to the administrative and set-up costs borne by the regatta sponsors, each participating club pays an entry fee that amounts to \$4 per person per event, or about \$24 per crew. Assuming there is an average of seven entries per event and 27 events per regatta, this totals \$4,536 for each day of regatta competition or \$31,752 over the entire season.

On the island of Hawaii paddler-related expenditures are different from those on other islands. Because 60 percent of the paddlers are under 16 (and therefore ineligible to drive), providing bus transportation over the long distances between canoe-racing competitions is a significant expense. Total bus-transportation expenditures are estimated at \$2,700 per season.

As a result of the distances these Hawaii island paddlers travel, they tend to spend more and stay longer at the site of the regattas than their counterparts on other islands. The reason is that the regattas provide an opportunity for them to socialize with friends and relatives that they might not otherwise see regularly.

Each paddler reportedly brings between two and four family members or friends to each regatta. The paddlers and supporters were said to have spent about the same amount of money. A race organizer interviewed for this report said all participants and supporters customarily buy lunches from sponsor-club concessions rather than bring picnic lunches in order to help the sponsor club meet its expenses. Assuming each of the 1,300 paddlers at each event and their 3,900 supporters spend at least \$10 each on food, soft drinks, leis, or souvenir t-shirts, it is estimated that \$52,000 is spent by paddlers and supporters at each regatta, and \$364,000 is spent over the course of the entire regatta season.

Other expenditures involve those of the three Kona clubs that travel to Hilo. Because the selection of goods there is greater than it is in Kailua-Kona, a number of the participants choose to spend an extra day shopping. One MOHCRA organizer estimated that 100 people from Kona spend at least \$100 per day over a 2-day period while shopping. Assuming that this is done three times per year, the regattas represent an income benefit to Hilo of approximately \$60,000.

If all regatta-related expenditures for the island of Hawaii are summed over the entire season, they come to \$470,422.

Long-Distance Races

In 1986, Moku O Hawai'i Canoe Racing Association sponsored four long-distance races for clubs on the island of Hawaii and one large-scale invitational race to which mainland and international crews were invited. The number of long-distance canoe races held by MOH clubs varies because the clubs operate on small budgets. Those clubs wishing to put on a long-distance race invite other clubs within Moku O Hawai'i to pay an advance entry fee of between \$60 and \$100. If enough crews agree to enter and enough money is raised, the event is held. If not, the long-distance race is canceled. Between 8 and 22 clubs enter these races.

In 1986, the following long-distance races were held on the island of Hawaii: (1) the A.J. McDonald Race from Keahou Bay to Kailua-Kona (8 miles for men, 6 miles for

women); (2) the Richard Smart Race from Kawaihae to Mahukona and back (27 miles for men, 13 miles for women); (3) the Auntie Alice Hauanio Race from Poohiki to Kalapana (12 miles for men, 6 miles for women); (4) the Dan Nathaniel Ironman Race from Hilo Bay Front to Onomea and back (13 miles for men, 6 miles for women); and (5) the Queen Liliuokalani Race from the City of Refuge to Kailua-Kona (18 miles for men, 11 miles for women).

The A.J. McDonald, Richard Smart, Auntie Alice Haunio, and Dan Nathaniel races are local races, primarily for MOHCRA crews. The Queen Liliuokalani race is a large-scale invitational race. Each of the MOHCRA local races has different organizing and entry fees. Fee expenditures for the previously mentioned races are as follows: A.J. McDonald, organizing fees (\$1,500), entry fees (\$20 per child, \$30 per woman, and \$35 per man); Richard Smart, organizing fees (\$1,500), entry fees (\$50 per person); Auntie Alice Haunio, organizing fees (\$2,000), entry fees (\$30 per person); and the Dan Nathaniel "Ironman", organizing fees (\$2,000), entry fees (\$35 per person). Organizing fees for the above races total \$7,000.

Crew expenditures for long-distance races held on the island of Hawaii generate lower per-crew costs than long-distance Oahu races. Because of their generally shorter lengths, it is customary for the use of escort boats in both training and competition to be donated.

In 1986, the expenses of the 105 crews participating in the four long-distance races involving exclusively local participants involved travel as well as gasoline, race, food, and beverage expenses. Per crew race costs for food and drink totalled \$50 per crew. Gasoline costs for the escort boats cost \$60 per race crew. Entry fees varied between \$35 and \$50 per crew depending on race requirements. These costs varied between \$145 and \$160 per crew per race.

Total crew, food, and gasoline expenditures in the A.J. McDonald, Richard Smart, Auntie Alice Haunio, and Daniel Nathaniel Ironman can be estimated to come to \$22,445.

Additional travel costs also have been included for the clubs that had to travel across the Island in order to participate in these events. It was estimated that the average club that travelled to an event on the island of Hawaii spent \$120 on transportation expenses (for four cars), \$50 on food and \$50 on accommodation. Assuming that \$220 was spent by four clubs at each of four different locally sponsored long-distance races it is estimated that additional travel expenditures come to \$4,400.

Total expenditures for these races can be estimated at \$26,845.

Queen Liliuokalani Race

The largest and best known canoeing event on the island of Hawaii is the Queen Liliuokalani Long Distance Race. It consists of an 11-mile course for women extending from Keauhou Bay to Honaunau City of Refuge, an 18-mile race for men, extending from Honaunau to Kailua-Kona, and a 6-mile double-hull canoe race for both men and women.

In 1986, the Queen Liliuokalani race involved organizing expenditures of about \$2,000. It attracted a field of 46 women's and 51 men's crews. They came from the mainland USA, (six crews), neighbor islands (46 crews), and the island of Hawaii (45 crews).

Thirty-six of the crews participated in the "ironman" event which involved crews of six and no escort boat. The 61 other crews participated in koa, non-koa, and masters division races that involved crews of nine and required escort boats for crew changes. Expenditures varied for each crew depending upon the type of race entered.

MOHCRA canoe club organizers estimate that in 1986, the Queen Liliuokalani "ironman" crews spent an average of 2 days on the island of Hawaii. Each crew was made up of a team of six paddlers, a coach, and two support staff. Their expenses were estimated per crew as follows: \$180 for accommodations (this rate assumes that several paddlers share each room), \$225 for food (\$25 per person with some meals donated), \$540 for air transportation to and from a neighbor island, \$400 for round-trip canoe transportation by barge, and approximately \$50 per crew on high-energy snacks and refreshments. These expenses totaled \$1,395 per off-island crew participating in the "ironman" division. Assuming that all 36 visiting clubs spent this amount, their total expenditures came to about \$50,220.

The crews participating in the koa, non-koa, and masters division races incurred significantly higher expenses than those participating in the "ironman" event. MOHCRA canoe race organizers described each of these crews as consisting of a team of 12 people: nine paddlers, a coach, and two alternate paddlers. Each crew paid an entry fee of \$100.

In 1986, six of the 61 crews participating in these races came from the mainland. Assuming that the number of paddlers and coaches per crew was equal to that of the Hawaii crews, it was estimated that 72 people participated from out-of-state. Each of the mainland participants reportedly brought one additional person and spent one week in Hawaii. Assuming that each of the 144 people from the mainland spent \$100 per day on hotel, food, transportation, and other expenses over a 7-day period their expenditures were about \$100,800. Additional expenses included canoe transportation or rental at \$400 per crew, \$175 for the use of an escort boat, and approximately \$50 per crew for refreshments during the race. These additional expenses were estimated at \$625 per crew or \$3,750. Total mainland crew expenditures were estimated at \$104,550.

Expenditures for each of the 46 crews from the neighbor islands participating in the non-ironman events were calculated as follows: \$180 for lodging (with several paddlers sharing a room), \$300 for food (\$25 per person), \$400 for canoe transportation, \$175 for the rental of an escort boat, and \$50 for refreshments. Their expenditures were estimated to be \$1,105 each. Total expenses of participating neighbor island clubs were estimated at \$50,830.

The crew expenses for the five clubs participating from Hilo and Puna were calculated in the following manner. Each crew paid about \$180 for lodging, \$300 for food, \$175 for escort boat rental, \$50 for refreshments, and approximately \$100 for gasoline and other automobile transportation expenses. Thus each of these crews spent approximately \$805 to participate in the race. Their total expenditures were estimated at \$4,025.

The four crews from West Hawaii did not pay for escort boats. However, it was estimated that they had expenditures of approximately \$150 each for food, gasoline, and other miscellaneous expenses. Their expenses came to \$600.

Total expenditures related to the Queen Liliuokalani race are estimated at \$212,225. If the estimated expenditures of the seven MOHCRA regattas, the four MOHCRA long-distance races and the Queen Liliuokalani race are summed, they total \$705,092.

Related Organizations

Na Wahine O Ke Kai

Na Wahine O Ke Kai is the name of a small, independent paddling organization made up of five women. It puts on a women's Molokai-Oahu canoe race each year. In 1986, the group spent about \$18,000 to put on a race for 20 crews. The 12-woman crews came from Hawaii (17), California (1), Chicago (1), and Tahiti (1).

The race organizer said each of these crews spent an estimated \$1,200 on escort boats, food, transportation, entry fees, and canoe costs. This is less than the amount spent by the men's crews entered in the Bankoh Molokai Hoe. The difference was said to be due to fewer financial resources of the women's crews compared to the longer-established men's crews. Therefore, the women economize wherever possible. Their total expenditures are estimated to come to \$24,000.

In addition, the three crews from out-of-state stayed about five additional days in the state. Assuming that each of the 36 women paddlers spent \$100 per day each over the 5-day period, their expenditures are estimated to have been \$18,000. Total race expenditures are estimated to total \$42,000.

Na Opio Association

Na Opio is a high school canoe-racing association that holds its canoe racing competitions from January 1 to April 1. It has an informal working arrangement with schools in the Hawaii Department of Education (DOE) and the Interscholastic League of Hawaii (ILH), but maintains no official ties to either organization. The DOE permits the organizers of Na Opio to involve its students during after school hours but does not recognize Hawaiian canoe racing as a legitimate intramural activity. Neither does it contribute any funding to the Na Opio program. The ILH schools, however, pay the Na Opio organizers to train canoe clubs in their schools and fund the cost of the regattas.

At present, Na Opio is organized only on Oahu and has an annual budget of \$20,000. This amount covers the cost of leasing canoes from canoe clubs, the costs of regattas, and the costs of holding one or two long-distance races. Other expenses are covered through donations and extensive volunteer work.

The Na Opio organizer said they were grateful for the support of the ILH schools to help them pay their expenses but added they would like to involve students at the DOE schools.

EXTERNAL ECONOMIC IMPACTS

As canoe paddling has gained popularity, it has attracted enthusiasts from the mainland and several foreign countries. In 1986, the Queen Liliuokalani race attracted 78 paddlers from four different California canoe clubs; the Bankoh Molokai Hoe attracted 120 paddlers (10 crews of 12) from California, Illinois, Tahiti, and Australia; and the Na Wahine O Ke Kai attracted 36 paddlers (3 crews) from California, Illinois, and Canada. However, it was said by canoe race organizers that these paddlers represent only a few of the total number of out-of-state clubs that have been involved. In past years, teams have come from Samoa, Japan, and as far away as Germany.

The paddlers who come to these events were said to have stayed at least 1 week in Hawaii and to have spent about \$100 per day. Assuming each of the 234 paddlers spent \$100 a day for 7 days, their expenditures came to \$163,800. However, it must be noted that this is a conservative estimate because it includes only the spending of participating paddlers, not that of family members or friends that accompany them to Hawaii. This amount also does not include expenditures on canoe rentals or other miscellaneous costs borne by the visiting canoe clubs.

HAWAIIAN CANOE RACING ASSOCIATION STATE CHAMPIONSHIP REGATTA

The Hawaiian Canoe Racing Association (HCRA) State Championship Regatta is the culmination of the year's regatta activities. It is made up of specially-selected crews from the Hui Wa'a, the OHCRA, the MCHCA, the GICRA, the MOHCRA, and the MCRA associations (Table 4).

TABLE 4. HCRA STATE CHAMPIONSHIP REGATTA: PARTICIPATING
PADDLERS AND ASSOCIATIONS

Canoe Association	Lanes	Clubs	Crews	Paddlers
MOHCRA	3	10	78	468
MCHCA	2	6	52	312
Hui Wa'a	3	7	46	276
OHCRA	4	13	155	30
GICRA	1	3	23	138
MCRA	1	1	2	12
Total	14	40	356	2,136

The HCRA championship is unlike any other regatta held in the state. It is made up of 31 separate events and is the only regatta in which all of the different canoe racing associations agree to compete under one set of rules and procedures. Under the rules established by the HCRA, each of the associations is allowed to choose its own representatives to the state regatta. This is generally done through the association championships held at the end of the season by each of the active canoe associations.

The actual process of selection is complex. Each of the participating associations is allowed by HCRA rules to enter only clubs with "qualified" crews (crews of six that have won or placed in their category of competition: senior men's, etc.). This restriction prevents the entry of hastily put together "pick up" crews and raises the standard of competition. Because some clubs are larger than others and the rules specify that no paddler may compete in more than one heat, the HCRA classifies participating clubs according to the number of qualified crews they bring to an event. Those clubs that are able to field 31 crews and participate in every event in the competition are classified as "AAA" clubs. Those clubs able to field 10 to 14 crews in competition are classified "AA" and those able to field six or fewer are classified as "A" clubs.

The actual number of clubs that are awarded lane space by the HCRA is determined by a formula based on the active number of paddlers in every club. Because the number of active paddlers fluctuates, this number is said to change yearly. In the 1986 regatta held in Hilo, the 14 lanes at the regatta were allocated on the following basis: OHCRA four lanes, Hui Wa'a three lanes, MCHCA two lanes, MCRA one lane, and the GICRA one lane. The lanes are allocated to the top-scoring finishers in each division. Thus the top four finishers in the OHCRA are granted one lane each and so on. Because the number of crews within each club that are considered "qualified" is limited, clubs that are unable to provide qualified crews in a particular event may seek substitute crews from other clubs that meet the competition standard. This has had the effect of increasing the number of crews able to compete since a club with more qualified crews than it has competition slots may send some of its crews to another club as substitutes. In 1986, for example, the 14 designated lanes were shared among 304 crews from 40 different canoe clubs.

Each year approximately \$15,000 is spent by the HCRA on such expenses as race security, airfare, housing, food for officials, lane setting, official boats, uniforms, security, a public address system, portable sanitary facilities, insurance, miscellaneous expenses, and canoe transport costs (Appendix D). The competition is held on Oahu every other year. This gives neighbor island canoe racing associations the opportunity to host the HCRA championship on alternate years. In 1986, the HCRA regatta was held on the island of Hawaii. Clubs from all over the state participated in the event.

Actual expenditures differed according to the resources and practices of individual clubs. However, it was estimated that an average of \$1,400 was spent per off-island club in order to participate in the event. Canoe club organizers estimate that this amount covered the cost of the following club expenditures: the round-trip shipment of canoes by barge, the rental of vans to carry paddlers, miscellaneous costs for club leis, club gifts, and food for at least one large party for club members and their families. It is assumed their expenditures totaled approximately \$42,000 in 1986.

Expenditures by individual paddlers also varied from one club to the next. According to one HCRA organizer, most clubs used travel agencies in order to get special rates for their paddlers. Although practices vary, it was generally assumed that each paddler was responsible for his own airfare, accommodations, food, and other expenses. One estimate made by canoe club organizers was that paddlers spent \$115 each for airfare, two nights lodging, and one communal meal. In addition, it was estimated that \$25 was spent by each off-island participating paddler at the 1986 HCRA regatta.

According to information provided by the HCRA, there were 278 off-island crews and 26 crews from participating island of Hawaii clubs. In addition to the paddlers, each of the clubs brought coaches and relief paddlers as well as families and friends of paddlers. It was estimated that for every three off-island paddlers, one friend or supporter came along to see the race. Assuming each crew was made up of six people and that there were .3 supporters per paddler, it was estimated that there were 1,668 off-island participating paddlers at the 1986 HCRA championship regatta and 567 supporters. If each spent an average of \$150 on living expenses, their total expenditures were estimated at \$335,250.

Assuming that each of the 156 paddlers participating in the 26 island of Hawaii crews brought at least one friend or supporter to the event, it can be estimated that there were at least 300 Hawaii county paddlers and supporters at the event. If each spent at least \$15 on t-shirts, food, and gas, expenditures by island of Hawaii participants came to \$4,500.

Total 1986 championship regatta expenditures were estimated at \$396,750.

EQUIPMENT EXPENDITURES

The rapid growth of canoe paddling has stimulated a small commercial sector of individuals supplying canoes, canoe equipment, paddles, wet-suit garments, and swimwear to canoeing enthusiasts (Table 5). A number of these vendors are craftsmen as well as entrepreneurs. For example, there are presently two shops and several individuals building competitive outrigger racing canoes on a commercial basis each year.

Canoes

Estimates say an average of 17 fiberglass canoes are built each year at a cost of about \$6,000 per canoe. The canoe builders interviewed for this report said that although most of the canoes are built for Hawaii clubs, the growth of the sport has encouraged a growing export market. They said that on the average, three fiberglass canoes are shipped overseas each year. The most popular out-of-state markets for the canoes are Tahiti, California, and Illinois, where people have developed an interest in competing in Hawaiian paddling events. Other places where canoes have been sold are Louisiana, Australia, and American Samoa. Gross expenditures on fiberglass outrigger racing canoes in Hawaii are estimated to be \$102,000. In addition, about four koa canoes are built each year at a cost of about \$30,000 each. The koa canoes are expensive because neither the material nor the woodworking skills necessary to build the canoes is easily available. (A single koa log is said to cost as much as \$6,000.) The total amount spent on new koa and fiberglass canoes each year come to about \$222,000.

TABLE 5. HAWAIIAN CANOE PADDLING ESTIMATE EQUIPMENT
EXPENDITURES, 1986

Item	Average No. Bought/Year	Per Unit Cost	Total
Fiberglass canoes	17	\$ 6,000	\$102,000
Koa canoes	4	30,000	120,000
Paddles (factory made)	700	50	35,000
Paddles (custom made)	300	75	22,500
Paddles (home made)	100	10	1,000
Canoe maintenance costs (annual)	120*	500	60,000
Wet suit shorts	550	30	16,500
Women's swim wear	5,000	35	175,000
Men's swim wear	2,500	30	75,000
Foul weather gear	25	40	1,000
Women's accessories	2,500	20	50,000
Canvas canoe covers, aluminum hoops, etc.	15	815	12,225
Total			\$670,225

*Active canoes in competition, 1986

The sale of the new canoes often involves the additional purchase of specially-designed canvas and aluminum covers. These covers include aluminum hoops and runners that stretch the canvas and hold it in place. If 15 of these covers are sold each year at a price of \$815 each, they would bring in \$12,225.

Canoe maintenance costs are also significant. The canoe builders said canoe clubs spend at least \$500 per year on canoe maintenance, the minimum needed to take care of a canoe and keep it from deteriorating. Assuming 120 active racing canoes are being used statewide and that each club spends at least \$500 on servicing each canoe, \$60,000 is spent on canoe maintenance each year.

Paddles

Paddles represent another large expenditure. According to paddle wholesalers in Honolulu, approximately 1,000 new paddles are sold each year. Some are sold to canoe clubs which have to replace broken and used paddles but most are sold to individual

paddlers. This increase in sales to individual paddlers is due to new rules made by canoe clubs that require participating athletes to furnish their own paddles.

Commercially made paddles vary in cost between \$35 and \$100 depending on size, shape, and quality. The largest percentage of paddles (an estimated 700 or 70 percent) are mass produced imports from factories in Canada. They sell for \$50 each.

An additional 300 paddles were said to be custom-made in Hawaii. These paddles can be very expensive depending upon the wood chosen and the purpose for which they are made. Steering paddles, for example, are more expensive than regular paddles. It was estimated that most of these paddles were sold for \$75 each.

Some people make their own paddles. This is especially true of the high school leagues such as Na Opio. These paddles are made from scrap wood, with most of the outlay being for wood and shellac. An average of \$10 is spent on materials.

Assuming that 1,100 paddles are made and sold at the above-mentioned prices each year, it is estimated that annual paddle expenditure equal \$58,500.

Clothing

Another outcome of the rapid growth in canoe paddling over the past 5 years has been the development of specially designed rubber wetsuit shorts designed to protect paddlers from skin-chafing sores (caused by sitting for long periods in fiberglass or wooden canoes). Over time the shorts have become decorative, and people buy them as much for their appearance as for protection. The shorts sell for \$28 to \$45 each. Assuming that each year the manufacturers sell 550 pairs of shorts, they generate \$16,500 in sales.

Considerable money is also spent on swimsuits. Each year, paddlers replace swimsuits (because of the heavy wear on fabric that paddling entails) and buy additional suits for appearance. On the average, women paddlers buy between one and five swimsuits per year because canoeing events, such as regattas, are social gatherings where personal appearance is considered important. In addition to women simply buying suits, there has been a trend towards the buying of designer suits by individual canoe club crews. Assuming conservatively that 2,500 women purchase two suits each year to wear in conjunction with paddling events, at a rate of \$35 per suit, women spend \$175,000 on suits each year. Other items purchased by women include visors, gloves, suntan lotion, skin creams, and other accessories. Assuming that 2,500 women spend \$20 on these items it is estimated that \$50,000 is spent on these items.

Male paddlers also buy new swimsuits every year for paddling-related activities. Although they are said to buy the suits for use in several water sports, club officials indicated that most of the active male paddlers buy extra suits especially for the paddling season. Assuming 2,500 male paddlers spent \$30 per suit for at least one new suit per season, their expenditures total \$75,000.

An additional piece of special clothing sold by paddling stores is wet-weather gear. Demand for this kind of item is dependent upon weather conditions. However, in an average

year, an estimated 25 suits of wet-weather gear are sold at a per-unit price of \$40. Other expenses not considered above are accessories such as gloves, sun visors, special vitamins, and membership in health clubs (for use of weightlifting equipment). Assuming that each paddler spends at least \$20 on these items during the course of a season, about 5,000 active paddlers spent at least \$100,000 on paddling-related accessories and health-related equipment in 1986. If the cost of canoe equipment, maintenance, and clothing is totalled, it comes to \$670,225.

Fund-raising

Fund-raising is an important activity of canoe clubs. Several of the most common methods are t-shirt sales, huli-huli chicken sales, Molokai sweet bread sales, and the operation of food booths.

Estimating the total amount raised by these activities was difficult. T-shirts are the most commonly used fund-raising item. Clubs buy them for \$4 and sell them for \$8. However, they are sold more widely by some clubs and associations than others. Assuming 30 clubs buy and produce 300 t-shirts for sale during the course of a year, 9,000 t-shirts are purchased each year. Another 6,600 shirts are produced for the Bankoh Molokai Hoe alone. It is estimated that nearly 16,000 t-shirts are purchased each year at a cost of at least \$64,000. (This amount has been previously included in the estimates of regatta and long-distance race expenditures.)

Transportation

Another related service is that of canoe transportation by barge. Many clubs transport their canoes by barge when they participate in neighbor island canoe racing regattas. The average club pays nearly \$200 to transport a canoe one way between islands. Young Brothers estimates the company handles 340 canoe shipments per year. This means at least \$68,000 is spent transporting canoes and related equipment each year. However, this amount is not considered as a separate expense since it has already been included in the expenditures of invitational long-distance races.

PROBLEMS

Canoe club organizers reached for the purposes of this report indicated they were pleased with the rapid growth of the sport over the last 10 years. However, a number expressed concerns over (1) the management problems created by the rapid growth, (2) the difficulties involved in establishing a uniform set of standards for paddling events, (3) the need for assistance from both the state administration and county governments, and (4) the constant struggle by many of the clubs to remain financially sound.

The most widely-expressed concern was that the sport has been growing without firm guidance or direction. The present infrastructure of semi-autonomous independent canoe racing associations and a statewide umbrella organization has not resulted in a uniform set of standards acceptable to all. This is said to have a divisive effect among the different organizations and has led to numerous disagreements.

Disputes arise because associations disagree as to which rules are acceptable, which can be flexibly changed on short notice, and which may benefit some clubs at the expense of others. These differences occur because the size and financial resources of the clubs differ greatly, and what may seem fair to one club sometimes appears unfair to another. Although several organizers said they were confident that differences could be worked out they expressed a sense of frustration because some paddling groups were more willing to pull out of competitions than to compromise.

The concern was expressed that if a central sanctioning authority with enforcement powers is not created soon, standardized canoe racing rules will be imposed on the sport by paddlers from outside Hawaii. For as canoe paddling continues to grow in popularity on the mainland, Australia, and the South Pacific, the demands for a comprehensive set of rules will increase. Some fear that if the Hawaii Canoe Racing Association finds itself unable to provide uniform rules for this ancient Hawaiian sport, they will be made elsewhere.

One of the biggest causes of divisiveness among canoe racing associations and canoe clubs has stemmed from the regulations imposed by the HCRA on the use of koa wood canoes in the state championship regatta. Although the HCRA recognizes that each of the canoe associations has developed its own standards for canoe designs over the years, it specifies that for the most important race, the state championship, each association enter only those canoes 45 feet in length and weighing 400 pounds that conform to a rigid mathematical model specifically designed to preserve the shape of a "traditional Hawaiian" canoe. This mathematical model of a traditional racing canoe was developed from the results of a 2-year long survey (1977-79) of all the canoes in the state known to have been raced prior to 1977. The team of HCRA canoe surveyors measured new canoes as well as those built as early as 1900. They made particular note of design attributes in the faster canoes such as narrow sterns that made for greater racing speed and incorporated them into a composite canoe design that they hoped would set a uniform standard for all canoe racers in the state.

The older canoes in the survey were said to be multi-purpose canoes designed for fishing as well as racing. The sides of these canoes were built wide to encourage flotation and greater emphasis was placed on durability than on speed. As a result, these canoes are no match for new narrower canoes designed and built specifically for racing.

The creation of the formula has created problems because canoe racers in different associations and different islands believe that this unfairly biases canoe standards to those canoes of the most commonly built type. They say that there were many kinds of racing canoes developed in Hawaii over the years and that simply taking the measurement specifications from existing canoes is no guarantee that historic or cultural values are being preserved. They say that there are widely differing views as to what accurately specifies a traditional Hawaiian racing canoe.

HCRA organizers fear that an attempt to open races to all boat classes will render their existing canoes obsolete because they will be slower. This will create problems for many clubs because in order to remain competitive it will force them to upgrade their canoes at a great expense.

HCRA rules specify that each club build a canoe from koa wood, 3/4 of which comes from a single log. However, because tall koa logs are scarce all over Hawaii the HCRA race organizers fear that some clubs may never find the materials they need and will be put at a permanent disadvantage.

However, advocates of change say that creativity and experimentation are a part of any sport and must be allowed or the sport will never develop. They favor changing the koa wood rule to allow competitive racing canoes to be built from koa planks rather than from a single log. They believe that traditional Hawaiian canoe designs should be based on unique Hawaiian canoe historical design attributes discovered by scholars rather than by the average of existing canoe specifications.

A number of canoe racers complained that the present system of measuring canoes follows no set standard. They said they object to having to alter their koa canoes (at great expense and sometimes two or three times) when the canoes are measured in what they consider to be an arbitrary manner.

Because of the expense involved in maintaining and racing canoes, a number of canoe club organizers expressed concern about the unsupervised use of nearshore ocean areas. Nearshore areas on all islands that were once almost exclusively used by canoes are now being used by windsurfers, swimmers, and commercial craft operators. As a consequence of the increased activity in the nearshore waters, there have already been at least three lawsuits involving the use of canoes, swimmers, and other craft. Several canoe racing organizers expressed the sentiment that if something is not done soon about the problem, the risk of collisions between canoes and other water craft will increase. They expressed resentment that despite the long history of canoe paddling in Hawaii and its popularity among local residents, their interests have been increasingly superseded by newly established commercial operators of jet skis, windsurfers, para-sail rides, and other tourist-related ocean craft.

Related to this problem is the complaint that newspaper and television reporting on canoe racing seldom focuses on any aspect of canoeing other than the Bankoh Molokai Hoe race or the OHCRA championship. As a result, few residents of the islands are able to see Hawaiian canoe racing in other than a limited, traditional, Hawaiian cultural perspective. Because of this, canoe paddlers complain that they sometimes receive less consideration from County officials in the form of facilities than practitioners of other sports such as marathon runners, yacht racers, or baseball players.

A related concern was that of maintaining financial solvency in the face of increasing costs. Many of the smaller canoe clubs spend half a year or more fund raising in order to afford to participate in canoe racing events. But it was reported that even this effort is sometimes not enough because of the increasing costs faced by many of the clubs. These costs include not only the expense of sponsoring or participating in an association race series but also the underwriting of increasingly expensive youth programs as well. These programs, which are run by many of the clubs, encourage young people with few resources to participate. The clubs supply food, transportation, and equipment at no expense. In return, the young people or their parents contribute what they can.

The Oahu club organizers said that they felt they and their neighbor island counterparts deserve some recognition from city and county agencies for their work with underprivileged young people. This is because many of the participants in canoe paddling come from backgrounds of limited means and look to the sport as an important means of social interaction. Many of these young people look to their canoe club coaches for personal guidance and to their friends in the canoe club for emotional support. For many, the canoe clubs provide their only structured activity, outside of school, that imparts positive social values. Most canoe race organizers said they derived personal satisfaction from working with young people. They said that the canoe clubs serve as extended families in the true sense of the Hawaiian ohana (family) and that keeping this tradition alive was their principal reward.

Another problem cited by Oahu paddlers was the lack of adequate storage facilities for canoes on Honolulu. The Ala Wai boat house is old and there is not enough parking available for those who wish to use the facility. There are also no outdoor lights at the facility despite the fact that many of the young paddlers do not finish their practice sessions until after dark. In addition there were complaints that the floating docks are inadequate. However, funds have been appropriated for the facility to be upgraded.

The Oahu canoe race organizers were particularly concerned that improvements be made at Keehi Lagoon — a site referred to by paddlers as the “dust bowl” because of the lack of grass in the area and the fine dust stirred up by the paddlers when they congregate there. It is the most commonly-used location for canoe regatta championships on Oahu because it offers the most accessible calm water for the 14 lanes needed to put on a regatta.

The organizers ask that a 1977 Hawaii Department of Transportation plan for the area be implemented. The plan calls for building a canoe house and establishing a protected water course for the paddlers. (At present, two of the lanes are blocked by derelict fishing boats that have not been used or moved in many years.) Canoe paddlers say that in order for the facility to be built, state and city and county officials would have to exchange adjoining pieces of land on which nothing is presently built.

Canoe club organizers from Oahu and other islands shared a sense of frustration about their inability to convince city and county as well as state officials that their needs for facilities are as legitimate and pressing as those of enthusiasts of other popular sports such as baseball, football, basketball, or tennis.

CONCLUSIONS

Each year an estimated \$3.6 million is directly spent in Hawaii on canoe racing-related events, goods, and services (Table 6). If this amount is multiplied by the standard .74 entertainment multiplier, indirect expenditures total approximately \$2.7 million, bringing the total economic impact of canoe racing events on the state's economy to \$6.3 million. The sport involves an estimated 7,000 active paddlers and 15,000 supporters statewide. In addition, the better-known canoe races, such as the Bankoh Molokai Hoe, attract paddlers from all over the world.

TABLE 6. HAWAIIAN CANOE PADDLING ESTIMATE TOTAL
EXPENDITURES, 1986

Association	Regattas	Long Distance Races	Equipment Expenditures*	Total Expenditures
OHCRA	\$ 770,300	\$293,555		\$1,063,855
Hui Wa'a	567,000	20,930		587,930
GICRA	32,900	16,070†		48,970
MCHCA	289,100	30,714		319,814
MOH	470,422	239,070		709,492
MCRA	1,700	13,394		15,094
HCRA				
Championship	396,750	—		396,750
No Opio	20,000	—		20,000
No Wahine				
O Ke Kai	42,000	—		42,000
Miscellaneous equipment	—	—	\$670,225	670,225
Totals	\$2,590,172	\$613,733	\$670,225	\$3,874,130

*Equipment expenditures for 1986 (see Table 5)

†Includes \$670 for cost of food, travel, and other expenses

Canoe racing is a popular Hawaiian sport with increasingly significant regional social and economic impacts in the areas where events are held. The sport does much to help young people. It is an economic boon to areas such as Hilo, where large numbers of people gather for regattas each year, as well as to the places selected to host the HCRA State Championship Regatta each year. In addition, the sport has become an international focal point for paddlers from throughout the world and offers the state an opportunity to attract visitors to either participate in or watch its canoe races. Although the potential for growth is great, development of canoe paddling in Hawaii will succeed only if canoe paddlers are able to unite into a cohesive unit and can gain the active cooperation of state and city and county officials.

RECOMMENDATIONS

It is recommended that:

- (1) A professional mediator be hired to assist the canoe racing associations in the development of a uniform set of rules and procedures they can all abide by.
- (2) A concerted effort be made to have the Keehi Lagoon area cleaned up and turned into a first class racing facility for use by flat water kayaks as well as Hawaiian canoes. Hawaiian canoe paddling is now considered an important crossover sport for Olympic kayaking by the National Paddling Committee because of the high percentage of former Hawaiian canoe paddlers now on the U.S. Olympic kayaking team. There is a strong belief that such a facility at Keehi could become an important national center for Olympic kayak training.
- (3) The canoe racing associations work with the Honolulu city government for Summer Fun monies to develop their canoe paddling programs for young people. This would remove pressure from organizers constantly worried about keeping their programs solvent and permit them to spend more time with the young people involved in their programs.
- (4) The recognition of canoe racing as a legitimate scholastic sport and the budgeting of money for an interscholastic racing program by the Department of Education
- (5) The appointment of a full-time canoeing specialist in the Honolulu city and county recreation program (similar to the position created in Maui County) to help coordinate canoe racing activities
- (6) Have the Hawaii Visitors Bureau or an appropriate state agency consider promoting the sport of canoe paddling to encourage greater appreciation of Hawaiian canoe paddling by the general public.

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APPENDIXES

APPENDIX A. REPRESENTATIVE HUI WA'A CANOE REGATTA: EXPENDITURE DISTRIBUTION

Expenditure	Hui Wa'a Association	Sponsoring Club	Participating Club	Paddles	Supporters
Insurance	\$ 375	—	—	—	—
Security	200	—	—	—	—
Food/water	—	\$ 200	—	\$ 5	\$ 5
Officiating	85	—	—	—	—
Escort boats	400	—	—	—	—
Lane setting	600	—	—	—	—
Surveyors	—	—	—	—	—
Medals/trophies	—	1,375	—	—	—
Equipment	40	120	\$ 50	—	—
T-shirts	—	580	—	8	8
Gas	—	—	—	2	2
Entry fees	—	300	150	—	—
Sound system	200	—	—	—	—
Miscellaneous	—	75	—	—	—
Leis/presents/gifts	—	—	—	—	—
Total	\$1,900	\$2,650	\$2,200*†	\$24,000*§	\$40,000*#

Note: Total expenditures per regular regatta = \$70,750; total expenditure per 7-regatta series = \$495,250; total expenditures over an 8-regatta series (championship included) = \$567,000

*Total expenditures for 11 clubs per regatta
†\$200 x 11 = \$2,200
§\$15 x 1,600 = \$24,000
#\$10 x 4,000 = \$40,000

APPENDIX B. MOLOKAI LONG-DISTANCE RACE EXPENDITURES

Race Name	Distance		Crew Size		Entry Fee/Crew		Average No./Crew		Organizing Cost	Per Crew Cost	Total
	Women	Men	Women	Men	Women	Men	Women	Men			
Maui-Molokai	28	28	9	9	\$50	\$50	8	15	\$2,000	\$250	\$ 7,750
Frank Ka'ahanui	4	10	6	6	12	12	7	5	300	50*	5,044
Tony Castor	—	12	6	6	50	50	—	3	300	50	600
Total	—	—	—	—	—	—	—	—	\$2,600	—	\$13,394

*This figure covers the cost of Molokai participant crews only. Maui crews, of which there were eight, spent \$500 each to attend.

APPENDIX C. MAUI LONG-DISTANCE RACE EXPENDITURES

Race	Distance			Crew Size			Entry Fee (per crew)			Average No. of Crews			Organizing Costs	Per Crew Costs	Total
	Youth	Men	Women	Youth	Men	Women	Youth	Men	Women	Youth	Men	Women			
Maalaea Distance Race Maalaea to Lahaina	—	27	—	—	9	—	—	\$12	—	—	22	—	\$600	\$200	\$ 812
John Kukahiko Relays													300	5(6)\$ 50 30(9) 150	6,970
Lahaina to Olowalu	—	—	13	—	—	2(16) 11(9)	—	—	12	—	—	13	—	—	—
Olowalu to Lahaina	—	13	—	—	3(6) 19(9)	—	—	12	—	—	22	—	—	—	—
Queen Kaahumanu Race (W) Maliko to Kahului	—	—	13	—	—	(6)	—	—	12	—	—	13	1,200	50	7,892
Great Kahakuloa Race (M) Kahului Harbor to Lahaina	—	32	—	—	(9)	—	—	18	—	—	27	—	—	200	—
The Kauikeaouli Race Maui to Lanai	—	—	28	—	—	(9)	—	—	18	—	—	7	300	—	3,788
Lanai to Maui	—	28	—	—	(9)	—	—	18	—	—	9	—	—	200	—
Molokini-Kihei Race	—	30	30	—	(9)	(9)	—	18	18	—	10	7	300	200	4,006
Ben Abiera Kalaepohaku to Mud Flats	4	—	—	(6)	—	—	12	—	—	—/8	?	—	—	—	—
Mud Flats to Maalaea	—	—	4	—	—	(6)	—	—	12	—	—/8	?	—	—	—
Maalaea to Kalaepohaku	—	—	8	—	(6)	—	—	12	—	?	?	—/8	—	—	—
Kahana Invitational (Iron) Mala Wharf to Hanako'o	1	—	—	(6)	—	—	12	—	—	23	—	—	2,000	50	3,426
Hanako'o to "S" turn	—	—	4.5	—	—	(6)	—	—	12	—	—	23	—	—	—
"S" turn to Black Rock	—	4.5	—	—	—	(6)	—	—	12	—	—	23	—	—	—
Black Rock to Hanako'o	—	13	—	(6)	—	—	—	12	—	—	23	—	—	—	—
Na Pili Invitational Mala Wharf to Hanako'o	1	2	1-5	12	12	12	24	24	24	12	12	12	1,800	100	1,624

APPENDIX D. HCRA STATE CHAMPIONSHIP RACE BUDGET

Expenditure	Total
Race security	\$ 600
Airfare	2,790
Housing	2,200
Awards	2,500
Lane setting	800
Official boats	750
Officials' meals	500
Uniforms	1,500
Security	550
Sound system	650
Platform	500
Sanitoids	300
Insurance	250
Miscellaneous	500
Canoe transport	1,200
Total	\$15,590

