SundayHome
The Sunday Star-Bulletin & Advertiser
© by Gannett Pacific

New Activity In Affluent Resort Sales

By Jerry Tune
Star-Bulletin Writer

WHEN the Mauna Lani Hotel opened on the Kohala Coast, just down the road from the elegant Mauna Kea Beach Hotel, the word was out that there was a new oasis on the beautiful coast of rugged lava and blue bays. And while hotel occupancy still is in a period of building, the surprising development has been the rapid sale of condominiums at the Mauna Lani — at prices ranging from $275,000 to $895,000.

In just 10 months of sales, 70 of the 80 condominium units in 11 buildings have been sold.

"There is a pent-up demand for luxury units on the water on the Kohala Coast," said Francine Duncan, the director of advertising and public affairs at the Mauna Lani, while addressing the members of the Hawaii Resort Developers Conference last week at their directors meeting.

She said the buyers came from 16 different states and three foreign countries (Australia, Japan and Americans living in Saudi Arabia). Average annual income of the buyers was $200,000 to $250,000. Average family net worth was $5 million.

A similar buyer profile was presented for the Mauna Kea, which has been involved in selling home lots in the hills above the hotel, and now has entered into the marketplace with a new product — very large attached villas.

AVERAGE ANNUAL INCOME of the home buyers is $350,000 and family net worth averages at $5 million.

William Mielcke, vice president and project director of the Mauna Kea Land Corp., said that at the Fairways South home lot increment (33 lots on 66 acres) the original price of the subleasehold lots a few years ago was $68,000. Resales now are in a range between $300,000 and $350,000. Since the area opened 23 homes have been built and the last recorded sale was at $995,000. Homes listed for sale

positive dollars finally coming back the other way.

"Development is a cash-flow business based on internal rate of return," says Sanborn, "not earnings per share."

Not all stockholders like to be in this kind of a business, especially when they see the lean years stretch out into longer and longer periods.

THERE WAS SOME RECENT grumbling by stockholders of Louisana Land Corp., which is developing the Kalua Koi resort on Molokai. Boise Cascade, the original developer of Waikoloa, decided to get out of the land business in 1972 but it took six years from this announcement to actually sell off Waikoloa.

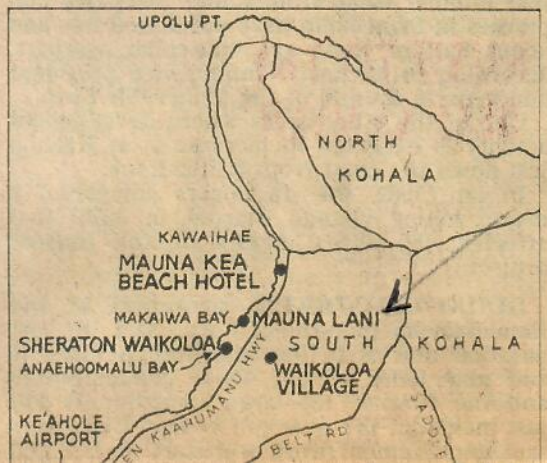
Boise Cascade sold to a partnership that consists of Ronald Boeddeker, a civil engineer who had been with the company and who lives in Santa Barbara, and the Bass family of Fort Worth, Texas.

Classified section H

Corp. All rights reserved.

Prepared by the staff of the Honolulu Star-Bulletin June 12, 1983

The developments at the Mauna Kea, above, and Mauna Lani, at left, both include championship golf courses. The Mauna Lani course has a tricky hole that plays across the ocean.



average price of these subleasehold lots is $350,000. Mielcke reported to the traveling group from the Hawaii Resort Developers Conference that there have been five sales in six months with four of them in cash.

Mauna Kea also has 18 reservations with earnest money for the villas, a group of owner-occupant buyers who are interested in living part of the year on the Kohala Coast.

While the resort condominium and home market generally has been slow for the past three years or so, it is apparent that at the top of this market there still is strong demand.

THE KOHALA COAST is gradually building a reputation as a place for the affluent to come and enjoy tranquility and the amenities that go along with quality hotels. After the second or third visit to the area, many of the hotel guests become home or condominium owners.

The third link in this general resort destination area is coming at Waikoloa, an area more rustic and yet filling a definite need for the quality tourist on the Kohala Coast.

"We have good beaches, sun, sand, and the pattern of land ownership with three big developers means there is quality all the way through," said Will Sanburn, director of business relations at Waikoloa.

"We can't let a lousy condo go on the land because we own the land right next to it."

Red mission tile from Santa Barbara, Calif., one of the affluent bedroom communities for many Hollywood personalities and President Ronald Reagan, has become the trademark of buildings at Waikoloa. And in keeping with the ranch atmosphere of much of Santa Barbara, Waikoloa plans to make improvements to appeal to the same tastes of the affluent.

SANBORN SPEAKS ABOUT plans for a guest ranch at the 2,500-foot elevation level and then 5-acre ranchettes, a polo field, a health spa and a possible sports center for athletic training at lower levels. There also will be a commercial center developed in the Waikoloa Village area.

Much of what happens at Waikoloa will depend on timing, and the willingness of operators to come in and deal. But with 31,000 acres to put in its conceptual plan, Waikoloa is full of ideas.

Sanborn says that noted architect Barry Berkus is doing the plan to bring "activity nodes" around various places in the vast land area of Waikoloa. Berkus, who is one of the most innovative residential architects — including efforts in the lower-income levels — is working directly with one of the owners of Waikoloa who lives in Santa Barbara.

If the flurry of sales of expensive homes and condominiums bolsters the spirits of resort areas, it doesn't mean that rich developers are making a lot of money on these projects.

THE MAUNA LANI, for example, has put out $97 million to develop the land and hotel and doesn't expect to reach a positive position until 17 or 18 years.

"This is for the next generation," says Nobuo Kitsuda, senior vice president of the Mauna Lani Resort, and the man in Hawaii for the past 10 years while the Tokyu Group of Japan patiently waited to get the necessary approvals to build and then construct a luxury hotel.

The Mauna Kea Beach Hotel has been operating for 23 years and yet it has been only the past few years that it has moved into residential development around the hotel.

The pattern for resort development is all the same — huge amounts of invesments up front and then a long period to wait until the

The sale not only included Waikoloa but some land in Lake Arrowhead, Calif., and other Boise Cascade land. By December 1978 Boise Cascade was out of the land development business. After the sale company stock increased in value.

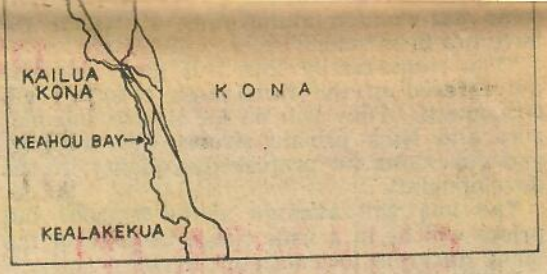
Despite the recent slump in all resort areas, the commitment is there to continue development.

Waikoloa now has a permit request to get a small airstrip of 2,300 feet that would accommodate Princeville Airways, which wants to fly into the area. An office building is planned that also will be the sales center. And work on some zero lot line condominiums, across from the clubhouse, will begin this year.

MAUNA LANI IS LOOKING at its next condominium site near the sixth and seventh holes on its famous golf course. Mauna Lani talks about building some 150 units a year and has plans for a beach club and racquet club. Meanwhile, the initial development costs are staggering. Water pumped from deep private wells is now averaging some 350,000 gallons a day (or about 1,000 gallons a day per each hotel room). Kitsuda explains that this is high initially because of the large demands for water to create the lush landscaping from the lava lands. Later, once the plants have become established, the level will be reduced.

The Mauna Kea figures about three years to sell out its villas project, and then it is looking at about 200 to 250 luxury condominiums in its "bluffs" area. No pricing or details are available as yet.

Spacious interior at Mauna Lani.



While the dollars for development continue to flow out the front door, the development managers keep an eye out on how to turn a profit in some areas. One of the latest ways is the sale of merchandise — especially monogrammed shirts that have the Mauna Kea or Mauna Lani logo on them. The Mauna Lani found this was good for about $500,000 in business this past year and looks to selling $750,000 next year. Kapalua on Maui is advertising these items in catalogues that are mailed out to the Mainland.

BUT THESE ARE SMALL items compared with everything else. "The sale of this merchandise may help us turn the golf course into a profit (situation)," says Kitsuda.

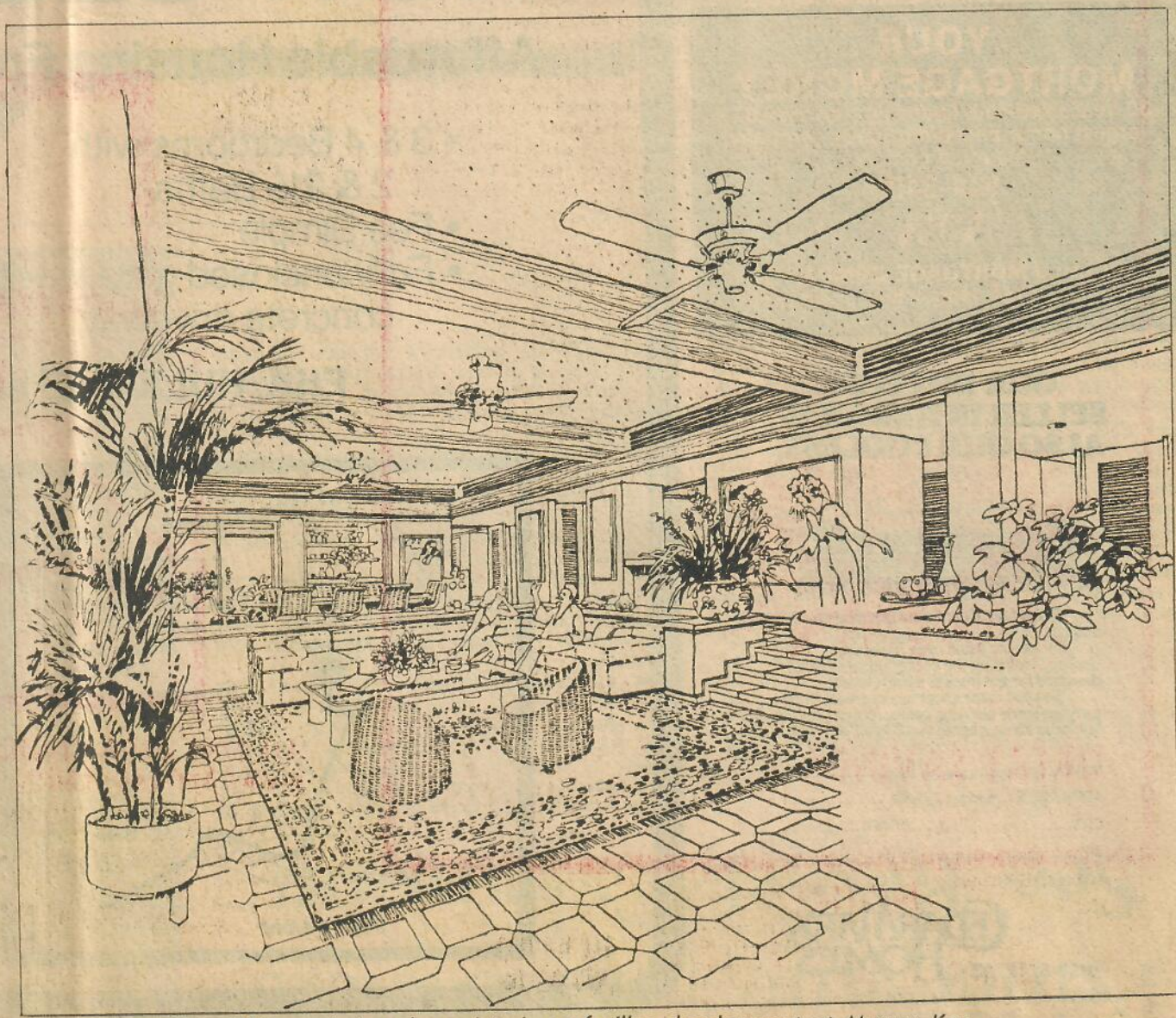
That may take care of one golf course. However, the Mauna Lani — like some other resort developers in Hawaii — believes it needs another golf course. And so out go more dollars for development.

Employee housing is another expense for developers. In the case of the Mauna Lani, most of the employees already lived on the Big Island so the impact was lessened. However, the Mauna Lani did build 19 units at Waimea, which is being used in a Section 8 rental program. The Hawaii Housing Authority will own and administer this housing, which is open to everyone on the Island. In addition, the Mauna Lani has taken a two-year lease on 10 rental units in the Hale Waimea, which will be used for hotel employees.

Mauna Kea, in a joint venture with its Olohana Corp. and the Hawaii Housing Authority, developed 51 units of single-family and duplex housing at Kawaihae Village 10 years ago. The housing was developed with the Act 105 and the FHA 235 programs.

The recent development on the Kohala Coast is beginning to show visible support for the long-term dreams of Gov. John A. Burns who was instrumental in getting the airport and highway for the Kohala Coast.

(For more on resort plans and a summary of Hawaii resorts, turn to pages H-2 and H-4).



This rendering shows interiors of villas development at Mauna Kea

How they cook fish from Mauna Lani ponds

Alika Cooper, keeper of the ancient fish ponds at Mauna Lani Bay Hotel, catches, cooks and serves pond mullet in the Hawaiian style.

He cleans the fish, seasons them, wraps and ties them in ti leaves. Over glowing coals he lays a grid on which he arranges the individually wrapped fish. There they steam-bake till, by their aroma, Alika judges them to be perfectly cooked.

They may be seasoned with Hawaiian salt, bacon strips, sliced onion and/or sliced lemon.

Hans Peter Hager, executive chef at Mauna Lani Bay Hotel, cooks the freshly caught mullet in the hotel kitchen. He described three methods as he worked:

Fish in white wine/cucumber sauce: "Saute the fish, which has been seasoned in seasoning salt, a little Worcestershire sauce, a little lime, flour and egg. This is the egg dip, so the fish stay nice and moist. It's just like Alika wraps his fish in ti leaves so they stay nice and moist. In the French style, we use the egg dip.

"For the sauce, use a little white wine in the skillet, fresh butter, a little seasoning salt, and that's it. Pour the wine, add the butter, mix while it's boiling. Shake the pan, drop in a few peeled, seeded slices of cucumber before serving. Nice an crunchy."

Fish in Meuniere Sauce with macadamia nuts: "Buy a little brown sauce, put some in a skillet with a little shallot or onion, Worcestershire sauce, lime juice, and you've got Meuniere Sauce.

"Saute the fish, put Meuniere Sauce over. Then put a little butter in another skillet, brown it to hazelnut color, drop macadamia nuts in and then pour right over the Meuniere Sauce on that fish."

Mullet with noodles: "Steam the mullet. Saute the noodles. Put noodles on the plate, steamed fish on top, shoyu sauce on top, grated ginger on top, lots of scallions on top.

"Keep a little hot oil. Squash 1 clove of garlic and drop in oil. When the clove is light brown, you take it out and put the hot oil right over the fish.

"Make these same recipes with any good white fish. Even red fish, no problem."

At the hotel, he said, the royal pond mullet will be cooked and served, but only by special arrangement.

"I believe, to serve this fish, it must be a special occasion, as a candlelight dinner in the room, or for very VIP people, honeymoon, anniversary, something like that," said Hans Peter.

"It will be written on the menu that arrangements may be made to have the mullet cooked and served, but only by special order.

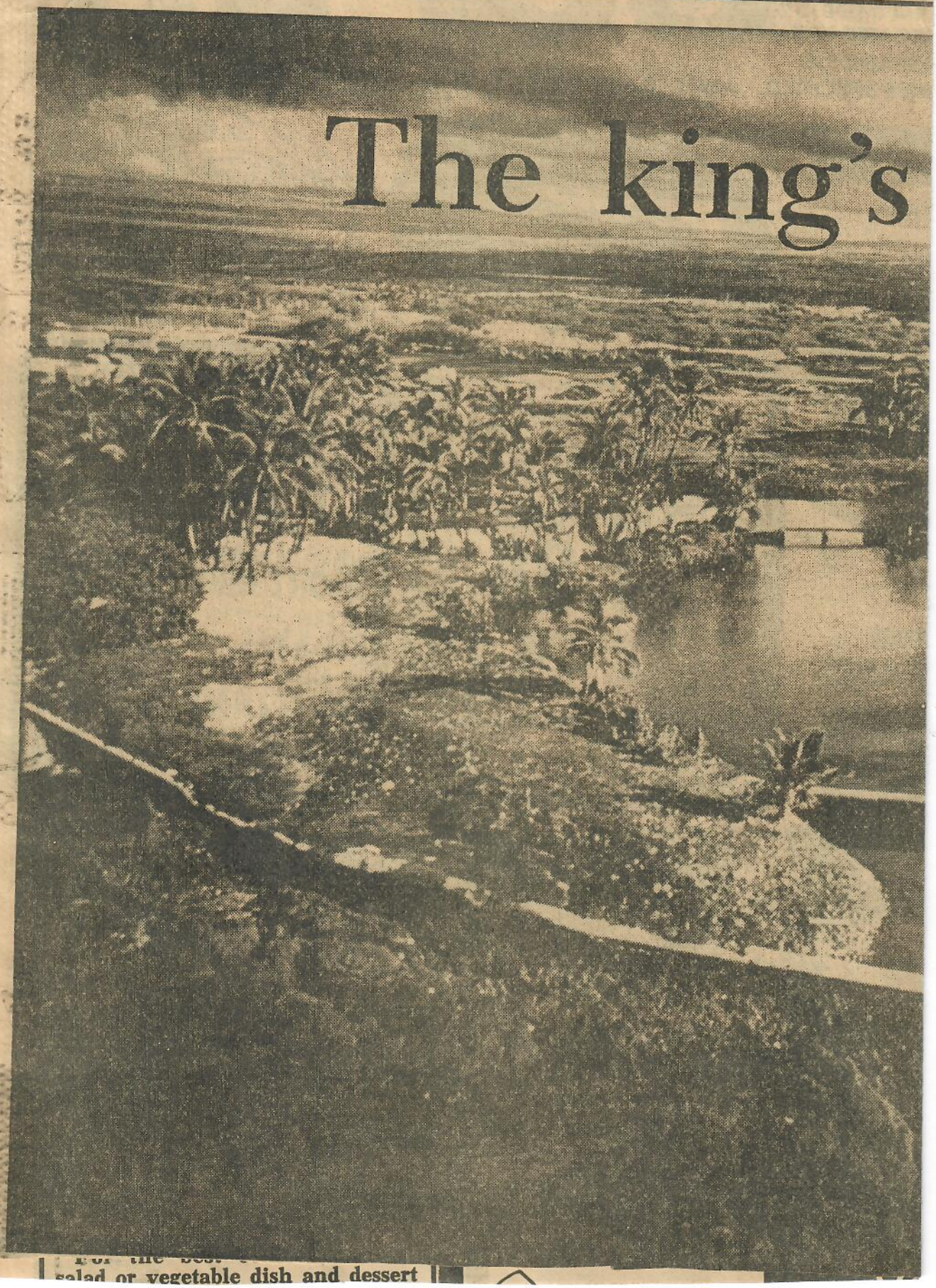
"Special land, special ponds with great history, so we keep it special."

Mary Cooke

More news D14,15,20
Comics D16

Food

The king's

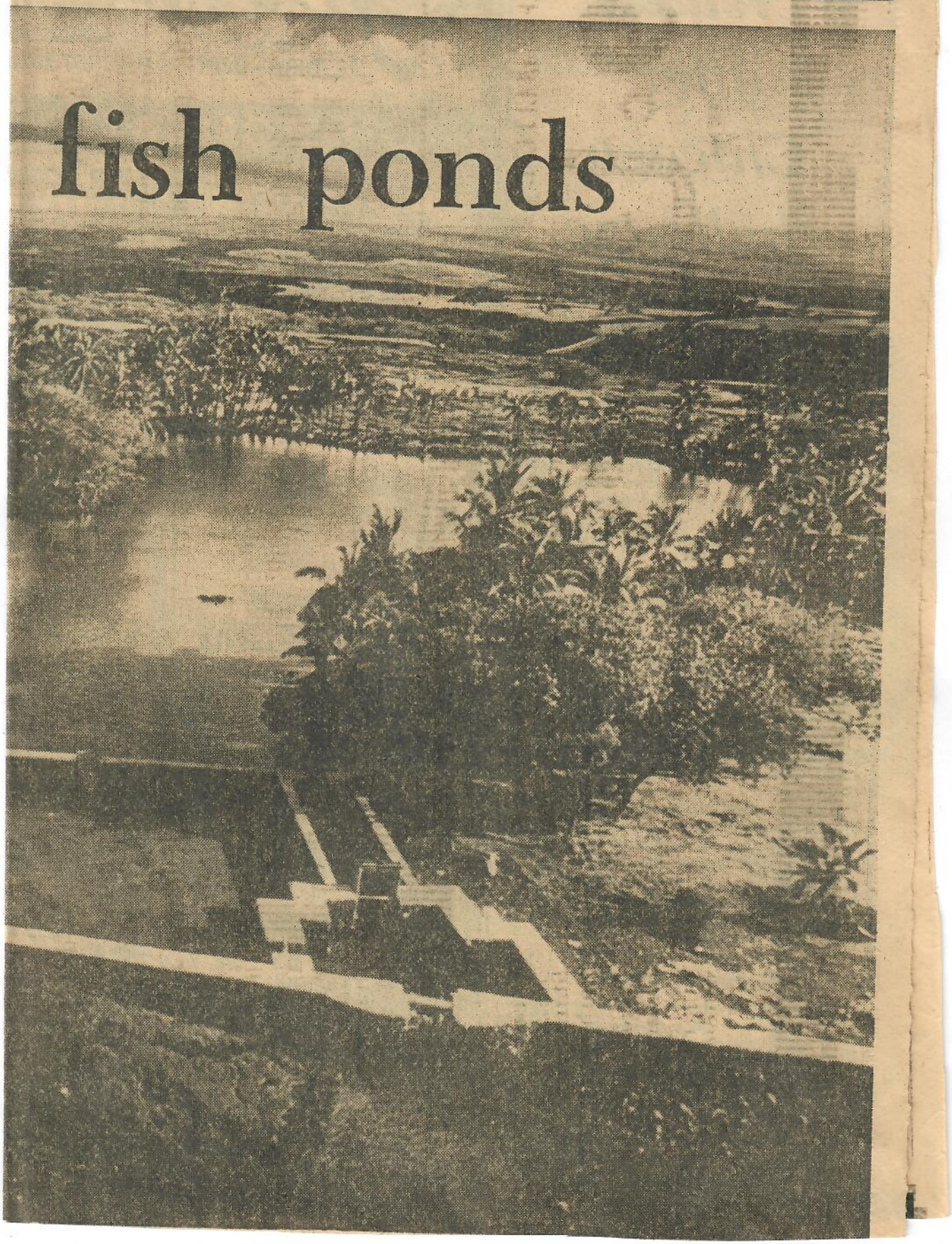


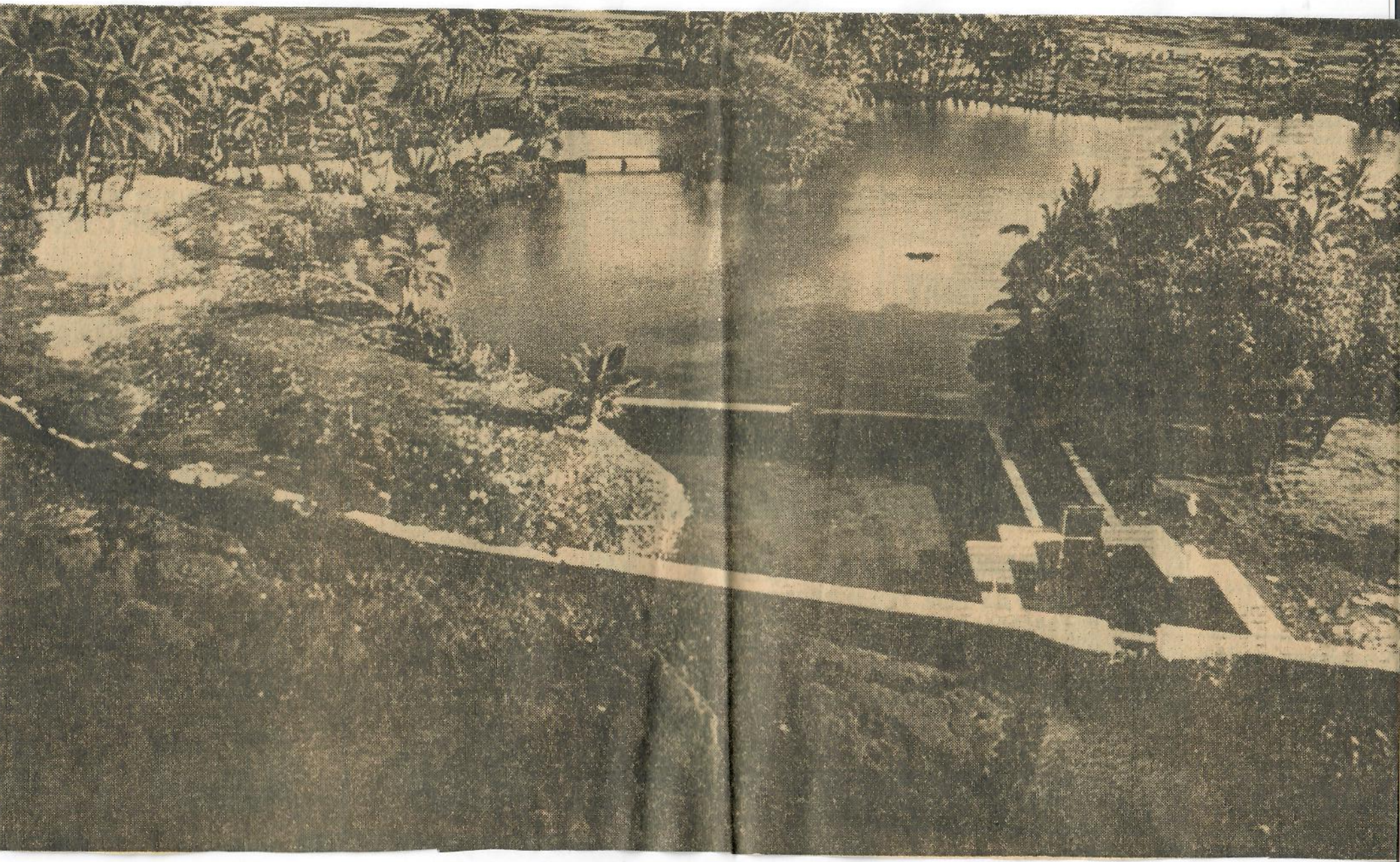
salad or vegetable dish and dessert

Report

The Honolulu Advertiser
Wednesday, February 2, 1983

fish ponds





By Mary Cooke
Advertiser Food Editor

The ancient Kalahuipua'a Fish Ponds at the new Mauna Lani Bay Hotel on the Big Island have been restocked with fish that, in past centuries, were raised there and eaten only by the Hawaiian alii (rulers).

The ponds are tended and worked in the technology of early Hawaiians who, scientists say, probably were the greatest aquaculturists in the world.

Memo to now and future guests at the new Mauna Lani Bay Hotel on the Big Island gold coast:

If, on a special occasion, you choose pond mullet for your dining enjoyment, pause and consider this:

The fish will be harvested from one of a series of legendary ponds once owned by, and operated to serve Hawaiian chiefs and kings.

Hawaiian chiefs and kings *only*.

In the ancient order, no person of lesser rank was permitted to eat the fish from these ponds.

Of the few remaining ponds that did serve the great Kamehamehaha and other Hawaiian *alii*, those at Mauna Lani are now the most visible and productive.

The manner in which the ponds are maintained, and the methods used to trap, raise, fatten, store and harvest the fish, provide an almost unbroken link between contemporary Hawaii and the Hawaii of Kamehameha I.

And before Kamehameha?

That, too, says Hawaiian legend.

Mauna Lani's four principal ponds — Kalahuipua'a, Waipuhi, Manoku and Hopeala — are remnants of Wainaalii Fish Pond, a pre-historic 600-acre pond which once fronted the Kohala coast. It extended from Kalahuipua'a (site of the hotel) to Kiholo.

Somewhere back in time, this vast monument to the aquacultural skill of ancient Hawaiians was divided and fragmented by the Kaniku lava flow, accounts of which have been preserved in Hawaiian legend.

"It's in the folk memory," said Kenneth F. Brown, president of Mauna Lani Resort, Inc.

Supporting Hawaiian folk memory, Brown cited a contemporary report written by the Oceanic Institute on the archeology and history of the ponds at Mauna Lani.

"By carbon dating samples of sediment from one of the ponds, it is (found to be) about 1,800 years old," he said. "It was a pond and its integrity is still there. It's a very ancient place."

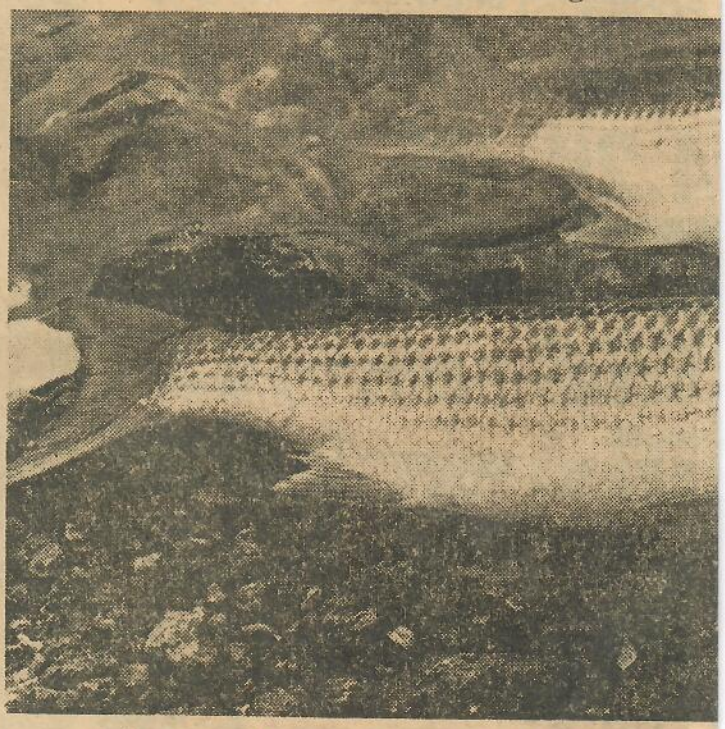
Of the original 600 watery acres, the Mauna Lani complex now owns and operates about 11 acres of working ponds, restocked with the fish that once were royal favorites: Silver pond mullet, *awa* and *moi*.

More than five acres of new ponds, replicas of the old, have been built and are being worked in the ancient manner to increase the production of fish.

The old ponds cluster near the sea and they are included in a recently created 27—acre park preserve which contains other significant Hawaiian sites and archeological treasures identified in a study made by Bishop Museum scientists.

A portion of an ancient Hawaiian foot trail, which runs along the coast and passes through the Mauna Lani property, is part of a still-visible system that once connected coastal destinations and provided routes to and from inland settlements at Waimea and Puuwaawaa.

Depending upon where the king and



Silver mullet, fresh-caught from the Kalahuipua'a Fish Pond, rest on black lava cinders, cooled by limpid waters in this protected area. For

Mauna Lani's four principal ponds — Kalahuipua'a, Waipuhi, Manoku and Hopeala — are remnants of Wainaalii Fish Pond, a pre-historic 600-acre pond which once fronted the Kohala coast. It extended from Kalahuipua'a (site of the hotel) to Kiholo.

Somewhere back in time, this vast monument to the aquacultural skill of ancient Hawaiians was divided and fragmented by the Kaniku lava flow, accounts of which have been preserved in Hawaiian legend.

"It's in the folk memory," said Kenneth F. Brown, president of Mauna Lani Resort, Inc.

Supporting Hawaiian folk memory, Brown cited a contemporary report written by the Oceanic Institute on the archeology and history of the ponds at Mauna Lani.

"By carbon dating samples of sediment from one of the ponds, it is (found to be) about 1,800 years old," he said. "It was a pond and its integrity is still there. It's a very ancient place."

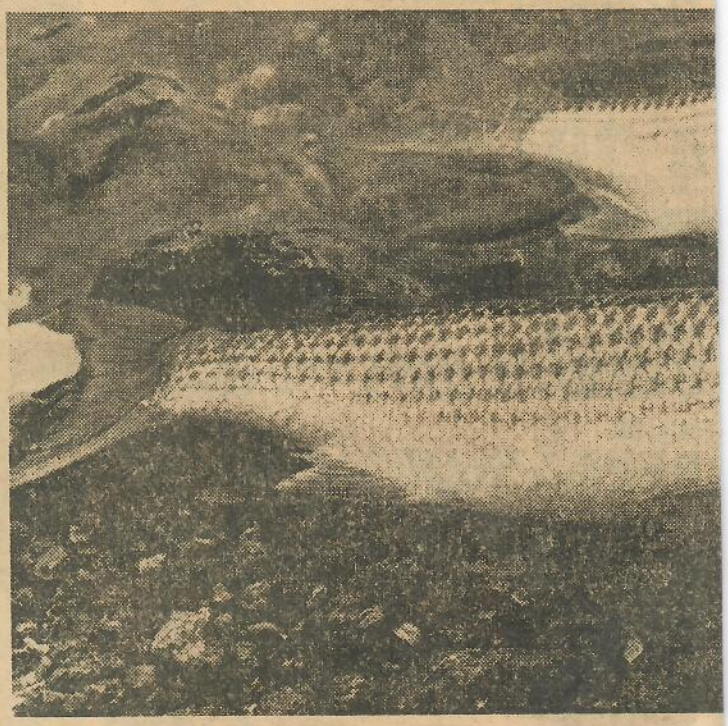
Of the original 600 watery acres, the Mauna Lani complex now owns and operates about 11 acres of working ponds, restocked with the fish that once were royal favorites: Silver pond mullet, *awa* and *moi*.

More than five acres of new ponds, replicas of the old, have been built and are being worked in the ancient manner to increase the production of fish.

The old ponds cluster near the sea and they are included in a recently created 27—acre park preserve which contains other significant Hawaiian sites and archeological treasures identified in a study made by Bishop Museum scientists.

A portion of an ancient Hawaiian foot trail, which runs along the coast and passes through the Mauna Lani property, is part of a still-visible system that once connected coastal destinations and provided routes to and from inland settlements at Waimea and Puuwaawaa.

Depending upon where the king and



Silver mullet, fresh-caught from the Kalahuipua'a Fish Pond, rest on black lava cinders, cooled by limpid waters in this protected area. For

Now a cluster of palm-fringed archeological treasures, these ponds link contemporary Hawaii with the Hawaii of Kamehameha The Great and his ancestors.

From these special areas, on special occasions, hotel guests will be offered choice food for the table. Daily, the ponds and their environs offer visitors "source food" for the spirit.

honu, a *makai* settlement ning distance of the Kalahuipua'a Fish Ponds. There, in his last years (1812 to 1819) he established his court. Historians have suggested the near location of these prime fish ponds may have been a reason for the great warrior's choice of residence.

Through time and tide, the Kalahuipua'a royal fish ponds remained, always very special, very private places. And their link with the Hawaiian *alii* still remains.

The man who owned the Kalahuipua'a ponds, before they became significant assets of the Mauna Lani complex, was the late Francis H. I'i Brown. He was a grandson of John Papa I'i, distinguished high-born Hawaiian who, from childhood, served in the courts of Kamehameha I, II and III.

"John Papa I'i was given by his parents to the royal court when he was 11 years old," said Kenneth Brown, nephew of Francis Brown, great grandson of I'i and president of Mauna Lani.

"They told him, 'This is our duty. It is your duty and privilege.'

"He was an early convert to Christianity, one of the first Hawaiians to learn to read and write, a devout Christian who spent his whole life in service to the *alii*. And in his youth he had participated in pagan ceremonies."

I'i's grandson, Francis Brown, cared well for the king's ponds. In the years he owned them, he repaired and restocked them. He planted thousands of coconut trees surrounding them and along the black lava coasts on either side of them. He also planted the pond areas with milo trees and *loulu*, a rare native Hawaiian palm. Quietly, he removed any non-Hawaiian plant life.

From the beginning of their stewardship, Mauna Lani executives have been dedicated to the idea that these ponds must continue to receive the protecting, nurturing care that is their due.

To maintain their productivity and status as a truly Hawaiian place — where there still lingers the spirit of the culture that was there before — they contracted with Alika Cooper, local commercial fisherman with a lifelong knowledge of the technology, care and working of Hawaiian fishponds.

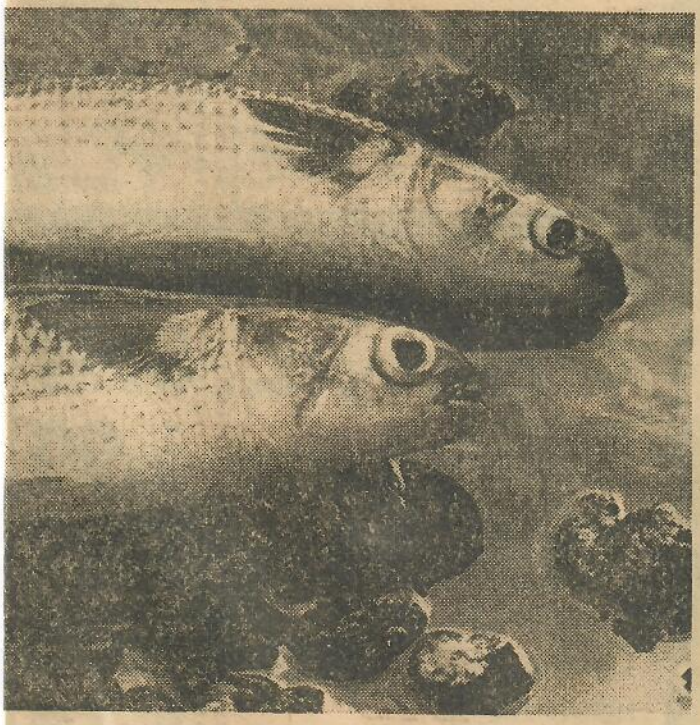
Cooper's principal work has been to increase the number of fish in about 16 acres of ponds and to repair, replace or build anew the *makaha* systems for the ponds.

"The *makaha* complex includes the oceanside gates and holding pens adjoining the ponds," Cooper said. Purpose and uses of the *makaha* are threefold: To trap wild, young fish from the ocean, to retain and fatten them and to provide areas to harvest them.

Traditionally, Hawaiian fish ponds

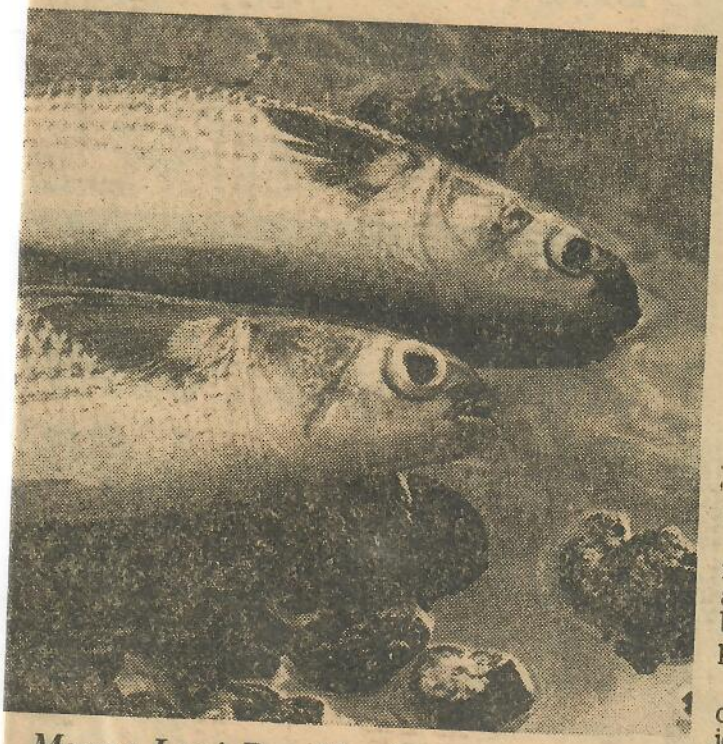
Continued on page 13

chiefs were in residence (early Hawaiian rulers maintained a mobile court), their swiftest runners daily fled along the trails that led to and from the nearest royal fish ponds. Homeward bound, they carried calabashes of freshly caught fish surrounded by enough pond water to keep them alive until they could be delivered to the royal conclave.



Mauna Lani Bay Hotel recipes to prepare mullet or any fine white fish, *see page 12.*

chiefs were in residence (early Hawaiian rulers maintained a mobile court), their swiftest runners daily fled along the trails that led to and from the nearest royal fish ponds. Homeward bound, they carried calabashes of freshly caught fish surrounded by enough pond water to keep them alive until they could be delivered to the royal conclave.



Mauna Lani Bay Hotel recipes to prepare mullet or any fine white fish, *see page 12.*

anity, one of the first Hawaiians to learn to read and write, a devout Christian who spent his whole life in service to the *alii*. And in his youth he had participated in pagan ceremonies."

I'i's grandson, Francis Brown, cared well for the king's ponds. In the years he owned them, he repaired and restocked them. He planted thousands of coconut trees surrounding them and along the black lava coasts on either side of them. He also planted the pond areas with milo trees and *loulu*, a rare native Hawaiian palm. Quietly, he removed any non-Hawaiian plant life.

From the beginning of their stewardship, Mauna Lani executives have been dedicated to the idea that these ponds must continue to receive the protecting, nurturing care that is their due.

To maintain their productivity and status as a truly Hawaiian place — where there still lingers the spirit of the culture that was there before — they contracted with Alika Cooper, local commercial fisherman with a lifelong knowledge of the technology, care and working of Hawaiian fishponds.

Cooper's principal work has been to increase the number of fish in about 16 acres of ponds and to repair, replace or build anew the *makaha* systems for the ponds.

"The *makaha* complex includes the oceanside gates and holding pens adjoining the ponds," Cooper said. Purpose and uses of the *makaha* are threefold: To trap wild, young fish from the ocean, to retain and fatten them and to provide areas to harvest them.

Traditionally, Hawaiian fish ponds

Continued on page 13

The king's fish ponds

Continued from page 1

are located in sheltered coastal areas or bays where ocean water mixes with fresh or brackish water from subterranean springs. Their seaside boundaries, (often attributed to the *menehune*, Hawaii's legendary pre-historic builders), are walls made of porous lava rock, built between and connecting two points of land.

At a break in the wall, there is the intake-outlet juncture that leads to the *makaha* complex.

The outer, seaside gate (made of irregular, vertical tree limbs) leaves spaces through which baby fish, spawned in the ocean, are swept in with high tides which carry them up through the sluice canal and into the pond. A solid gate is then lowered to keep them from escaping back to sea while they are still small.

Cooper said another Hawaiian method of stocking the ponds is to net *pua* or two-or-three-inch-long "fingerlings" in the ocean and transfer them to the ponds.

When the fish mature and grow fat, they are no longer able to get back to sea through the outer *makaha* gate. But at every high tide, they are attracted by the ocean water effluvia and swim toward it. As they swarm around the outer gate, the pond keeper has only to trap them by lowering the inner gate. He then harvests the fish wanted for a particular meal. In the old Hawaiian way, he takes no more than are needed at any time.

Fish within the pond also may be caught by gradually closing them into a "surround net" and bringing it to shore.

Cooper and Norman Ah Hee, who succeeds him as supervisor of the ponds at Mauna Lani, demonstrated the latter method and harvested a mid-morning catch in Kalahuipua'a pond.

The men waded waist-deep into the pond, maneuvering their net in a semi-circle. Without any aggressive motions, they surrounded a few fish and guided the glistening, silver prey — still alive and riding easily in the net — toward the shore.

Early Hawaiians designed their fish ponds to accommodate maximum nutrition for the fish, necessary flora and fauna in the ponds and, because of their shallow depth, radiation from the sun that penetrates to the bottom.

Add to this the flow of tides, the nutrients carried in by each tide and the to-and-fro circulation that keeps the ponds flushed and clean.

Also, add turtles.

"Turtles have been in these ponds for years," Cooper said. "They eat the *limu* (pond weed) that would just take over unless it was controlled. They also stir up the bottom and bring up stuff the mullet like to eat.

"The turtles are good workers and they are vegetarian so they can live in the ponds with the fish."

Not so, he said, concerning the barracuda and *ulua* that sometimes enter the ponds through the *makaha* when they are babies.

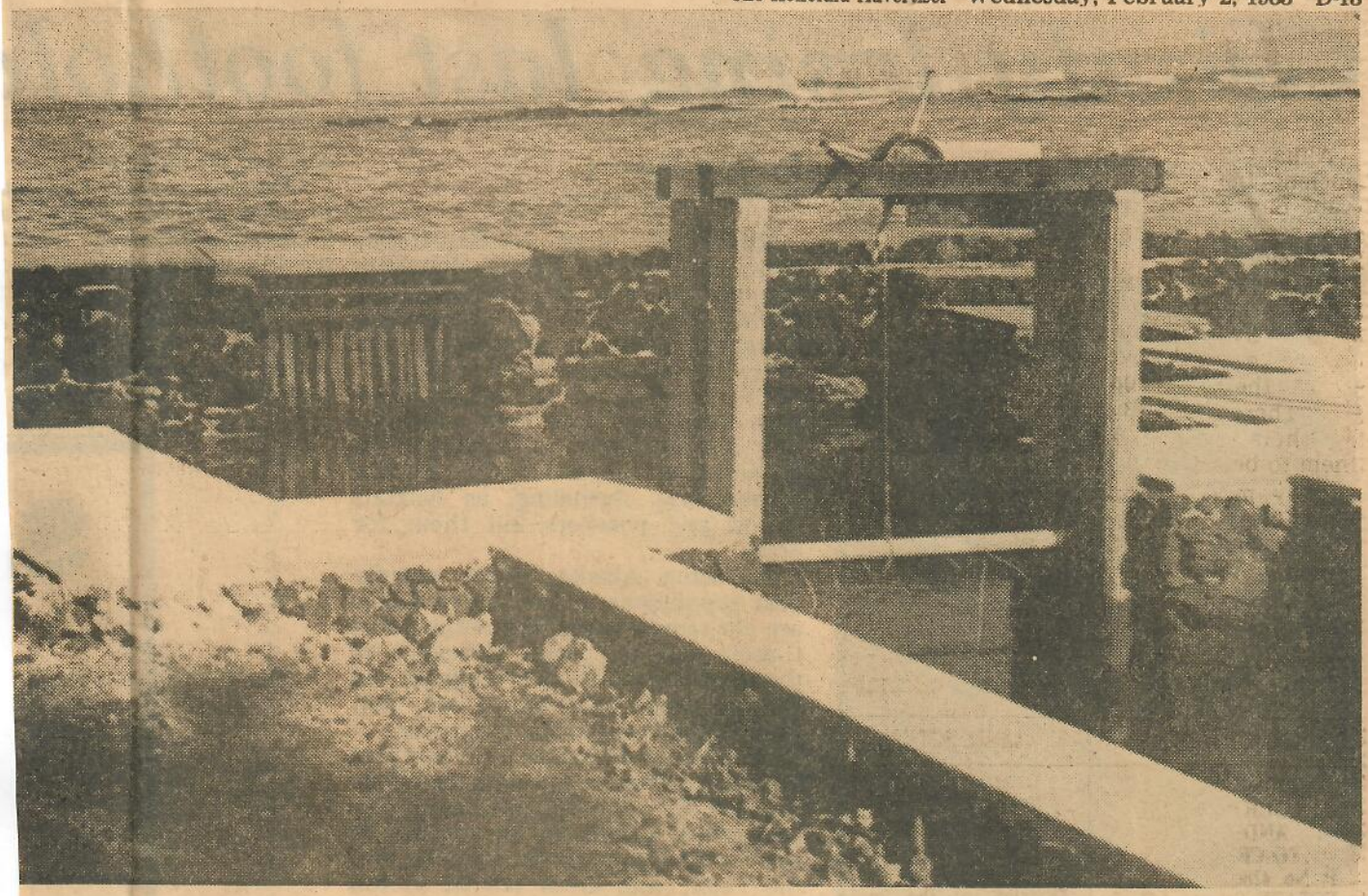
"They are predators," Cooper said. "As they grow, they prey on the mullet and *awa* in the ponds, mostly the mullet."

The solution: Cooper set aside one small pond on the property, harvested the "poachers" and put them in it by themselves.

"There were a lot of barracuda in the ponds. The biggest one we took out was about 50 pounds," he said.

"Now we keep them all together in 'the predators' pond' and people can watch when we feed them."

Meanwhile, safe from these sea bandits' lightening swift thrust through limpid pond waters — or any man-made trauma — the mullet, *awa* and *moi* grow to great sweetness, tenderness and fatness, and they become food that is indeed fit for a king.



The makaha complex

The oceanside gate, made of irregular, vertical tree limbs, allows baby fish to enter the pond with the tide.

The second gate, center, is built of solid planks. It can be raised or lowered.

When lowered, as shown in photo, it traps young fish in sluice canal, right, which leads into the pond.

Mature, fat fish cannot go back to sea through spaces in the outer gate. They are easily harvested when trapped in the small area between the two gates.

ADVERTISER

Chef Hager **Pond keeper Cooper**

The king's fish ponds

Continued from page 1

are located in sheltered coastal areas or bays where ocean water mixes with fresh or brackish water from subterranean springs. Their seaside boundaries, (often attributed to the *menehune*, Hawaii's legendary pre-historic builders), are walls made of porous lava rock, built between and connecting two points of land.

At a break in the wall, there is the intake-outlet juncture that leads to the *makaha* complex.

The outer, seaside gate (made of irregular, vertical tree limbs) leaves spaces through which baby fish, spawned in the ocean, are swept in with high tides which carry them up through the sluice canal and into the pond. A solid gate is then lowered to keep them from escaping back to sea while they are still small.

Cooper said another Hawaiian method of stocking the ponds is to net *pua* or two-or-three-inch-long "fingerlings" in the ocean and transfer them to the ponds.

When the fish mature and grow fat, they are no longer able to get back to sea through the outer *makaha* gate. But at every high tide, they are attracted by the ocean water effluvia and swim toward it. As they swarm around the outer gate, the pond keeper has only to trap them by lowering the inner gate. He then harvests the fish wanted for a particular meal. In the old Hawaiian way, he takes no more than are needed at any time.

Fish within the pond also may be caught by gradually closing them into a "surround net" and bringing it to shore.

Cooper and Norman Ah Hee, who succeeds him as supervisor of the ponds at Mauna Lani, demonstrated the latter method and harvested a mid-morning catch in Kalahuipua'a pond.

The men waded waist-deep into the pond, maneuvering their net in a semi-circle. Without any aggressive motions, they surrounded a few fish and guided the glistening, silver prey — still alive and riding easily in the net — toward the shore.

Early Hawaiians designed their fish ponds to accommodate maximum nutrition for the fish, necessary flora and fauna in the ponds and, because of their shallow depth, radiation from the sun that penetrates to the bottom.

Add to this the flow of tides, the nutrients carried in by each tide and the to-and-fro circulation that keeps the ponds flushed and clean.

Also, add turtles.

"Turtles have been in these ponds for years," Cooper said. "They eat the *limu* (pond weed) that would just take over unless it was controlled. They also stir up the bottom and bring up stuff the mullet like to eat.

"The turtles are good workers and they are vegetarian so they can live in the ponds with the fish."

Not so, he said, concerning the barracuda and *ulua* that sometimes enter the ponds through the *makaha* when they are babies.

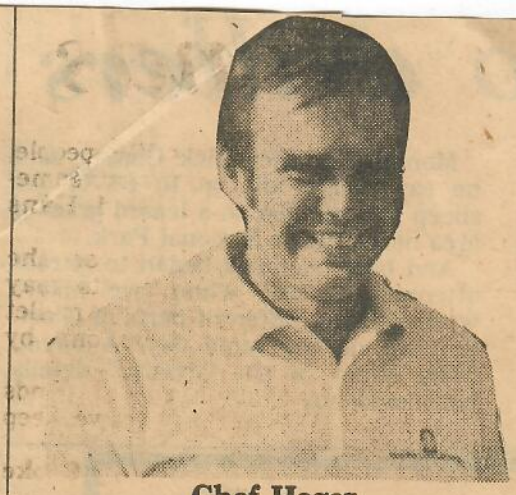
"They are predators," Cooper said. "As they grow, they prey on the mullet and *awa* in the ponds, mostly the mullet."

The solution: Cooper set aside one small pond on the property, harvested the "poachers" and put them in it by themselves.

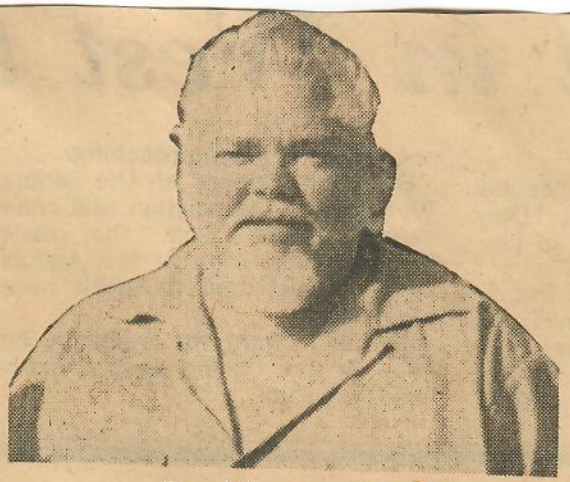
"There were a lot of barracuda in the ponds. The biggest one we took out was about 50 pounds," he said.

"Now we keep them all together in 'the predators' pond' and people can watch when we feed them."

Meanwhile, safe from these sea bandits' lightening swift thrust through limpid pond waters — or any man-made trauma — the mullet, *awa* and *moi* grow to great sweetness, tenderness and fatness, and they become food that is indeed fit for a king.



Chef Hager



Pond keeper Cooper

The Mauna Lani Terrace condominium project is under construction on the Big Island. All units are either oriented toward an artificial lagoon or historic fishponds. — Photo by Bob Fewell.

letters

FEB 9, 1983
HONOLULU ADVERTISER

Forget Gibson not

Who will represent Walter Murray Gibson next Saturday at the centennial celebration of the crowning of Kalakaua and Kapiolani?

Gibson, the flamboyant prime minister of Kalakaua who so enraged the planters and business community of the time, was above all others responsible for the construction of Iolani Palace and for having a coronation.

Since 1886, when Gibson was run out of the kingdom by the men of the Bayonet Revolution, his name has been relegated to official oblivion. No street, park, public school or even plaque preserves his name, though many of far less importance in Hawaii's history have been so honored.

Will the blacklisting be continued next Saturday? It would be ironic to have on hand representatives of the very families and institutions which bitterly opposed the coronation — because it might inflame Kalakaua's ambition to really rule — and to have no place at Iolani Palace for the shade of the premier who engineered both place and occasion, 100 years ago.

ROBERT M. KAMINS
JACOB ADLER

Sadness about Kalahuipua'a

Re "The King's Fish Ponds," February 2.

It saddens and depresses me to be reminded of the drastic changes that have happened to Kalahuipua'a over the past several years.

The hotel has been built, the golf course realized. The hotel complex and planned condominiums will be expanded considerably. Many aspects of the true story of Kalahuipua'a have been kept hidden from your readers — the foreign corporation that now owns the land; the photographer's angle has cropped out the newly constructed hotel and the green carpet of the Francis I'i Brown Golf Course laid out over bulldozed lava grounds.

In my mind, Mary Cooke painted a false paradise of Kalahuipua'a that was aimed to deceive both innocent readers and tourists alike.

Among the many deceits that I felt were concealed in this deceptively pleasant article, one stands out that adds to the tragedy of this place. The investors have changed the name of the locale. From Kalahuipua'a the absolutely incongruous name of "Mauna Lani" is now being brainwashed into the minds of our uninformed people and tourists alike, by the media, the foreign investors and their advertisers . . .

RICHARD HAMASAKI

Where are chiefs?

In regards to a letter by Virgil R. Krueger (1/26) regarding his knowledge on Hawaiian land issues, I wish to say that for hundreds of generations before Cook's arrival Hawaiian chiefs who maintained the life of the land were allowed to rule by their people and were expected to provide and take care of the very same people who served them.

If not, the people would transfer their allegiance to another chief.

Kamehameha the Great, listening to certain dissatisfied chiefs dispossessed of family lands by people by foreign disease and the presence of warships of foreign nations in Hawaiian port of calls interfering in Hawaiian politics, this absurd idea of the Great Mahele would never have happened.

Historically it has always been "by force" that Hawaiians have been able to preserve their rights to their land. I ask your readers to look specifically to the overthrow of Liliuokalani.

It was America which chose "by force" to destroy the Hawaiian identity and to subject Hawaiian people and "my" generation to humiliation and poverty.

Where are the Kamehameha's of today who can hear the Hawaiians' plight and rescue us from this wicked chief called America?

R. HIKO'ULA HANAPI

Cost of celebrating

I am a football fan and, like all NFC loyalists, I cheered the Washington Redskins' Super Bowl victory over Miami. Remembering the elation in Hawaii when the University of Hawaii Wahines won the National Collegiate Women's Volleyball title, I can appreciate the civic pride that the residents of Washington, D.C. must feel.

However, I find it very difficult to understand how President Reagan could have judged this accomplishment to be so great or important to the nation as to warrant granting all federal employees in the Washington area two hours off to attend a parade in tribute to the Redskins' victory. Sports fans and presidential admirers may think that I am nitpicking, but I ask them to consider the cost of this grand gesture.

According to the 1982 Federal Personnel Guide, the average wage of general schedule federal employees was $10.50 an hour on March 31, 1981. Of the 3 million federal employees, more than 340,000 are employed in the Washington, D.C. area. A few simple calculations demonstrate that President Reagan's gesture of civic pride was a grand one indeed as it cost taxpayers more than $7 million.

This appears to be a misplacement of priorities by a president who is publicly committed to increasing government efficiency and coming as it does during a period when stories of deficits, budget paring and cuts in entitlement programs to the needy appear daily on the front pages of our newspapers.

A. MICHAEL HO

Haoles & Hula Bowl

I am writing in reaction to a somewhat sarcastic article published on January 21, concerning the Hula Bowl half-time entertainment on January 15.

As a member of the 1983 McDonald's Hula Bowl Band, I felt that the haoles (Caucasians) received enough acknowledgement throughout the show. We even played a song titled "I Got Rhythm", that represented the Big Band era. It was highlighted by the performance of the All-American drill team, which was composed of about ninety-eight percent haoles, if not more.

This song had nothing to do with the Japanese, Chinese, Korean, or Portuguese people of the Islands. Therefore, we can say that it was dedicated to the haoles, although it was not di-

2-24-84 HONOLULU STAR-BULLETIN A-14

The Richness of Our Ancient Fishponds

By Russ Apple

Tales of Old Hawaii Columnist

ESTUARIES ARE SAID to be about 20 times more productive than an alfalfa field, acre for acre, and about twice as productive as a corn field.

Long before — perhaps three centuries before — Western scientists began to study, appreciate and protect estuaries, ancient Hawaiians put estuaries to work for their gods and for their high chiefs.

Ancient Hawaiians farmed fish in their manmade estuaries.

Hawaiian fishponds were estuaries.

On the Mainland, estuaries are thought of as river mouths invaded by ocean tides to mix fresh water and salt water in shallow bays and flats.

Flip that concept around for Hawaiian fishponds.

Hawaiian fishponds enclosed shallow parts of the ocean. Sometimes Hawaiians used natural ponds behind barrier dunes of sand; sometimes they built long rock walls to encircle ocean water on reef flats. Fresh water invaded the ponds from streams and springs.

Nutrients came in Hawai'i's fishponds on each tide. Nutrients also arrived constantly from inland, carried from watersheds to the ponds by streams.

When rain fell, surface runoffs dumped even more nutrients into the ponds.

Estuaries and Hawaiian fishponds were productive because sunlight could penetrate their shallow depths.

Estuaries occur naturally on the continents.

HAWAIIANS BUILT their own estuaries. Fishponds were such handy and reliable sources of protein food that Hawaiian chiefs built them along coasts wherever natural features permitted.

At the time of Kamehameha the Great there were about 335 royal fishponds scattered around the coasts of most of the Islands. Each was controlled by a high chief and its products of fish, seaweed and crustaceans were kapu to commoners.

How did Hawaiian fishponds — manmade estuaries — work?

Remember that each Hawaiian fishpond was an enclosed body of water. Each was unique in its physical, chemical and biological attributes.

It's the sunlight that makes them work.

Sunlight penetrates down in the pond water. How much goes down and how far depends on the translucency of the water.

Scientists term the little particles suspended in water turbidity. Murky water has high turbidity. High turbidity slows the growth rates of fish, and of all the things fish like to eat.

Fishponds of ancient Hawai'i had clear water, low turbidity.

(Today, most surviving fishponds have high turbidity. Modern man has fooled with the watersheds and muddied up shore waters near the fishponds.)

Nutrients from tides and watersheds fed the plant plankton. Sunlight made the plant plankton grow and grow.

THAT GREEN or blue-green algae seen in some of the ponds today is plant plankton. Animal plankton eat the plant plankton. Fish eat the animal plankton. So do lobsters, crabs and shrimps. Bigger fish eat the smaller fish that ate the animal plankton.

That's the food chain of the Hawaiian fishpond. It went on until a fat, big fish was placed on the altar to the gods; and another placed before a high chief.

That chief also got the shellfish and seaweed from his royal pond.

In that food chain, each time there was a transfer of food energy upward, there was about a 90 percent energy loss.

It took a thousand pounds of plant plankton to produce about a hundred pounds of animal plankton.

It took about 100 pounds of animal plankton to produce the 10-pound fish that went on the altar.

And another thousand pounds of plant plankton to start the food chain which resulted in the 10-pounder placed before the chief.