

Fishing, But Little Catching · Pakini Survey Results

How much fishing is taking place in the bay?

- Estimated annual fishing hours; 95,000 hrs
- 1,385 individual fish caught over 12 months
- 81% of fisher groups interviewed did not catch any fish
- 67% said they planned to eat their catch

Where do the fishers come from?

Residents of Maunaloa Bay area comprise 49% of the bay's fishers; 43% came from other parts of O'ahu; 8% are from outside O'ahu.

Which fish are most targeted in the Bay?

- O'io
- He'e
- Papio
- Uhu

What are the top fish caught in the Bay?

- Goatfish/Weke ("Oama season)
- Surgeon/Tangs
- Shrimp (for bait)
- Crab

How much effort is required to catch a particular fish?

- 1 Papio ~ 50 hours
- 1 O'io ~ 29 hours
- 1 He'e ~ 5&1/2 hours
- 1 Uhu ~ 5 hours
- 1 Goatfish/Weke ~ 1 hour

What is the average size of fish being caught?

- Uhu: 12-16 inches (legal size = 12 inches)
- Goatfish: 2-4 inches (legal size = varied depending on species)
- Surgeon/Tangs: 4-6 inches (legal size = 5-16 inches depending on species)
- Aholehole: 4-5 inches (legal size = 5 inches)

In what ways are people fishing in the bay?

Most popular were: dunk, spear, whip and fly.

To what extent are fishing methods/gear types being employed?

Mostly pole & line, with spearfishing in second place and scoop net in third place.

How much illegal fishing is taking place?

Lay gill nets are banned, but there were 27 observations of them during the year-long survey.

If you are interested in helping Maunaloa Bay, please contact us at 808-744-0052 or info@malamamaunaloa.org

This project was sponsored by Mālama Maunaloa with funding from the Hawai'i Division of Aquatic Resources through NOAA and the Fisheries Local Action Strategies Committee and with support from The Nature Conservancy and local fishers.



For more information please visit: www.malamamaunaloa.org

MAUNALOA BAY PAKINI SURVEY



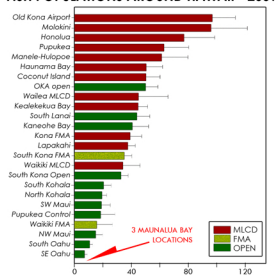
Fishers, residents and organizations like Mālama Maunaloa are working together to bring back the abundance of marine resources our kupuna remember in Maunaloa Bay to leave a healthy legacy for future generations.

The pakini survey was named for a traditional fishing basket that was historically used in Maunaloa Bay.

A Bay In Decline

Of nearshore areas around the state surveyed by local scientists, Maunaloa Bay ranks lowest in numbers of fish. The steep decline in fish populations in recent decades is driven by pollution and sediment from land suffocating the reef, invasions of foreign species displacing native ones, and harmful fishing practices that take too many fish at once.

FISH POPULATIONS AROUND HAWAII - 2009



Credit University of Hawaii

"One of the most telling points of these fishermen surveys is how long it's taking a fisher to catch his target. You know a bay is in trouble when it takes hours to catch anything at all, and often fishers go home with nothing at all. This is a problem across the state because a vast majority of the harvested reef fish species in the main Hawaiian islands are in critical or depleted condition."

Dr. Alan Friedlander,
fisheries scientist
University of Hawaii

Pakini Survey Volunteers' Personal Observations

Volunteers surveyed 2,000 fishers from December 2007 to November 2008. Surveys were done 8 days per month for 12 months.

Volunteers who conducted the pakini surveys shared the following personal observations.

"I was really pleased with how many fishers were happy to talk with us and participate in the survey. Fishers want to use the resource, and they care about it too."

"Many fishers don't understand that they are catching more fish than they need and that catching undersized fish lowers reproduction, especially uhu and other herbivores that are favored targets."

"We observed frequent commercial SCUBA night diving in the Bay with massive harvests. They declined to participate in our survey, but from personal observation, it looked like they took more in a few trips than all the recreational fishers took together."

"He's really popular in the bay and I surveyed one fisherman who caught nearly 30 he'e at once which appeared to be undersized."

"It's culturally important for all of us to malama the bay regardless of whether we take from it or not. But if we take from the bay, we need to give back in some way."



A fisher taking part in the 2008 Pakini survey

Toward a Healthier Bay

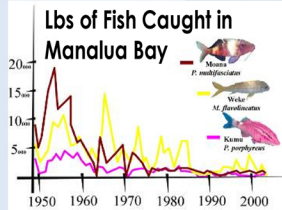
Numerous community-based efforts are underway to help Maunaloa Bay recover. Research is identifying the pollutants that enter the bay and their effects on marine life. And citizens are volunteering in various ways.



As part of the Makai Watch program in Maunaloa Bay, volunteers helped count native species found in Waialeale Stream, the only natural stream left flowing into the Bay.

Malama Maunaloa is working with Residents and volunteers to restore the sand and reef flats by removing invasive algae.

Fishers are playing a role too by participating with efforts like the Pakini survey, knowing and following fishing regulations, reducing catch of depleted fish species like uhu and weke, and taking only what they need, not what they can.



Credit Department of Aquatic Resources

"Fishing in Hawai'i was much different when my father first took me nearly 40 years ago. We'd fish in Kuli'ou'ou and Maunaloa Bay, and even though I thought there were plenty of fish to catch, he would tell stories of how much better it was when he was a child. I remember his tales of seeing thousands of mullet, and an abundance of 'aweawoe, weke and kumu. Anyone who has fished for a long time in Hawai'i will tell you they've seen a big drop in numbers of our reef fish. What's out there today is nothing compared to what I saw in my youth. It's past time for us to get concerned about that, and to take action before it is too late."

Bruce Blankenfeld,
Niu Valley,
recreational fisher
and navigator

