
**ASSESSING THE SOCIOCULTURAL CHARACTERISTICS OF
THE HO'OKENA TRADITIONAL FISHING GROUNDS:
Results of a Household Survey**

Hawai'i Community Stewardship Network and
Kama'āina United to Protect the 'Āina

In Partnership with

National Oceanic and Atmospheric Administration's
Pacific Islands Managed and Protected Areas Network and

South Pacific Regional Environmental Programme

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SUMMARY/ABSTRACT

The community of Ho'okena in the South Kona District of Hawai'i Island, Hawai'i, is known as a fishing village that continues to use many traditional Hawaiian practices to sustainably harvest food from the ocean for the purpose of feeding their families. Without access to this food source, some community members believe the community's lifestyle, cultural practice, and physical health would be jeopardized. Community representatives and other partners undertook a survey of Ho'okena households to (1) establish a baseline snapshot of the community currently utilizing the Ho'okena traditional fishing grounds; (2) establish a baseline of the Ho'okena community's dependence on subsistence fishing and utilization of traditional Hawaiian fishing methods in the Ho'okena traditional fishing grounds; and (3) determine the degree of support among the Ho'okena community for increased management in the Ho'okena traditional fishing grounds.

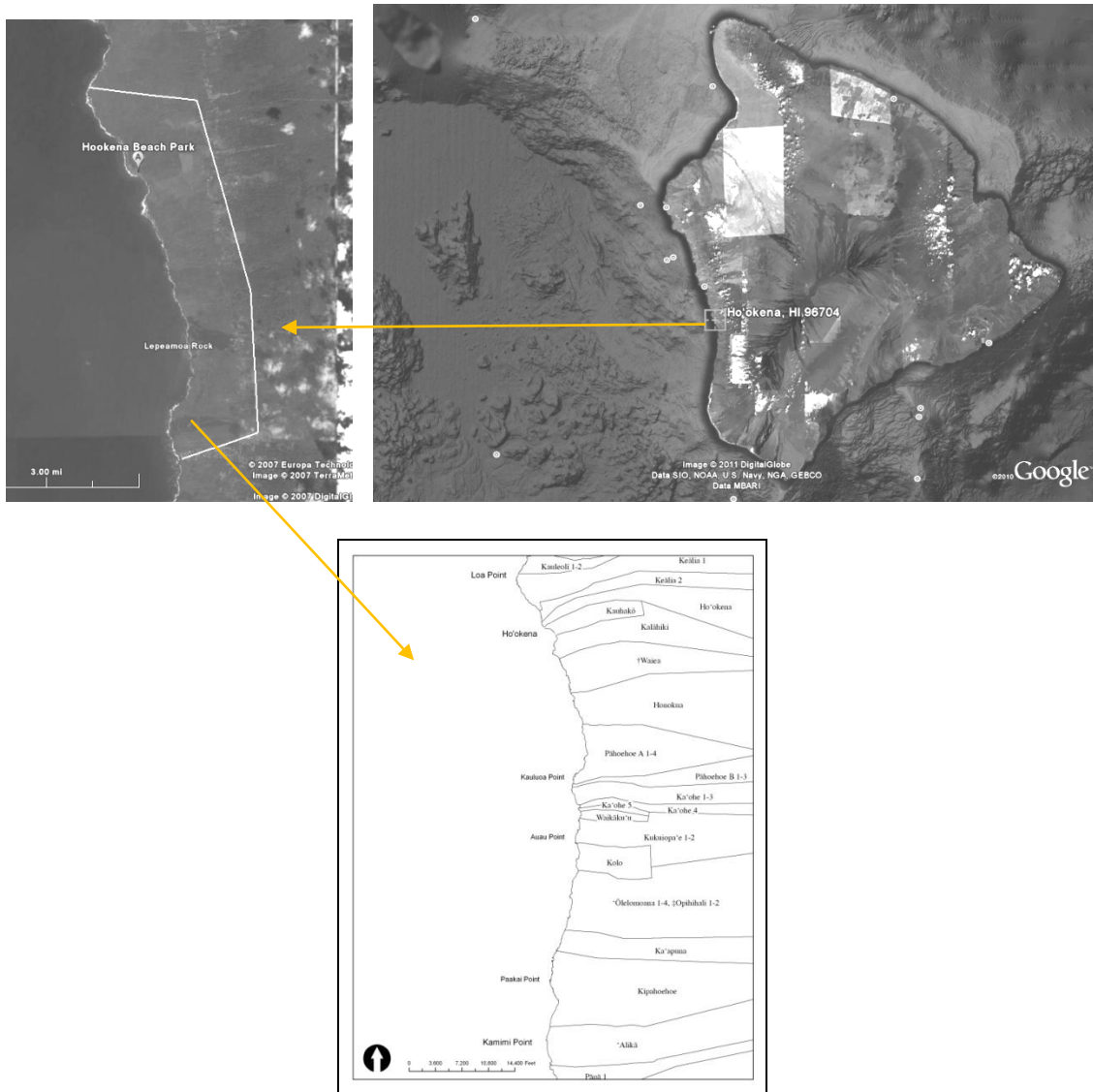
Half of Ho'okena's households were surveyed (short of the project's goal). Respondents were mainly males age 45 to 64 of at least partial Hawaiian ancestry living in the Ho'okena area. Most respondents reported that their households regularly utilize the Ho'okena traditional fishing grounds for fishing and other activities. Of those who fish, most do so in order to catch fish to eat, to give to others, and to use for special occasions such as family parties. Half of those surveyed said their household depends somewhat or a lot on marine resources from the area. Almost half of respondents said they utilize certain traditional Hawaiian practices when fishing. Of the proposed management strategies, those most strongly supported by respondents are Hawaiian practices, a seasonal kapu, and size limits.

BACKGROUND

The village of Ho'okena is located about twenty miles south of Kailua-Kona along the southwestern (leeward) side of Hawai'i Island in the district known as South Kona. "Ho'okena" is the name of both an *ahupua'a* (traditional Hawaiian land division) and a specific community inhabiting areas within and adjacent to the Ho'okena *ahupua'a*.

The community of Ho'okena includes a seaside village of approximately 20 households and an additional 25 or so households living *mauka* (up the mountain) from the seaside village. One of the last villages in Hawai'i where traditional *wa'a* (outrigger canoes)

are utilized for fishing, Ho'okena has a strong fishing tradition. In the Hawaiian tradition, communities only fished in certain areas and did not fish in another community's designated area without express permission from the *kono'hiki* (a traditional resource manager assigned by a chief). Twelve miles of coastline, from Loa Point to the southern boundary of the Alika *ahupua'a*, is considered to be the traditional Ho'okena fishing grounds.



In the 1990s, area fishermen grew increasingly concerned about declining fish stocks, which they attributed to an expansion in fishing pressure from aquarium fish collectors. As a result, a local community organization, KUPA (Kama'aina United to Protect

the 'Āina), formed and successfully pressured the State resources management authority to create Fishery Replenishment Areas limiting the aquarium fishing industry in South Kona.

KUPA envisions the continuation of a living Hawaiian culture in Ho'okena, which they directly equate with continued fishing traditions. Though the Fishery Replenishment Areas have been successful at increasing stocks of aquarium fish, fishermen and other community members continue to be concerned about other fish stocks, especially those species highly sought for food. Therefore major threats to KUPA's vision include the loss of fishing practices along with the decline in the fishery. KUPA is considering possible ways to address these threats and has been working with fishermen to develop a community-based marine resources management plan, including recommending new rules for the Ho'okena traditional fishing grounds, since 2008.

The Hawai'i Community Stewardship Network (HCSN) has been working with KUPA since 2007 and is assisting with management plan development. As part of that effort, HCSN and KUPA received training and support from the National Oceanic and Atmospheric Administration¹ (NOAA) to gather baseline sociocultural information about fishing in the Ho'okena traditional fishing grounds. The goal of the assessment was to inform the development of the management plan and to provide baseline information for assessing the efficacy of the management plan in the future.

RESEARCH DESIGN AND METHODOLOGY

Since 2007, HCSN and KUPA have been conducting key informant interviews and focus groups about marine resources management in Ho'okena, including possible new management activities and regulations. Through these means, we identified information gaps and possible management activities and regulations to vet with the broader Ho'okena community. Due to the nature of the information needed, we determined that a sociocultural assessment was needed. The goals of the sociocultural assessment were as follows:

1. Establish a baseline snapshot of the community currently utilizing the Ho'okena traditional fishing grounds.

¹ NOAA provided training and contributed funding and technical assistance to the project.

- a. Describe the community
- b. Describe the fishermen utilizing the area
2. Establish a baseline of the Ho'okena community's dependence on subsistence fishing and utilization of traditional Hawaiian fishing methods in the Ho'okena traditional fishing grounds.
 - a. Types of fishing they do/gear they use
 - b. Where they fish
 - c. How often they fish in the proposed area
 - d. What they do with their fish (eat, share, sell)
 - e. How else they use the proposed area
 - f. Use of traditional fishing methods
 - g. How much they depend on fishing for income/food
 - h. The perceived potential impact of resource decline
3. Determine the degree of support among the Ho'okena community for increased management in the Ho'okena traditional fishing grounds.
 - a. What they think about resource condition and threats
 - b. What they think about increased management
 - c. What they think about managing for subsistence and traditional practices
 - d. What they think about potential rules (including their own ideas)
 - e. Their willingness to participate
 - f. Where they get their information on fishing, and which sources they most trust

Because the Ho'okena area is relatively small and because we wanted to include as much of the community as possible in decision-making, we identified a household survey as the best possible research method to supplement the information already gathered.

A household survey form was developed and revised several times with assistance from a community representative. A quick, one-evening pilot of the survey was conducted, which resulted in a slight revision. After using the form for half of one day in the field, additional small changes were made.

We attempted to reach each household during a two-and-a-half day period in May 2009. This included households in the oceanside or *makai* village and households in the upland or *mauka* areas. We also alerted community members of our availability to conduct the survey at Ho'okena Beach Park in case they were not available during the daytime house-to-house survey. KUPA also hosted a potluck at the beach park one evening to encourage people to come and participate in the survey. Therefore, we surveyed people in one of three settings: their homes, at the beach park, and at the potluck at the beach park.

We combined the survey with a socioeconomic monitoring training workshop involving members from other communities around Hawai'i that are part of a community-based resources management learning network (called E Alu Pū, or Move Forward Together). Surveyors therefore consisted of community volunteers, HCSN staff members, and NOAA training and technical support staff that were a mix of ethnicities and an almost even mix of both sexes. At each household, we asked to speak with a representative of the household that was most familiar with fishing in Ho'okena, and we asked respondents to speak on behalf of their entire household. Each survey was conducted by two research partners, one of whom read the survey questions and one of whom recorded respondents' answers. Research partners were usually one male and one female of different ethnic backgrounds.

Each evening, research partners entered the gathered data into a Microsoft Excel spreadsheet. After the field research, Microsoft Excel was used to analyze the data.

In the two-and-a-half day effort, twenty-one households were surveyed by the trained community volunteers. Thirteen surveys were conducted at homes, and eight surveys were conducted at Ho'okena Beach Park. We spoke to household representatives from ten *makai* homes and eleven *mauka* homes.

RESULTS

Twenty-one household surveys were conducted. When we add members of households represented by respondents, 110 people are represented in survey results. Thirteen of respondents reported living in the Ho'okena area, two others live in nearby communities, one lives in California, and five declined to answer. Due to the sample size (approximately 47% of Ho'okena households), we are not able to conclusively state that the results represent the entire Ho'okena community.

Goal 1: Establish a baseline snapshot of the community currently utilizing the Ho'okena traditional fishing grounds.

Through the household survey, an attempt was made to describe the community of Ho'okena and the fishermen utilizing the area. In order to fully reach this goal, the remainder of Ho'okena households would need to be surveyed. In addition, fishermen at key access points to the Ho'okena traditional fishing grounds would need to be surveyed, as not only Ho'okena household members access the fishing grounds.

Of the twenty-one surveys completed, seventeen were with men and four were with women. Most respondents were between the ages of 45 and 64 and reported being of at least partial Hawaiian ancestry. Twelve respondents said they had more than twenty years of fishing experience, while two had between eleven and twenty years of fishing experience. Five respondents had no fishing experience. Questions specific to fishing were asked only of those who reported having fishing experience in the Ho'okena traditional fishing grounds.

Ethnicity

Of the twenty-one persons surveyed, four reported being Hawaiian, eleven reported being a mix of Hawaiian and other ethnicities, one reported being American Indian, two reported being white, one reported being a mix of Pacific Islands and other ethnicities, and one reported being a mix of Asian and white. One person did not report.

Age

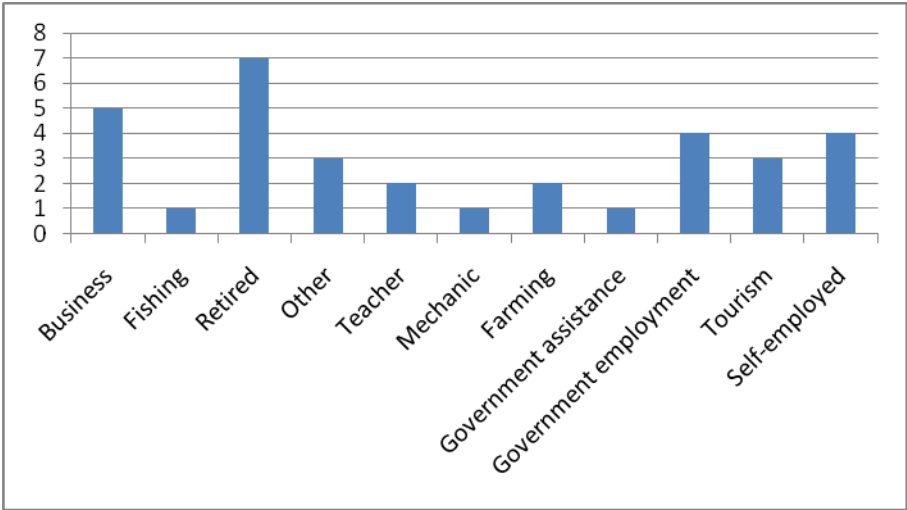
Of the twenty-one people surveyed, one was age 18 and younger, one was between 19 and 34; five were between 35 and 44; nine were between 45 and 64, and one did not report. In addition, the respondents reported that the number of people in their households, by age, are twenty-four people age 18 and younger; nineteen people age 19 to 34; eight people age 35 to 44; thirteen people age 45 to 64; and four people age 65 and over. Four respondents reported living alone. Therefore, for questions for which respondents answered for themselves and their household members, the total number of people represented was 110.

Residence

Thirteen respondents reported living in Ho’okena, likely due to the household nature of most surveys. Two reported living in nearby communities, one reported living in California, and five choose not to report.

Income Source

We gave respondents an opportunity to share multiple sources of income. They reported being involved in the following sectors:

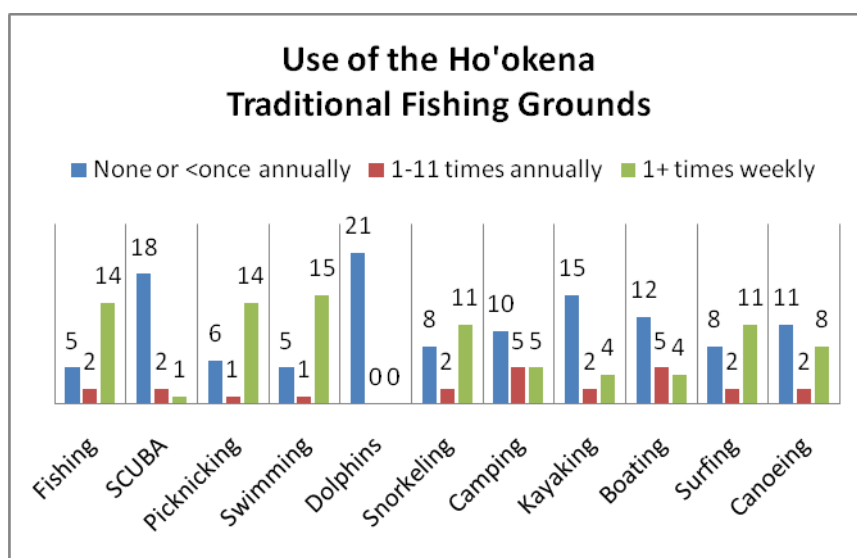


Goal 2: Establish a baseline of the Ho'okena community's dependence on subsistence fishing and utilization of traditional Hawaiian fishing methods in the Ho'okena traditional fishing grounds.

To describe the community's dependence upon the Ho'okena traditional fishing grounds, the survey sought to describe the use of the area, where and how often fishing takes place, types of fishing gear used, what is done with catch, the degree to which the community depends upon fishing for income or food, whether fishermen use traditional fishing practices and why or why not, and the community's perception of the impact of a decline in marine resources.

Use of the Area

Respondents reported using the Ho'okena traditional fishing grounds for a variety of activities. The activities most commonly engaged in are swimming, picnicking, and fishing in addition to snorkeling, surfing, and canoeing.

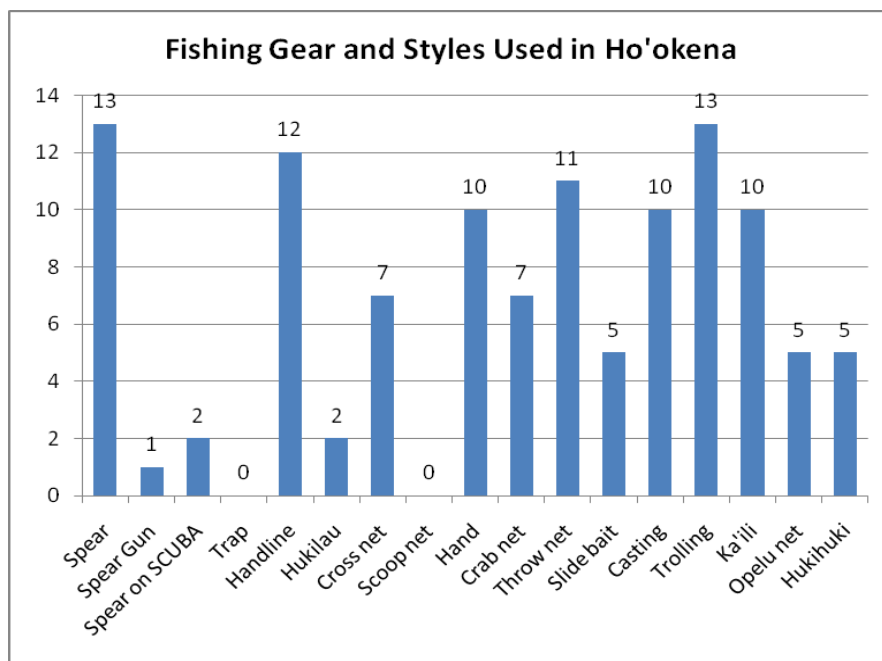


Fishing in the Ho'okena Traditional Fishing Grounds

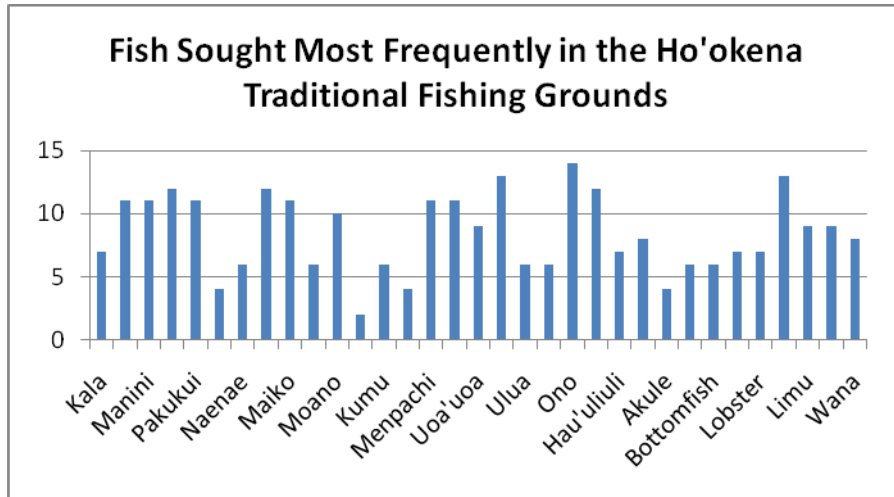
Of the sixteen people who reported fishing, nine fish more than once per week, four fish one to three times per month, two fish one to five times per year, and one fishes less than once per year. Of the nine people who reported fishing once or more per week...

- Eight reported having been fishing in Ho'okena for more than twenty years, with the other fisherman having been fishing in Ho'okena for eleven to twenty years.
- Eight reported a Hawaiian or Hawaiian mixed ancestry.
- Seven reported being the age of 45 to 64, with one age 35 to 44 and one 65 or older.

When asked about fishing gear, respondents most commonly reported that they and members of their households fish by trolling and by using spears (specifically Hawaiian slings or three-prong spears), hand-lines, and throw nets. Respondents reported that they and members of their household rarely or never fish *hukilau* style or by using spear guns, traps, scoop nets, or by using spears with SCUBA.



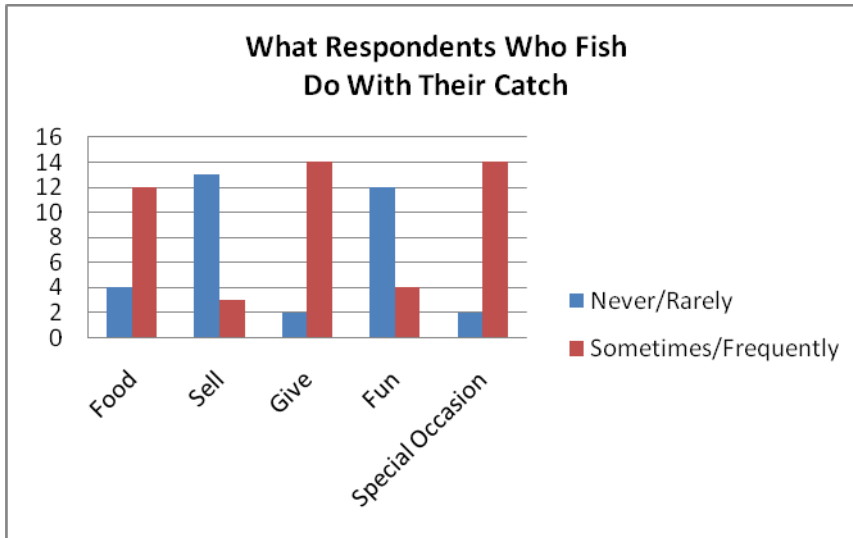
Respondents reported seeking a broad variety of species during their harvesting activities in the Ho'okena traditional fishing grounds, as shown in the graph below.



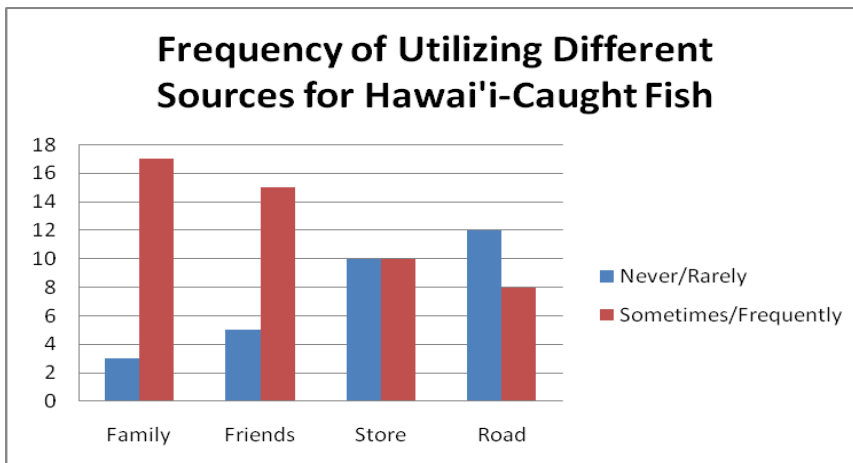
Using a map provided by research teams, respondents reported that members of their households most commonly utilized Zone 1 (14 responses), then Zones 2 and 3 (10 responses for each zone), followed by Zone 4 (8 responses). Respondents said their household members access these areas through Ho'okena (9 responses), Hōnaunau (8 responses), the old trails (7 responses), Keahou and Kahoe (3 responses each), then Miloli'i (2 responses).

Dependence on Fishing

When asked the primary motivation behind household members' fishing, most responded that they fish in order to eat the catch, give it to others to eat, or provide fish for food at special occasions such as family parties. When asked about the frequency of fishing for these different activities, respondents said their household members most frequently fish in order to catch for special occasions, then to give away, and then for their families to eat. Respondents said they and members of their households much less frequently fish primarily for fun or to sell the fish.



In addition to fishing themselves, households also depend upon fish provided by other sources to varying degrees. Respondents said their households mostly get fish from family and friends. About two-thirds as frequently, they purchase fish from the store or from road-side stands.



When asked how much respondents and their households depend upon marine resources from South Kona to eat or to make money, ten respondents said they depend somewhat or a lot, while nine said they depend a little or none at all.

Not surprisingly, those who reported fishing more frequently were more likely to say they have a higher dependence on fishing, as shown in the table below:

Frequency of Fishing	# of Responses	Dependence on Marine Resources	# of Responses
Once or more per week	9	Depend a lot	4
		Depend somewhat	3
		Don't depend very much	2
1-3 times per month	5	Depend a lot	1
		Depend	1
		Depend somewhat	2
		Don't depend very much	1
1-5 times per year	2	Don't at all depend	2
Less than once per year	1	Depend a lot	1
None	4	Don't at all depend	4

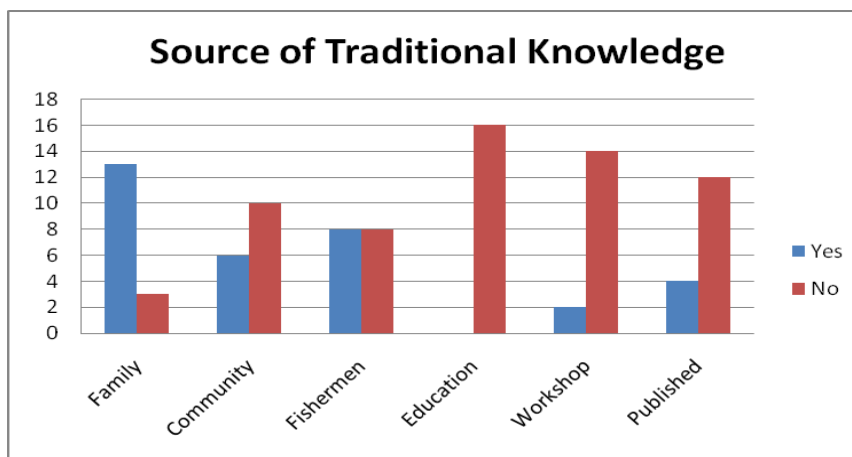
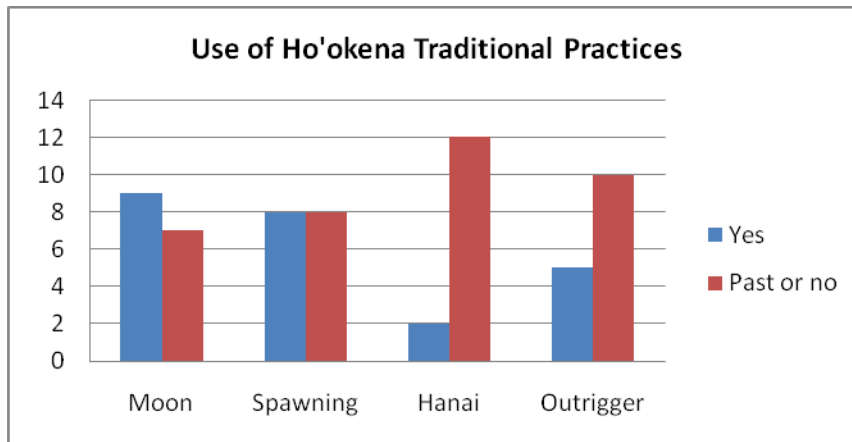
Likewise, those who reported fishing more frequently to feed themselves and/or their families reported a higher dependence upon fishing:

Frequency of Fishing for Food	# of Responses	Dependence on Marine Resources	# of Responses
Frequently	8	Depend a lot	4
		Depend somewhat	3
		Don't depend very much	1
Sometimes	4	Depend a lot	1
		Depend somewhat	2
		Don't depend very much	1
Rarely	4	Depend	1
		Don't depend very much	1
		Don't at all depend	2

Traditional Fishing Methods

Because of its rich cultural history and traditions, the Ho'okena community is interested in preserving its traditional Hawaiian fishing culture and in teaching members of the next generation to utilize those traditions. Therefore, the community was interested to learn about the level of use of traditional fishing methods. Results are captured in the graphs below. Most fishermen who utilize traditional practices reported learning these from other family members and, to a lesser degree, other fishermen. When asked why they believe some community members don't utilize practices considered traditional for

Ho'okena, most respondents felt that others don't know how to use traditional practices, with time considered another obstacle. Every respondent said they believed it is important for community members to practice methods considered traditional for Ho'okena.



Goal 3: Determine the degree of support among the Ho'okena community for increased management in the Ho'okena traditional fishing grounds.

To assess the community's support for increased management, the survey sought to describe what the community perceives about the health of marine resources in the area, what they think about different management strategies, and where they get information on fishing.

Health of Marine Resources in the Ho'okena Traditional Fishing Grounds

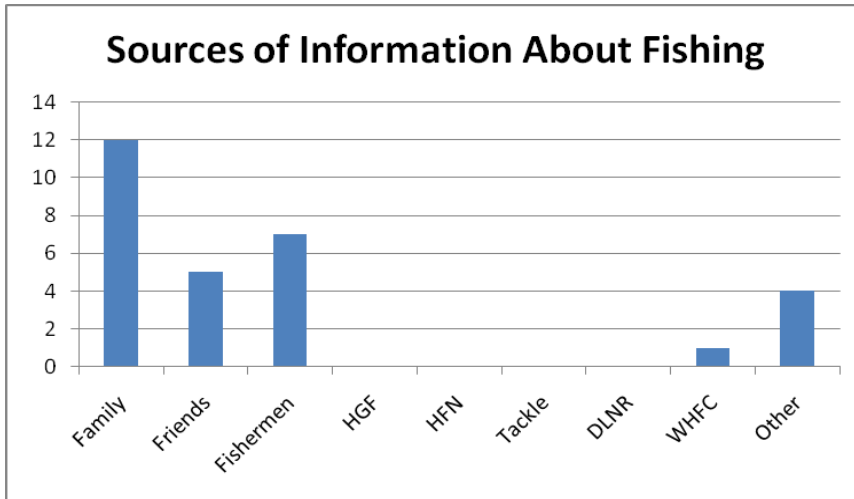
Two-thirds of respondents said they thought marine resources in the Ho‘okena traditional fishing grounds were healthy, with an additional one person saying they were “very healthy.” However, the same percentage said they thought the condition of these resources had declined over the past five years, and 84% said they thought the condition of resources had declined over the past 20 years.²

When asked why respondents gave the answers they did, they responded with a diversity of opinions, with overharvesting commonly mentioned:

- “People don’t go just for feed family. They go to sell.”
- “So much people fishing.”
- “People take too much—mostly outsiders.”
- “Greedy.”
- “Clorox.”
- “Pound fish...take too much. Should take only for your family or for a party.”
- “The shoreline is dry, so we get no more limu.”

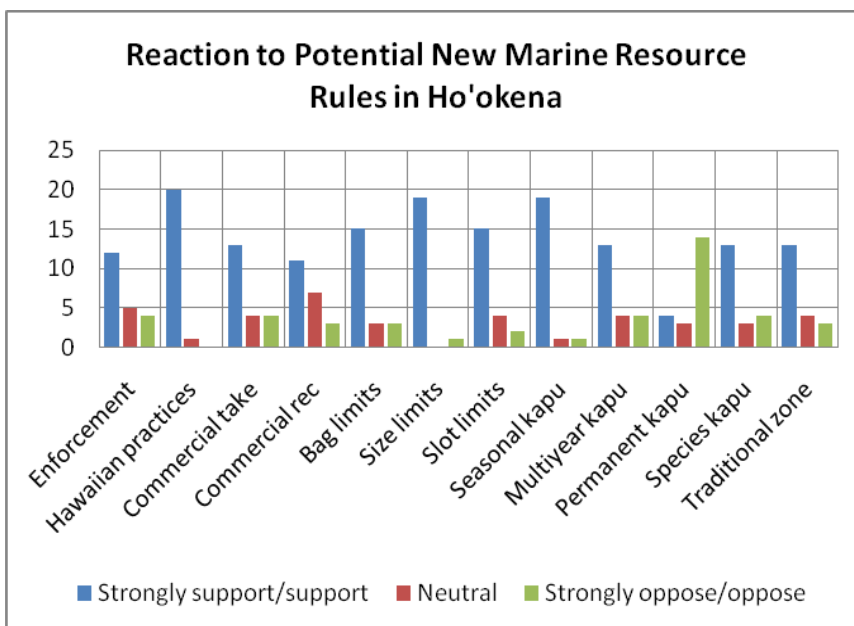
When asked where their households get good information about fishing, respondents reported that family is the primary source, followed by other fishermen and friends. It is important to note that these respondents did not report getting information from “Hawaii Goes Fishing,” the *Hawaii Fishing News*, tackle shops, or the Department of Land and Natural Resources. Two people named *kūpuna* as their primary source of information, and two named themselves and their own experiences as their primary source of information.

² Two respondents said they thought conditions were the same or better because the FRA laws have led to an improvement in the abundance of reef fish that are commonly targeted by aquarium collectors.



Response to Proposed Management Strategies

One of the main goals of the survey was to assess respondents' reactions to a variety of potential new fisheries management strategies or regulations for the Ho'okena traditional fishing grounds. The respondents supported many types of potential new marine resource regulations, with the strongest support for Hawaiian practices, seasonal *kapu*, and size limits. Bag limits and slot limits were the next most highly supported regulations. The only regulation that most respondents opposed was a permanent *kapu*.



SUMMARY AND CONCLUSIONS

Ho'okena community representatives and other partners undertook a survey of Ho'okena households to (1) establish a baseline snapshot of the community currently utilizing the Ho'okena traditional fishing grounds; (2) establish a baseline of the Ho'okena community's dependence on subsistence fishing and utilization of traditional Hawaiian fishing methods in the Ho'okena traditional fishing grounds; and (3) determine the degree of support among the Ho'okena community for increased management in the Ho'okena traditional fishing grounds.

To fully meet these goals, the households yet unreached should be surveyed, as should fishermen at other access points. Though most respondents of this survey access the area through Ho'okena, that is likely due to the fact that surveys were conducted at Ho'okena homes and at Ho'okena Beach Park.

Most respondents were between the ages of 45 and 64 and reported being of at least partial Hawaiian ancestry. Just more than half said they had more than eleven years of fishing experience in the Ho'okena traditional fishing grounds. Therefore, survey results are indicative of those with a relatively high level of experience that comes with engaging in a particular activity at a particular place over many years.

Fishing was *not* named as a primary source of income for most respondents. Most reported that they fish in order to feed themselves or their families, to share it with others for food, and to provide food for special occasions such as parties. This is reflective of the Ho'okena community's characterization as a subsistence fishing community in Hawai'i. Even though marine resources are not an income source, they are an important food source. Almost half of respondents said their households depend on marine resources from Ho'okena a lot or somewhat, so managing for local consumptive purposes seems reasonable.

Most respondents are not using fishing gear types that are considered to be so effective as to present potential harm to the abundance of marine resources (spear guns, spearing on SCUBA). Proposed rules that address these gear types may be more likely to be supported since they are not widely used by the local community.

However, some of the key fishing traditions that Ho'okena is known for—especially canoe fishing and the practice of *hanai ko'a*—are not largely utilized by survey respondents or their household members. Therefore KUPA may consider implementing activities or strategies to ensure that these practices continue to be taught and practiced by the community. Survey results indicate that this information would be most effectively transmitted through families, friends, and fishermen rather than through formal education, workshops, or various published formats.

Respondents were in general agreement that the health of marine resources in the Ho'okena traditional fishing grounds have declined over the past twenty years, with overharvesting cited most frequently as the reason for the decline. Many resource management strategies were supported, with the clearest support for Hawaiian practices, size limits, and seasonal *kapu*. Some opposition to almost all strategies did exist, but the highest degree of opposition was toward a permanent *kapu*. KUPA can use this information to consider the implications for the management plan and proposed new regulations under development.

DEFINITIONS OF TERMS AND ABBREVIATIONS

Ahupua'a: A traditional Hawaiian land division, generally a pie-shaped land division running approximately from a mountain area to the sea; often equivalent to the modern understanding of a watershed

HCSN: Hawai'i Community Stewardship Network, a statewide nonprofit organization

Hanai ko'a: Hawaiian practice demonstrating an understanding of a relationship between the community and fish through which fishermen cared for schools of fish for part of the year without any harvesting of the school, followed by a period of harvest

Hukilau: A style of fishing that involves a group of people working together to harvest fish with a large net.

Kama'āina: Local people, native-born

Kapu: Prohibition

Konohiki: Traditional resource manager assigned by a chief who had the authority to set fisheries regulations

KUPA: Kama'āina United to Protect the 'Āina, a Ho'okena community nonprofit organization

Kūpuna: Elders, grandparents

Makai: By the ocean

Mauka: Up the mountain

NOAA: National Oceanic and Atmospheric Administration

Wa'a: Hawaiian outrigger canoes

APPENDIX A: Household Survey

Date: _____ Survey number: _____ (Team number, then number of survey, A1, A2, A3)

Interviewer: _____ Recorder: _____

Location (check 1): Home Ho’okena Beach Park Potluck Access point _____

If at home, location of home (check one): Mauka Makai

Male Female

To start, I am going to ask a few questions about the ocean activities you and your other household members participate in within the area shown on the map. Please answer for you and your ohana in your house.

1. Of the following list of activities, which do you or other members of your ohana in your house participate in? For those activities they participate in, ask how often, and choose the appropriate box.

	Once or more per week	1-3 times per month	6-11 times per year	1-5 times per year	Less than once per year
Fishing or other harvesting*					
SCUBA diving					
Picnicking					
Swimming					
Interacting w dolphins					
Snorkeling					
Camping					
Kayaking					
Boating					
Surfing/body-surfing/body-boarding					
Canoe/wa’a					
Other:					

2. Do you have other family outside Ho’okena who come to Ho’okena to fish? __ yes __ no

**If respondent DOES harvest or has household members who harvest from the ocean area, ask questions 3-15, using the attached map for reference. If NOT, skip to page 5 and question 16.*

Next I’m going to ask a few questions about the harvesting activities you and your ohana in your house participate in within the Ho’okena traditional fishing grounds, the area shown on the map. Please answer for yourself and your ohana who live in your house.

3. For how many years have you been harvesting in Hawai‘i?

__ less than one __ 1-5 __ 6-10 __ 11-20 __ more than 20

4. *Point out and describe each zone on the map, and ask respondent to indicate on the map which zones s/he or members of the household utilize for harvesting activities. For each zone utilized, ask how often.*

	Frequently	Sometimes	Rarely	Never
Zone 1				
Zone 2				
Zone 3				
Zone 4				

5. What are all the different ways you or members of your household access these areas? (Check all that apply.)

- Ho‘okena Beach Park access
- Kaohe or Pebble Beach
- Hōnaunau boat ramp
- Miloli‘i boat ramp
- Keauhou boat ramp
- Old trails
- Other: _____

6. In the Ho’okena traditional fishing grounds depicted on the map, what are the primary species you and members of your household are seeking to harvest? (Have the respondent look at the list and circle the species they seek to harvest. Then, for those they seek to harvest, have them indicate the frequency.)

	Frequently	Sometimes	Rarely
Kala (Unicorn Fish)			
Nenuē (Gray Chub)			
Manini (Convict Tang)			
Kole (Yellow-eyed Surgeonfish)			
Pakukui (Achilles Tang)			
Lauipala (Yellow Tang)			
Naēnaē (Orangeband Surgeonfish)			
Uhu (Parrotfish)			
Maiko (Whitebar Surgeonfish)			
Mai’i’i (Lavender Tang)			
Moano (Double-bar Goatfish)			
Kihikihi (Moorish Idol)			
Kumu (Saddleback Goatfish)			
Umaumaulei (Orange-Spine Unicorn Fish)			
Menpachi/u’u			
Weke (Goatfish)			
Uoauoa (mullet)			
Ahi (Tuna)			
Ulua (Trevally)			
Omilu (Trevally)			
Ono			
Mahimahi (Dolphinfish)			
Hau’uliuli			
Opelu (Mackerel Scad)			
Akule (Big-eye Scad)			
Marlin			
Bottomfish			
He’e/Tako (Squid)			
Ula (Lobster)			
Opihi			
Limu			
A’ama (Crab)			
Wana			
Other			
Other			
Other			
Other			

7. In the Ho'okena traditional fishing grounds depicted on the map, what are the primary types or gear/methods used by you or your ohana that live in your house? Select all that are primary for you and your ohana that live your house.

- spear (three-prong, Hawaiian sling) spear gun/arbutlet spear w/ SCUBA Trap
- hand line hukilau cross net scoop net hand crab net
- throw net slide bait casting trolling ka'ili opelu net hukihuki
- other: Explain:

8. Do you or your ohana that live in your house use any of these long-time Ho'okena area practices when you fish? Check the appropriate box.

Moon calendar

- Yes, presently Yes, past No

Spawning/seasonal kapu

- Yes, presently Yes, past No

Hanai the ko'a

- Yes, presently Yes, past No

Outrigger canoe

- Yes, presently Yes, past No

Other

_____ Presently Past

_____ Presently Past

_____ Presently Past

_____ Presently Past

_____ Presently Past

_____ Presently Past

9. You mentioned that you use some of the practices considered traditional for Ho'okena.... Where did you learn them? (Select all that apply.)

- Family Community members/friends other fishermen
- Formal education (school) Workshop Published sources such as books, magazines, TV, radio, or the Internet Other (Please explain: _____)

10. In your opinion, is it important for community members to practice methods considered traditional for Ho'okena? yes no If yes, how much?

- Very important Somewhat important Not very important Not at all important
- Not sure

11. In your opinion, what are the reasons some community members don't utilize practices considered traditional for Ho'okena? (Check the answers below that most closely reflect respondent's answer or write what they say.)

- don't have time don't know how don't get enough results using those methods
- too difficult don't have the required number of people to help because I don't want to be at a disadvantage when compared with the other people harvesting who don't follow these practices not interested not traditional FOR ME other: Explain:

12. Do you know of anyone in your family who used traditional Hawaiian practices in the past? yes no (Write down who: _____)

13. If there were opportunities for you or your ohana in your house to learn more about traditional Hawaiian harvesting practices, would you want to learn them in order to utilize them? yes no

If yes, from who? Please provide your top two answers.

Family Community members/friends other fishermen
 formal education (school) workshop published sources such as books, magazines, TV, radio, or the Internet other (Explain: _____)

14. How often do you harvest to...

- a. Feed myself and my family/household
frequently sometimes rarely never
- b. Sell
frequently sometimes rarely never
- c. Give to extended family members and/or friends
frequently sometimes rarely never
- d. For fun
frequently sometimes rarely never
- e. For special occasions and cultural events
frequently sometimes rarely never
- f. Other: _____
frequently sometimes rarely never

15. From where do you get good information about fishing? (Select the answers below that most reflect respondent's answer, or write what they say.)

family friends other fishermen Hawaii Goes Fishing Hawaii Fishing News
 local tackle shop DLNR West Hawaii Fishing Council other None of the above

(Continue survey here if respondent and household does NOT harvest.)

Next I'm going to ask a few questions about how you and your ohana in your home uses food harvested from the ocean.

16. Did you or your ohana that live in your house used to fish? yes no

If yes, what are the main reasons you/your ohana don't fish anymore?

17. How often do you get locally caught fish and other seafood from the following sources? By locally caught, we mean caught in Hawai'i.

- a. Family/Relatives
frequently sometimes rarely never
- b. Friends/Neighbors
frequently sometimes rarely never
- c. Store
frequently sometimes rarely never
- d. Roadside vendors
frequently sometimes rarely never
- e. Other (Explain)
frequently sometimes rarely never

18. How much would you say that your ohana in your home depend on marine resources in South Kona, if at all, for eat or make money:

- Depend alot Depend somewhat Depend Don't depend very much
- Don't at all depend Not sure

Next I'm going to ask a few questions to find out what you think of the condition of the ocean resources in the Ho'okena traditional fishing grounds shown on the map.

19. How healthy do you think the marine resources are in the Ho'okena traditional fishing grounds?

- Very healthy Somewhat healthy Healthy Somewhat unhealthy Unhealthy
- Not sure

20. Has the health of marine resources in the Ho'okena traditional fishing grounds gotten better or worse over the last 5 years? Better Worse

Please explain your answer.

21. Has the health of marine resources in the Ho'okena traditional fishing grounds gotten better or worse over the last 20 years? Better Worse

Please explain your answer.

22. I'm providing a list of management options that have been used in the state. What is your opinion of these for the Ho'okena traditional fishing grounds?

Tool	Strongly support	Support	Neutral	Oppose	Strongly oppose
Increased enforcement					
Incorporating Hawaiian practices into management rules					
Banning commercial harvesting					
Banning commercial recreational activities					
Bag limits					
Minimum size limits					
Slot limits					
Seasonal/spawning kapu periods					
A multi-year kapu in one area					
A permanent kapu in one area					
Species-specific kapu					
Area for traditional fishing practices only					
Other					

We are almost done. I just have a few more questions.

23. Where do you live? (For beach or access point surveys only. Not specific address but general location—Ho'okena, Captain Cook, etc.)

24. What ethnic group(s) do you most identify with? You may select more than one, and you do not have to answer: Hawaiian Other Pacific Islander American Indian or Alaska native Chinese Japanese Korean Thai Vietnamese Other Asian White African American Hispanic or Latino Filipino Portuguese Other

25. Respondent's age: ___ Age 19-34: ___ Age 35-44: ___ Age 45-64: ___ Age 65+

26. Total number of people in your household age 18 and younger: ___ Age 19-34: ___ Age 35-44: ___ Age 45-64: ___ Age 65+

27. What are the top two sources of income for your household? Have respondent rank the top source and the second source.

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> farming/livestock | <input type="checkbox"/> fishing |
| <input type="checkbox"/> government employment | <input type="checkbox"/> handicrafts |
| <input type="checkbox"/> teacher | <input type="checkbox"/> retired |
| <input type="checkbox"/> business | <input type="checkbox"/> tourism |
| <input type="checkbox"/> self-employed | <input type="checkbox"/> other: _____ |
| <input type="checkbox"/> church leader | |

28. Are there other important issues relating to the health of Ho’okena that we did not cover in the survey but that you would like us to know about?

29. Finally, do you have any questions or comments about this survey?

We really appreciate your time. We will write a report about the survey by the end of June, which we will distribute them to every household. Mahalo nui loa for your participation in this survey.

(Have them sign a SEPARATE sheet if they want a copy of the report mailed to their home.)