

# Traditional Ecological Knowledge Intergenerational Learning Exchange Report

Big Island, Hawaii  
August 21-24, 2008



## Contents

Workshop Summary

Background

- *Pacific Island Marine Protected Area*
- *Our Sea of Islands*

TEK Workshop - Kona, HI 2008

- *Workshop Participation*
- *Workshop Approach*
  - *How to capture Traditional Ecological Knowledge*
  - *Fisheries management traditional knowledge / skills sharing*
  - *Using TEK in resource management (why and how)*
  - *Living Art Vision Piece*
  - *US Coral Reef Task Force Sharing Session*

Workshop Evaluation and Next Steps

## Appendices

Appendix A: TEK Workshop Agenda

Appendix B: Participant Contact List (please fill out HI folks)

Appendix C: Workshop Output Example (Integrating TEK into Marine Management)

Appendix D: Workshop Evaluation

## Workshop Summary

Pacific Island leaders in the marine conservation arena have identified the urgent need to abate the loss of traditional ecological knowledge (TEK). There is concern that if the trend continues, traditional marine ecological knowledge and practices may cease to exist in the future. Further, should traditional management expertise erode completely, Oceania and indeed the world would suffer a significant loss of both its marine and cultural heritage, and our ability to use this information as part of solving current resource management issues. Leaders from around the Pacific have expressed the immediate need to foster the transmission of TEK and customary management practices from one generation to the next.

To address this challenge, a pilot workshop was held from August 21-24, 2008 in Kona, Hawaii where twenty five participants came together for an intergenerational learning exchange amongst Pacific Island customary marine managers and their youth to: 1) Promote and strengthen traditional knowledge and customary practices between youth and cultural practitioners from 8 Hawai'i communities (Miloli'i, Ho'okena, Hä'ena, Waipä, Wai'anae, He'eia, Mo'omomi, Hana/Kipahulu), and 4 other Pacific Islands (American Samoa, Fiji, Pohnpei, and the Marshall Islands) 2) Foster the intergenerational transfer and preservation of traditional knowledge and customary marine management practices through multi-media skills building activities to collect oral histories pertaining to traditional marine management, and 3) Define and share lessons about the importance of incorporating traditional knowledge into modern management at the U.S. Coral Task Force Meeting. The outcomes of the workshop included the development of four examples of using traditional knowledge for policy and management activities including Public Service Announcements, Policy development for area based management, and Educational Curriculum. Additionally, a short video of the workshop experience was developed. These outputs were presented to members and participants of the US Coral Reef Task Force meeting. In addition, all participants received multi-media resource kits to bolster local traditional knowledge initiatives.

This workshop was carried out through a partnership between; NOAA (Papahānaumokuākea Marine National Monument, National Marine Fisheries Service, and the Coral Reef Conservation Program), PIMPAC, Hawaii Community Foundation, Community Conservation Network, Pacific Voices, The Nature Conservancy, the Hawaii State Division of Aquatic Resources, and the Ho'okena Community.

## Background

### ***Managing Better Together Network:***

Many communities around the Hawaiian islands have become alarmed as they experience more and more noticeable declines in the productivity of fisheries and the land. Many of these communities have been and continue to act, mobilizing the grassroots to mālama 'āina from the foundation of Hawaiian cultural values and practices. Many of these communities also learn and share together through the Managing Better Together (MBT) Learning Network. This network, formed in 2003, brought together community members practicing their kuleana for ocean resources so they could improve resources management. The MBT Learning Network identified its highest priorities in 2003 as (1) assisting communities with resource management projects, (2) engaging youth in resources management, (3) capturing kūpuna and traditional knowledge, and (4) enhancing the role of communities in direct management and protection. The founding communities of the MBT Learning Network also determined that they would get together twice per year to share lessons and ideas with one another.

### ***Pacific Islands Marine Protected Area Community (PIMPAC):***

PIMPAC grew out of extensive outreach with MPA managers and affiliated agencies and staff within the region that explored the greatest challenges faced by MPA managers as well as ideas to address these

challenges. The Pacific Islands have a long history of traditional management approaches for marine resources—many of which may provide solutions to today’s management challenges. However, the MPAs in the Pacific Islands have their own unique set of challenges which have inhibited them from being as effective as possible.

Despite the wealth of knowledge the Pacific Islands’ traditional approaches can offer, MPA managers in the Pacific must balance building on these traditional approaches while adapting to modern technology and practices. To play a successful role in MPA management, traditional and local approaches must be actively fostered, developed, and integrated into current MPA systems.

In addition, MPA managers in the Pacific are often very isolated from one another due to the great distances between islands. The geographical distance makes it very difficult for them to share knowledge and lessons learned with each other. Also, because the Pacific Islands are small, they have limited human and financial resources to work with.

Based on the interest expressed in the outreach results for establishing a regionally coordinated network, a workshop of over 45 marine protected area (MPA) leaders from around the Pacific Islands was held in August 2005. The workshop, held in Tumon, Guam and co-hosted by NOAA and the University of Guam, brought together governmental and non-governmental representatives from the U.S. Pacific Islands, Freely Associated States of the Pacific, and Fiji to discuss the strengths and challenges of MPAs in the Pacific Islands. To utilize existing regional strengths and address the challenges, the meeting participants shared a common vision for a regional coordination network that would strengthen their individual and collective MPA efforts. The group committed to work together in an evolving regional Pacific Islands MPA Community (PIMPAC) to overcome these barriers.

PIMPAC is a collaboration of marine protected area (MPA) managers, non-governmental organizations, local communities, federal, state, and territorial agencies, and other stakeholders working together to collectively enhance the effective use and management of MPAs in the U.S. Pacific Islands and Freely Associated States. Specifically, PIMPAC aims to build partnerships among Pacific Island MPA practitioners and to bring support to the region in order to strengthen MPA planning, management, and evaluation efforts and conserving the marine resources of the Pacific Islands. Funding for PIMPAC is provided by NOAA’s Coral Reef Conservation Program and the Department of Interior, Office of Insular Affairs.

***Our Sea of Islands:***

Our Sea of Islands: A Regional Forum for Oceania on Marine Managed Areas and World Heritage brought together participants from over 20 countries, states and territories around the Pacific. The Forum was co-sponsored by the National Oceanic and Atmospheric Administration (NOAA), the Department of the Interior, and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage Programme.

The purpose of the Forum was to highlight current efforts to protect important marine areas in Oceania, to share and expand technical expertise, and to develop balanced management practices by incorporating science and customary marine management techniques. Additionally, the Forum was an opportunity to build upon established marine managed area networks across Oceania and collaborate with these ongoing efforts.

As a part of the six-day event, a communique was developed that summarizes Forum outcomes and recommends needed action to further marine protection across the region. Through discussions facilitated at the Forum, participants affirmed that traditional knowledge and management practices are

integral to the maintenance, development and management of MMAs in Oceania. This principle underpins all of the following commendations, proposed participant actions and recommendations to governments and organizations by the Our Sea of Islands Forum.

## **Traditional Ecological Intergenerational Learning Exchange Kona, HI 2008**

To address this concerns expressed by MBT members, PIMPAC members, and participants at the Our Sea of Islands Meeting, an intergenerational learning exchange amongst Pacific Island customary marine managers and their youth pilot workshop was designed. This workshop was held from August 21-24, 2008 in Kona, Hawaii where twenty five participants came together to: 1) Promote and strengthen traditional knowledge and customary practices between youth and cultural practitioners from 8 Hawai'i communities (Miloli'i, Ho'okena, Hä'ena, Waipä, Wai'anae, He'eia, Mo'omomi, Hana/Kipahulu), and 4 other Pacific Islands (American Samoa, Fiji, Pohnpei, and the Marshall Islands) 2) Foster the intergenerational transfer and preservation of traditional knowledge and customary marine management practices through multi-media skills building activities to collect oral histories pertaining to traditional marine management, and 3) Define and share lessons about the importance of incorporating traditional knowledge into modern management at the U.S. Coral Task Force Meeting.

### ***Workshop Participation***

A total of 38 people (participants and trainers) attended the workshop. Nominations were sought via the MBT and PIMPAC networks and based on a set of criteria, including the following:

- Must be a respected member of the community they are from and must possess unique and valuable traditional knowledge.
- This "kupuna" figure and/or makua must be accompanied by a youth from that community (1:1).
- The youth, must show leadership qualities and potential.
- The youth must be respectful, have a strong sense of place and conservation ethic.
- Communication skills, creativity and ability to amplify what they have learned from this workshop to others back home, should be an important criterion, as well.

### ***Workshop Approach***

This section provides a brief description of the main workshop components:

- How to capture Traditional Ecological Knowledge
- Fisheries management traditional knowledge / skills sharing
- Using TEK in resource management (why and how)
- Living Art Vision Piece
- US Coral Reef Task Force Sharing Session



**How to capture Traditional Ecological Knowledge**

Educational activities, materials and lessons were developed by collaborators, Community Conservation Network and Pacific Voices to facilitate instruction of multi-media application and approaches to collect oral histories pertaining to customary marine management. The workshop focused on four areas: how to collect oral histories with digital audio-recorders; how to collect oral histories with digital still camera; how to conduct one-on-one and focus group interviews; and how to effectively present key messages to the public through formats such as public service announcements.

The general format of each focus area consisted of the following: lecture, hands-on application and field work, facilitated large and small group discussions, and technological review or tutoring. In addition, each youth member and their elder undertook a project planning procession that guided the creation of their final presentations at the US Coral Task Force Meeting. The process entailed the identification of culturally important marine resources; their threats; traditional knowledge surrounding the selected marine resources; and steps to mitigate those threats.

The workshop material was tailored to address cultural ways of acquiring and sharing knowledge and especially honed into the transfer and use of the collected information into local management strategy. In preparation for this workshop, no existing model was found to inform contemporary marine management plans and strategies with traditional or indigenous knowledge. The workshop materials may be the first of its kind and a subsequent guidebook will be developed with support from NOAA and expertise from the Community Conservation Network.

**Fisheries management traditional knowledge / skills sharing**

As an integral part of the workshop, time was built in for elders or makua to share their customary marine management knowledge and practices with their youth. The knowledge and practices that were shared were also related to their respective project plan and final presentations. Examples of the customary marine management practices included ho’olei ‘upena(cast net), ku’i ‘opihi(limpet gathering), how to make a torch for torch fishing, ‘opelu fishing, and how to make a crab net. These lessons were also recorded by the youth primarily with the underwater digitals given to them. Both youth and elders alike especially enjoyed this part of the workshop and recognized its immediate value.



*‘Opelu Fishing, Elder: Damien Kennison*



*Making a Torch: Elder Toasefulu*



*Casting Net: Elder, Jeff Chandler*

### ***Using TEK in resource management (why and how)***

Much of the workshop discussion and application was focused on how to incorporate TEK into modern management schemes. To set the stage for the workshop, the group first had a facilitated discussion on the question of “what is traditional ecological knowledge and why is it important?” The youth perspective on this topic was also captured. This discussion provided the basis for further exploring TEK and developing ideas for management use.

To explore the possibilities for using TEK in modern management schemes, the group was divided into four teams. Each team was made up of youth and elder members from at least one Hawaii community and one “other” Pacific island community (i.e. Fiji, American Samoa, Marshall Islands, or Pohnpei). The teams were asked to carry out a project planning exercise to further explore the use of TEK. To do so, each team was asked to look at: 1) their natural resource targets, 2) threats to those targets, and 3) TEK that could support the management of that target or address the threat, and 4) what management objectives could be used to address the threats. Once deciding on a specific management objective they wanted to focus on, the team explored the types of TEK information that could support that management objective.

From there, the group also looked at how they would communicate the TEK information they collected to address their management objective. To do this, each team decided on a specific target audience to focus their efforts. They also decided what output they would use (e.g. poster, PSA) and the communication method (e.g. written, visual) they would use to present to the US Coral Reef Task Force participants.

This process allowed each team to thoroughly review what resource management goals they wanted to accomplish, how TEK could support that goal, and how TEK could be used to develop a modern day management activity (e.g. curriculum, policy, etc). Each of the teams project plans are presented in Appendix C.

### ***Living Art Vision Piece***

To highlight the strong connections between Oceanic peoples and cultures, acclaimed native artist Solomon Enos was commissioned to create a water color painting that conveyed the primary purpose and aspirations of the workshop participants and organizers. The outcome was a stunning, 5'x7' painting of important food items such as the he'e (octopus), 'ulu (bread fruit), niu (coconut), limu (seaweed) and i'a (fish) overlaid on the Pacific ocean; representing spiritual, geo-political, bio-physical and cultural relationships. Solomon presented the piece on behalf of the group to help commemorate the 20th annual US Coral Task Force Meeting held at Keauhou, Hawai'i and relayed the multiple meanings of the painting: collectivity, sustainability, and the interplay between social, cultural and bio-physical dimensions.

To generate additional funds for future traditional knowledge initiatives in the Pacific, the artist and his manager, has generously agreed to provide a limited license to sell prints of the painting for select fundraising purposes. See Appendix C.



### ***US Coral Reef Task Force Sharing Session***

The final session of the workshop was held in collaboration with the US Coral Reef Task Force. The aims of the evening session will share highlights from, and promote discussion about the outcomes of the above stated workshop. The organizers of this event hope to foster a better understanding of session attendees about the challenges faced by Pacific Islanders in continuing the understanding and use of TEK. Additionally, the session will be used to share outputs (e.g. stories, photo journaling, etc) from the workshop skills building sessions that demonstrate mechanisms to engage youth in capturing TEK. Finally, the session will encourage a dialog among participants on how to move forward in using TEK in current management schemes.

An eight minute DVD was produced to highlight the importance of perpetuating the utilization of traditional indigenous knowledge in contemporary marine management and was shown at the August 27<sup>th</sup> business meeting along with remarks provided by Kona resident, Damien Kennison. See Appendix C.

### ***Workshop Evaluation and Next Steps***

Upon completing the workshop, the participants and resource team members filled out evaluation forms. The results of these forms demonstrate that over 95% of participants agreed or strongly agreed that the workshop met all of the objectives: 1) Convened a Pacific Islands intergenerational learning exchange to share traditional ecological knowledge and practices, 2) Taught participants how to collect and utilize TEK for marine resource management, and 3) promoted the utilization of TEK into management activities and policy making by presenting results to the US Coral Reef Task Force. Over 95% agreed to strongly agreed that the material is valuable and useful to them and are interested in attending follow up activities relating to this workshop. 37 % of respondents felt the workshop was too short and many noted the need more time for sharing TEK practices.

Overall there is great interest in carrying out further support and training on building youth capacity to “capture traditional ecological knowledge for marine resource management.” Some of the specific comments that were noted on which part of the workshop was particularly effective were: 1) cross-sharing between Oceania participants 2) having elders sharing knowledge and empowering the youth 3) hands on activities and use of technology, and 4) toolkits.

Some of the most commonly cited “lessons” or areas for improvement were: 1) more time (shorter days), 2) better food (local food), 3) more preparation time (getting materials out to participants sooner). The full workshop evaluation can be found in Appendix D.

PIMPAC is currently working on incorporating an addendum to the *Management Planning Guidebook* that includes a process to capture TEK that will support management planning goals and objectives. Further technical assistance and trainings may be offered in the future to build on the efforts of this workshop and expand the knowledge and skills to more Pacific Island youth. It is hoped that funding can be secured to provide on-going support and training for this topic area and that utilizing TEK in management development and implementation will become routine.





## APPENDIX A

|  |
|--|
| <b>PACIFIC TRADITIONAL KNOWLEDGE WORKSHOP</b><br><b>Final Agenda, August 21-24, 2008</b> |
|--|

### Thursday August 21, 2008

| Time                   | Activity  |
|------------------------|---|
| <b>8:00-10:00am</b>    | Breakfast<br>-Await final arrivals  |
| <b>10:30 – 12:00pm</b> | Arrive in Ho’okena<br>Cultural Protocol   |
| <b>12:00 – 1:00pm</b>  | Lunch<br>Guest Speaker  |
| <b>1:00 – 3:00pm</b>   | -Participant Introductions and expectations / Review Agenda and Objectives<br>-Present resource kits; encourage practice/ talk about journaling |
| <b>3:00 – 4:30pm</b>   | Orientation / Walking tour of Ho’okena  |
| <b>4:30-6:00pm</b>     | Return to hotel, shower   |
| <b>6 :00– 7:30pm</b>   | Dinner  |

### Friday August 22, 2008

| Time                  | Activity  |
|-----------------------|---|
| <b>7:00am</b>         | Depart Manago for Ho’okena  |
| <b>7:30 – 8:00am</b>  | Opening Circle / Breakfast /Journaling  |
| <b>8:00 – 9:30am</b>  | Facilitated Discussion on What is TEK and its Importance? Incorporating youth perspective   |
| <b>9:30 – 10:15am</b> | Review of process to documenting TEK, including techniques and tools, including examples of reporting/outputs; how to communicate |

|                       |  |
|-----------------------|--|
|                       |  |
| <b>10:15-10:30am</b>  | Break  |
| <b>10:30-12:00pm</b>  | Assign 4 teams, expectations for teams, project planning [have sheet up w the output options; teams sign up; each group presents responsible practices based on traditional knowledge and use different methods to communicate those: sign up sheet will include power point, skit, poster, story, wise saying/proverb, song, lesson/lecture]                  |
| <b>12:00 – 1:00pm</b> | Lunch / Journaling [get into their four teams; questions on chart paper to stimulate conversation]   |
| <b>1:00-3:00pm</b>    | How to capture TEK using pen and paper; tips on effective note taking  |
|                       | Tips on interviewing groups  |
|                       | Practice with group interviews using pen and paper (small groups of 4 interviewees)  |
| <b>3:00-3:15pm</b>    | Break  |
| <b>3:15-3:45pm</b>    | How to capture TEK via still photography; tips on photography  |
| <b>3:45-4:15pm</b>    | Tips on documenting instructional interviews   |
| <b>4:15-5:30pm</b>    | Exchange of Traditional Fishing / Management Practices, 4 Groups with Makua sharing practices; Practice still photography skills; Pen and paper / still photography practice in field  |
| <b>5:30pm</b>         | Return to hotel, shower  |
| <b>6:30 – 7:30pm</b>  | Dinner   |
| <b>7:30 – 8:30pm</b>  | Tech Review: How to download pictures, edit, organize photo files/ two stations with Each group in charge of organizing and managing their information; Meghan will get the stuff on one jump drive; Moani can compile into cds for everyone by the end from master computer.<br><br>Closing circle, sharing day's highlights, agenda/what needed for next day |

**Saturday August 23, 2008**

| Time                 | Activity                             |
|----------------------|--------------------------------------|
| <b>7:00am</b>        | Depart Manago for Ho'okena           |
| <b>7:30 – 8:00am</b> | Opening Circle / Breakfast           |
| <b>8:00 – 8:30am</b> | How to capture TEK via Audio         |
| <b>8:30 – 9:00am</b> | How to conduct one-on-one interviews |

|                        |   |
|------------------------|---|
| <b>9:00 – 9:30am</b>   | Develop set of Questions (Break out youth and makua)<br>[tell a story/5 questions]                                  |
| <b>9:30-10:15am</b>    | One-on-one interview and audio practice in groups: Youth & Makua<br>Resource people take photos during this process |
| <b>10:15-10:30am</b>   | Break   |
| <b>10:30 – 11:00am</b> | Get into teams for downloading, organizing and managing audio interviews<br>Work on Project development             |
| <b>12:00 – 1:00pm</b>  | Lunch / Journaling  |
| <b>1:00 – 4:30pm</b>   | Transfer to Keauhou Outrigger Hotel<br>Field Trip and practice  |
| <b>4:30-6:00pm</b>     | Discussion on incorporating TEK into management planning and activities   |
| <b>6:00 – 7:00pm</b>   | Dinner/ Journaling  |
| <b>7:00 – 8:15pm</b>   | Break into four groups and start working on presentations   |
| <b>8:15-8:30pm</b>     | Closing circle, share highlights, agenda for next day   |

**Sunday August 24, 2008**

| Time                   | Activity   |
|------------------------|--|
| <b>7:00 – 8:00am</b>   | Breakfast  |
| <b>8:00am</b>          | Transport to Keauhou Outrigger Resort                                |
| <b>9:00-9:30am</b>     | Live art explanation (Solomon Enos/ Daniel Anthony)                  |
| <b>9:30-10:30am</b>    | Intellectual property issues discussion                              |
| <b>10:30 – 12:00pm</b> | Work in groups to complete presentations<br>Practice presentations   |
| <b>12:00-1:00pm</b>    | Lunch at Keauhou / journaling<br>-discussion on web-page development |
| <b>1:00-2:30pm</b>     | Work in groups to complete presentations<br>Practice presentations   |
| <b>2:30-2:45pm</b>     | Break  |
| <b>4:15pm</b>          | Meet in presentation room; set up, prepare, etc.                     |

|                    |  |
|--------------------|--|
| <b>5:00 – 8:00</b> | Present at US Coral Reef Task Force sharing session          |
| <b>8:15pm</b>      | Depart for farewell dinner at Jackie Reyes<br>Closing circle |

## Appendix B

### TEK Workshop Participant Contacts

| Name            | Island Jurisdiction/<br>Organization | Email  | Phone          |
|-----------------|--------------------------------------|--|----------------|
| Tevita Nawadra  | Fiji                                 | 223 Rewa Street<br>Suva, Fiji<br>Email via Sefanaia Nawadra<br><a href="mailto:s.nawadra@conservation.org">s.nawadra@conservation.org</a>              |                |
| Pio Radikedike  | Fiji                                 | Institute of Applied Sceince,<br>University of the South Pacific<br>Suva, Fiji Islands<br><a href="mailto:veratavou@yahoo.com">veratavou@yahoo.com</a> |                |
| Willie Mwekto   | Marshall Islands                     | Jenrok, Majuro<br>P.O. BOX 1815<br>MH. 96960<br>Email via Albon Ishoda <a href="mailto:albon@mimra.com">albon@mimra.com</a>                            |                |
| Isaac Marty     | Marshall Islands                     | Youth to Youth in Health<br>P.O. Box 3149<br>Majuro, MH 96960<br>Email via Albon Ishoda <a href="mailto:albon@mimra.com">albon@mimra.com</a>           | 692-625-3099   |
| Epert Mikel     | Pohnpei                              | P.O. Box 1698<br>Kolonias, Pohnpei FM 96941<br>Email via Willy Kostka <a href="mailto:mctdirector@mail.fm">mctdirector@mail.fm</a>                     | 691-320-5587   |
| Rosmina Pablo   | Pohnpei                              | P.O. Box 1461<br>Kolonias, Pohnpei FM 96941<br>Email via Willy Kostka: <a href="mailto:mctdirector@mail.fm">mctdirector@mail.fm</a>                    | 691-320-6026   |
| Toasefulu Lulu  | American Samoa                       | PO Box 1848 - Nu'uuli<br>Pago Pago, AS 96799<br>Email via Ephraim Ellsworth Temple:<br><a href="mailto:ehraim@hawaii.edu">ehraim@hawaii.edu</a>        | (684) 733-2454 |
| Lesi Sio        | American Samoa                       | PO Box 1251<br>Fagatogo, American Samoa 96799<br><a href="mailto:bluesamoanpride@yahoo.com">bluesamoanpride@yahoo.com</a>                              | 684 258 9207   |
| Jeff Chandler   | Kaua'i, Hawai'i                      | PO Box 447<br>Hanalei, Hawai'i 96714   | 808-651-4660   |
| Janice Kainoa   | Kaua'i, Hawai'i                      | PO Box 447<br>Hanalei, Hawai'i 96714   |                |
| Atta Forrest    | Kaua'i, Hawai'i                      | PO Box 447<br>Hanalei, Hawai'i 96714   |                |
| Devin Forrest   | Kaua'i, Hawai'i                      | PO Box 447<br>Hanalei, Hawai'i 96714   |                |
| Claudia Kalaola | Häna, Maui                           | PO Box 489<br>Hana, Hawai'i 96713<br><a href="mailto:kalaola@alakukui.com">kalaola@alakukui.com</a>  | 808-248-4063   |
| John Villarimo  | Häna, Maui                           | PO Box 489   | 808-248-4063   |

|                          |  |   |                |
|--------------------------|--|---|----------------|
|                          |  | Hana, Hawai'i 96713   |                |
| Mervin Dudoit            | Oneali'i, Molokai  | Ka Honua Momona<br>PO Box 482188<br>Kaunakakai, Hawai'i 96748<br>kahonuamomona@mac.com  | 808-553-8353   |
| Kelson Mac<br>Poepoe     | Mo'omomi, Molokai  | pbartram@tripleb.com  |                |
| Hina<br>Wilkerson        | O'ahu  | c/o Nai'a Watson<br>NOAA PMNM<br>6600 Kalaniana'ole Hwy, Suite 300<br>Honolulu, Hawai'i 96825   | 808-397-2660   |
| Kalei Paige              | Hilo, Hawai'i  | c/o Moani Pai<br>NOAA PMNM<br>6600 Kalaniana'ole Hwy, Suite 300<br>Honolulu, Hawai'i 96825  | 808-397-2660   |
| Healani Cahill           | Kona Hema, Hawai'i                                       | QLCC<br>74-5490 Makala Blvd.<br>Kailua-Kona, Hawai'i 96740<br>sye@aloha.net   | 808-329-7336   |
| Damien<br>Kennison       | Ho'okena, Hawai'i  | KUPA<br>83-4322 Mamalahoa Highway<br>Captain Cook, Hawai'i 96704<br>namamo@yahoo.com  | 808-987-9149   |
| Glendora<br>Kennison     | Ho'okena, Hawai'i  | KUPA<br>83-4322 Mamalahoa Highway<br>Captain Cook, Hawai'i 96704  | 808-987-9149   |
| Lei Ilae-<br>Kaleimamahu | Puna, Hawai'i  | Hawai'i Community College<br>200 West Kawili Street<br>Hilo, Hawai'i 96720-4091<br>leikaimu@aol.com   | 808-974-7611   |
| Keani<br>Kaleimamahu     | Puna, Hawai'i  | Hawai'i Community College<br>200 West Kawili Street<br>Hilo, Hawai'i 96720-4091   |                |
| Moani                    | Hawai'i Community<br>College                             | Hawai'i Community College<br>200 West Kawili Street<br>Hilo, Hawai'i 96720-4091   |                |
| Noe                      | Hawai'i Community<br>College                             | Hawai'i Community College<br>200 West Kawili Street<br>Hilo, Hawai'i 96720-4091   |                |
| Meghan<br>Gombos         | NOAA Coral Reef<br>Conservation<br>Program               | NOAA Pacific Services Center<br>737 Bishop St #2250<br>Honolulu, HI 96813<br><a href="mailto:Meghan.gombos@noaa.gov">Meghan.gombos@noaa.gov</a> | 808 532 3961   |
| Mahina Duarte            | NOAA<br>Papahanaumokuakea<br>Marine National<br>Monument | 6600 Kalaniana'ole Highway, Suite 300<br>Honolulu, HI 96825<br>Mahina.Duarte@noaa.gov   | (808) 397-2660 |
| Debbie<br>Gowensmith     | Community<br>Conservation                                | 212 Merchant Street, Suite 200<br>Honolulu, Hawaii 96813  | 808-348-1694   |

|                  |   |  |              |
|------------------|---|--|--------------|
|                  | Network   | <a href="mailto:Debbie@conservationpractice.org">Debbie@conservationpractice.org</a>   |              |
| Luna Kekoa       | Community Conservation Network                  | 212 Merchant Street, Suite 200<br>Honolulu, Hawaii 96813<br><a href="mailto:Luna@conservationpractice.org">Luna@conservationpractice.org</a> | 808-349-6095 |
| Jason Philibotte | NOAA Pacific Islands Regional Office            | 1601 Kapiolani Blvd Suite 1110<br>Honolulu, HI 96814<br><a href="mailto:jason.philibotte@noaa.gov">jason.philibotte@noaa.gov</a>             | 808-944-2236 |
| Malia Nobrega    | Pacific Voices                                  | <a href="mailto:malianob@gmail.com">malianob@gmail.com</a>   | 808 286-5461 |
| Lei Ka'upu       | Community Conservation Network                  | 212 Merchant Street, Suite 200<br>Honolulu, Hawaii 96813<br><a href="mailto:lkaupu@hawaii.edu">lkaupu@hawaii.edu</a>                         | 808 217-0585 |
| Manuel Mejia     | The Nature Conservancy                          | 923 Nu'uaniu Avenue<br>Honolulu, HI 96817<br><a href="mailto:mmejia@tnc.org">mmejia@tnc.org</a>  | 808 225-3647 |
| Marion Ano       | The Nature Conservancy                          | 923 Nu'uaniu Avenue<br>Honolulu, HI 96817<br><a href="mailto:mano@tnc.org">mano@tnc.org</a>  | 808 398-6520 |
| Russell Amimoto  | The Nature Conservancy                          | 923 Nu'uaniu Avenue<br>Honolulu, HI 96817<br><a href="mailto:ramimoto@tnc.org">ramimoto@tnc.org</a>  | 808 778-7872 |
| Moani Pai        | NOAA Papahānaumokuākea Marine National Monument | 6600 Kālaniana'ole Highway, Suite 300<br>Honolulu, HI 96825<br><a href="mailto:Moani.Pai@noaa.gov">Moani.Pai@noaa.gov</a>                    | 808 397-2660 |
| Nai'a Watson     | NOAA Papahānaumokuākea Marine National Monument | 6600 Kālaniana'ole Highway, Suite 300<br>Honolulu, HI 96825<br><a href="mailto:Naia.Watson@noaa.gov">Naia.Watson@noaa.gov</a>                | 808 397-2660 |
| Matthew Limtiaco | NOAA Papahānaumokuākea Marine National Monument | 6600 Kālaniana'ole Highway, Suite 300<br>Honolulu, HI 96825<br><a href="mailto:Matthew.Limtiaco@noaa.gov">Matthew.Limtiaco@noaa.gov</a>      | 808 397-2660 |
| Kimo Carvalho    | NOAA Papahānaumokuākea Marine National Monument | 6600 Kālaniana'ole Highway, Suite 300<br>Honolulu, HI 96825<br><a href="mailto:Kimo.Carvalho@noaa.gov">Kimo.Carvalho@noaa.gov</a>            | 808 397-2660 |
| Willy Kostka     | Micronesia Conservation Trust                   | PO Box 2177<br>Kolonias, Pohnpei FM 96941<br><a href="mailto:mctdirector@mail.fm">mctdirector@mail.fm</a>                                    | 691 320 5670 |
| Petra McGowan    | Hawaii Division of Aquatic Resources            | 1151 Punchbowl Street, Room 330<br>Honolulu, HI 96813<br><a href="mailto:Petra.MacGowan@hawaii.gov">Petra.MacGowan@hawaii.gov</a>            | 808-587-0098 |

## APPENDIX C

### EXAMPLE OUTPUT - Utilizing Traditional Knowledge for Resource Management Planning - TEAM 1

| Natural Resource Target  | Threat to Targets   | TK that could support management of target  | Management Objective that includes TK  |
|--|---|---|--|
| <ul style="list-style-type: none"> <li>• Total resources management</li> <li>• Aina and kai “whole”</li> </ul> | <ul style="list-style-type: none"> <li>• Oppressive policy</li> <li>• Lack of awareness</li> <li>• Commercialism</li> <li>• Loss of cultural values</li> <li>• Lack of traditional knowledge in policy making</li> <li>• Policy unable to evolve to fit the times</li> <li>• Lack of educated people – mindframe</li> <li>• Changing of priority</li> </ul> | <ul style="list-style-type: none"> <li>• Kumulipo</li> <li>• Local traditional practices</li> <li>• Ahupua’a management concept</li> <li>• Konohiki</li> <li>• Specialized customized policy</li> <li>• Everthing is connected</li> <li>• Education – culturally adept</li> <li>• Community based management (ahupua’a)</li> <li>• Knowledge that each area differs and requires different techniques and set of rules</li> </ul> | <ul style="list-style-type: none"> <li>• Raise awareness to everyone to empower all to make a difference</li> <li>• change policy</li> <li>• Community based management</li> <li>• Allow each place to define and determine their own policies</li> <li>• Raise traditional knowledge awareness</li> </ul> |

#### **Communication Plan:**

**Workshop Goal:** Promote the utilization of TK into management planning and policy-making by presenting workshop results at the U.S. Coral Task Force Meeting

#### **WORKSHOP PROJECT PLAN**

TEAM: \_\_\_\_\_1\_\_\_\_\_

To fulfill the workshop goal, the team \_\_1\_\_(#) will develop \_poster/sign\_\_\_\_\_(output) aimed at \_\_\_policy makers\_\_\_\_\_(target audience) and share it with US Coral Reef Task Force participants at the Sunday night event through \_\_\_visual/ written\_\_\_\_\_(communication method.)





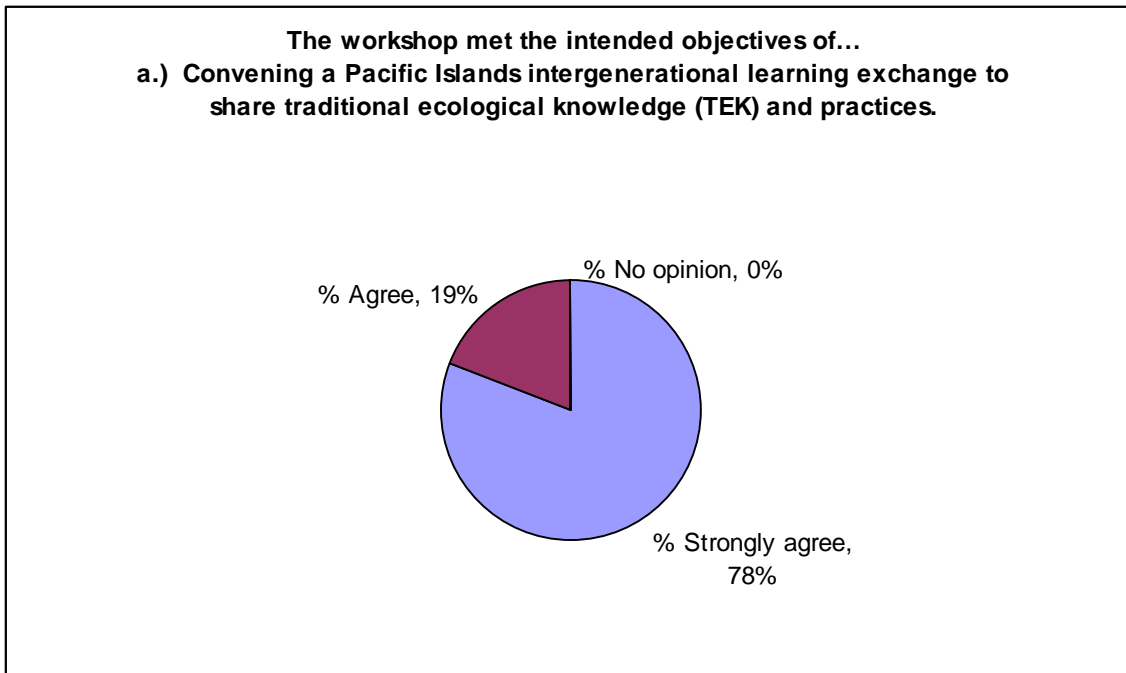
*The above is a poster that was developed by team 1 as a final communication product.*

APPENDIX D  
Workshop Evaluation

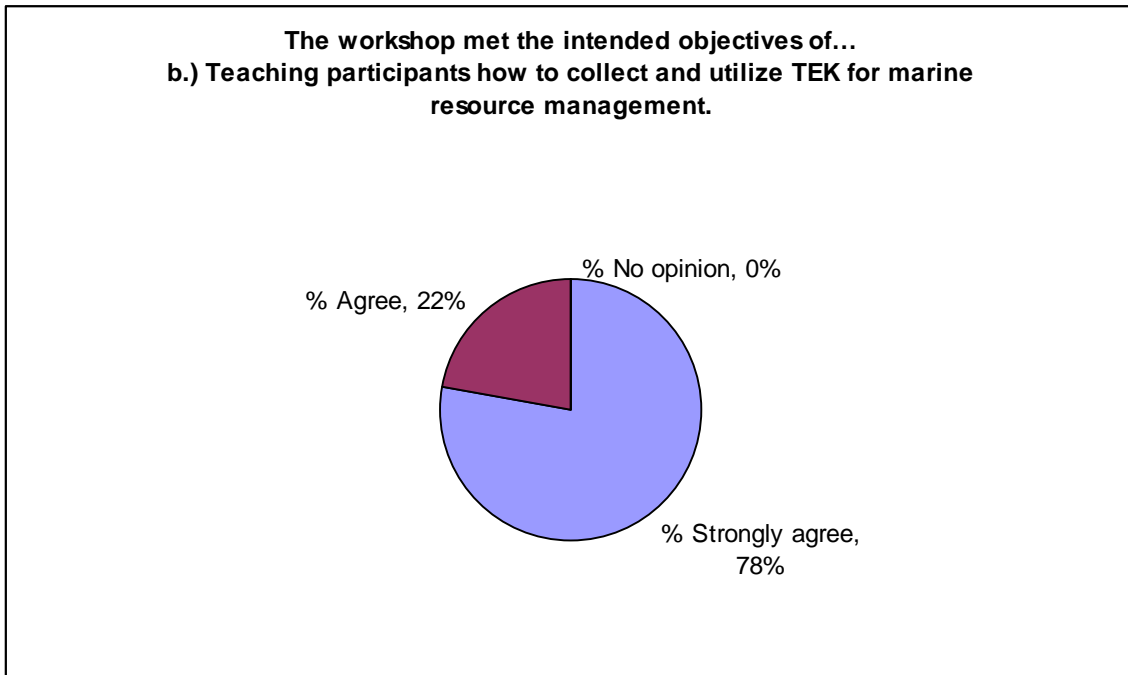
N=27 (# of respondents) 1=strongly agree, 2=agree, 3=no opinion, 4=disagree, 5=strongly agree

**Q1. The workshop met the intended objectives of...**

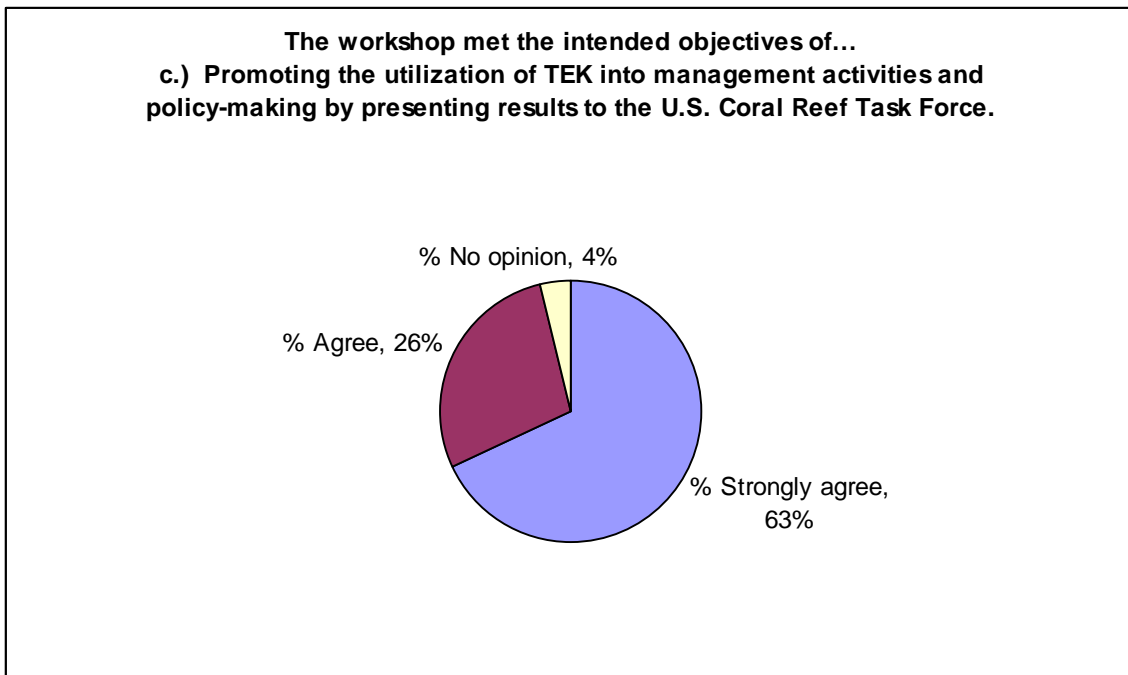
**a.) Convening a Pacific Islands intergenerational learning exchange to share traditional ecological knowledge (TEK) and practices.**



**b.) Teaching participants how to collect and utilize TEK for marine resource management.**

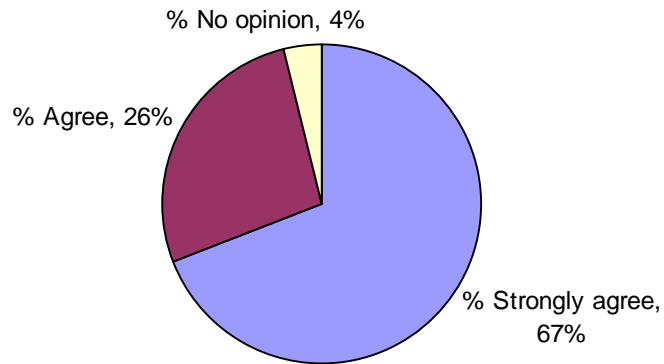


**c.) Promoting the utilization of TEK into management activities and policy-making by presenting results to the U.S. Coral Reef Task Force.**



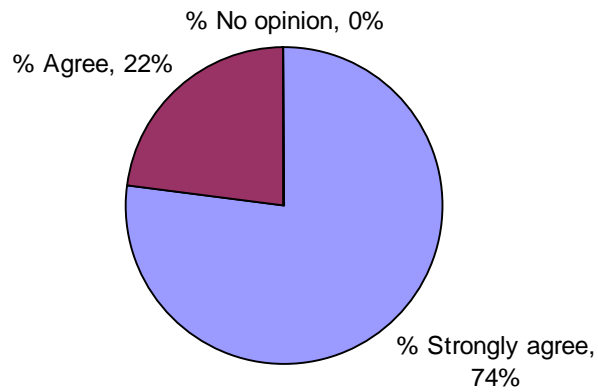
**Q2. The workshop met my overall expectations.**

**Q2. The workshop met my overall expectations.**

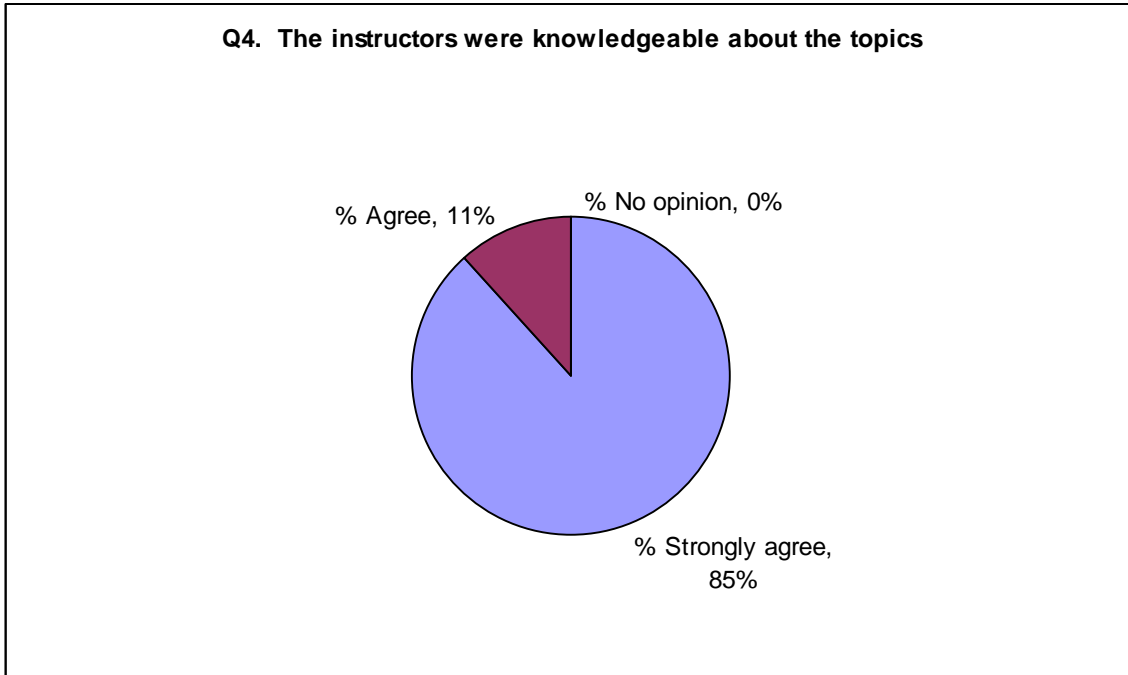


**Q3. The instruction was professional and informative.**

**Q3. The instruction was professional and informative**

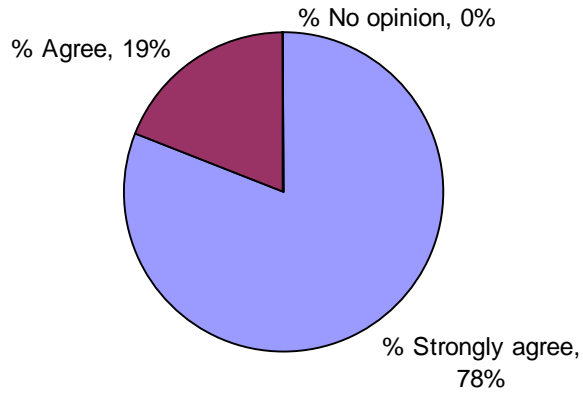


**Q4. The instructors were knowledgeable about the topics.**



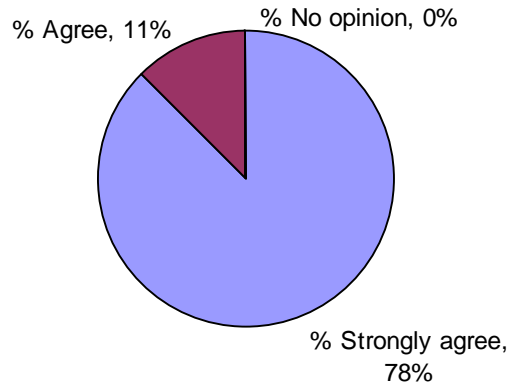
**Q5. The curriculum/material is valuable and useful to me.**

**Q5. The curriculum/material is valuable and useful to me**



**Q6. I am interested in attending follow-up activities relating to this workshop.**

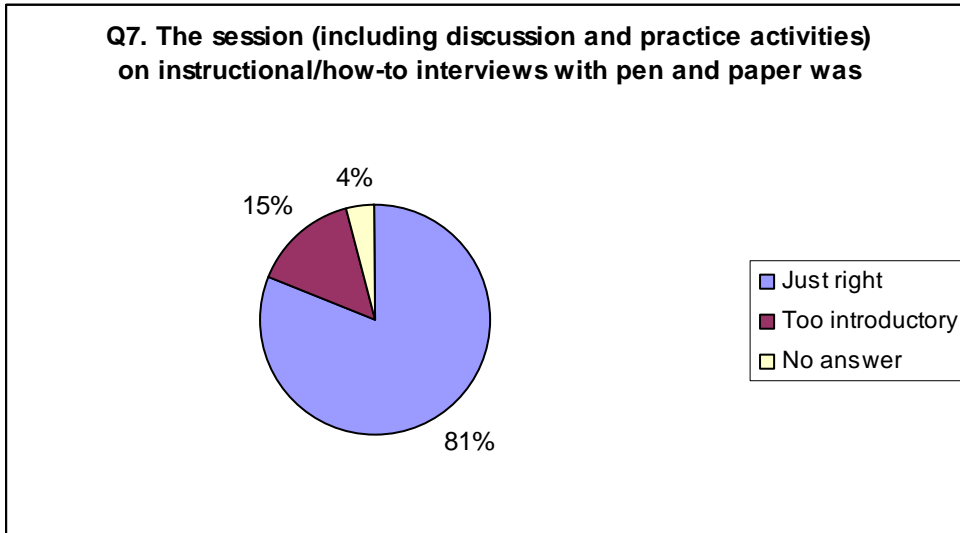
**Q6. I am interested in attending follow-up activities relating to this workshop**



Please rate the following sessions in regards to the content:

Response choices: Too introductory, Just right, Too advanced

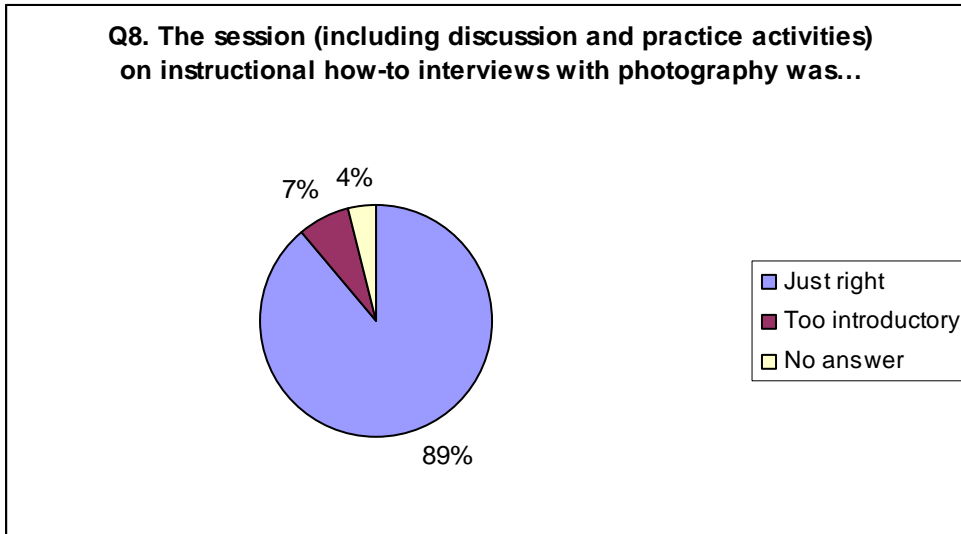
**Q7. The session (including discussion and practice activities) on instructional/how-to interviews with pen and paper was...**



### Comments for Q7:

I really learned a lot...Thank you  
comment #8: wasn't aware of all the techniques when taking photos  
comment#7 I missed it  
comment#11: I say between the two boxes that checked, few were too long and few topics could add a little more length  
comment#7: it made me understand and learn the right way  
comments#7: the instructors were knowledgeable  
comment#7: very useful for me  
final comment: traditional medicinal practices  
7: but need more time to assist in refining skill  
Other  
Other:  
Travel to Aotearoa

**Q8. The session (including discussion and practice activities) on instructional how-to interviews with **photography** was...**



### **Comments #8:**

final comment: Mahalo nui loa for everything! It has been an unreal experience for me! Meet new ohana and learned new things!

Comment#8 I missed it

comment#8: we did not just learn from the instructions, but were able to have hands on learning

comment#8: Good intro and not too confusing for TEK workshop

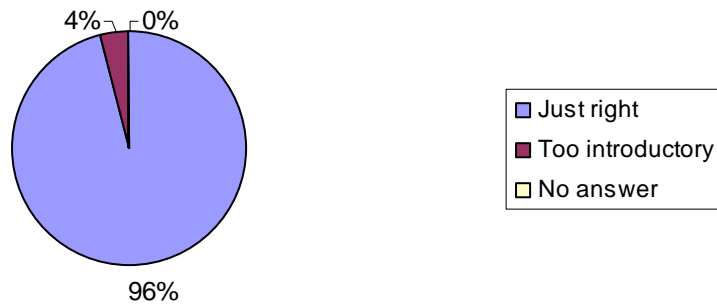
8: but need an online or quick guide for future use when at home

Everything good in this program.

**Q9. The session (including discussion and practice activities) on one-on-one interviews with **audio recording** was...**



**Q9. The session (including discussion and practice activities) on one-on-one interviews with audio recording was...**



**Comments #9:**

comment#9 we using the sessions that help us know how to use the mp3 then, discuss questions to be asked before interviews

comment#9: I understood what was being taught and will get better with more practice

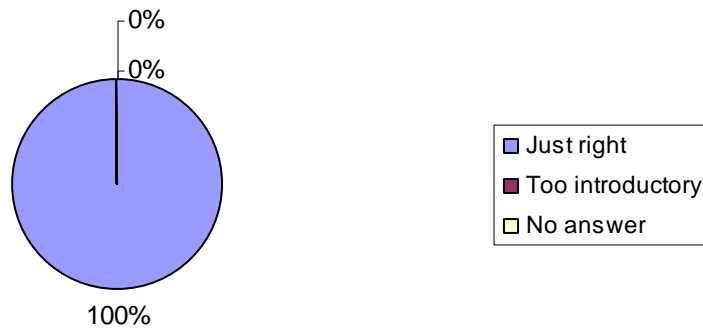
comment#9: Good feedback

9: did not see or hear this. But comment suggested was good.

Just right

**Q10. The overall workshop was...**

**Q10. The session (including discussion and practice activities) on one-on-one interviews with audio recording was...**



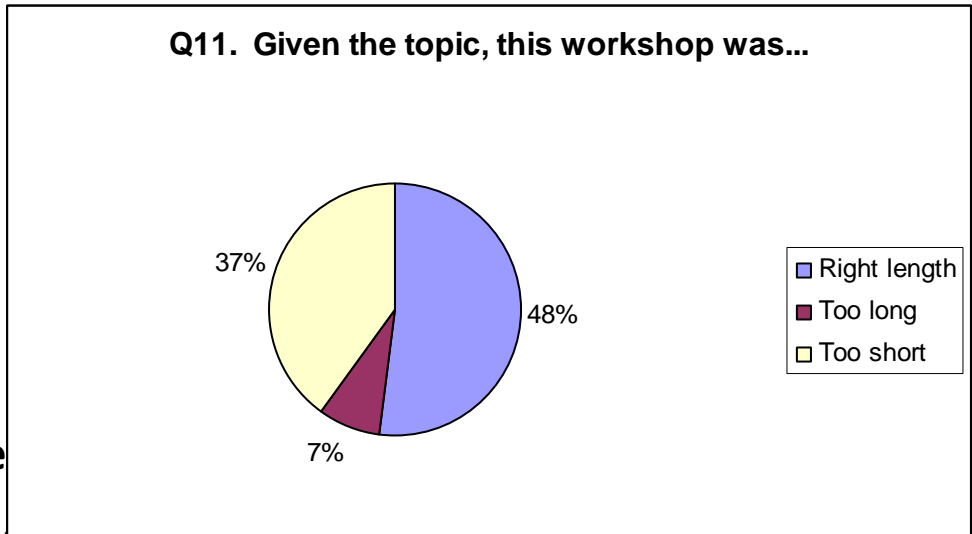
**Comments #10:**

comment #10: mahalo nui

comment#10 I learned a lot from it

Comment#10: Seemed advance at first, but once we got taught what we needed to do, it got easier.  
 Coment#10: Great people involved  
 10: but at times too much covered in too short of time

**Q11. Given the topic, this workshop was...Too short, Right length, Too long**



**Comme**

comment #11: need more time, so that it doesn't feel crammed into just 3-4 days  
 comment#11 Because we should have shortened the time because of the makuas (shorter days) and make it two more days.  
 comment11: it was a long time to be away from home but not enough time to get all the traditional knowledge from the elders

**Q12. What other activities or instruction should have been included in this workshop?**

The workshop pretty much covered everything that I need to know. Mahalo.  
 I think less technical things should have been included. Build in more time for other forms of cultural exchange like song, dance (no working)  
 video would have been great  
 gathering from the ocean and aina and preparing food together  
 advance notice would have helped us to prepare more traditional knowledge and fish gathered and prepared would have been great  
 actually catching opelu  
 curriculum development and design learning outcomes and be able to write measurable objectives  
 historical timelines for the benefit of the youths (future generations)  
 example: More breakdown to how to begin a net, (hands on experience on activities), then how to use the net on reef, how to see fish and catch fish. Same for all other activities.  
 nothing! It was awesome  
 public speaking tips  
 connecting with aina, more time in water, and eating fish prepared different ways  
 more hands on making things like the torch  
 more media overview right at the beginning as to use of people's images. Cultural media perspectives intro earlier.  
 activities to work with lawmakers or DLNR.  
 youth demonstrating a cultural practice that they have learned and share with group; explain how they

practice their tradition in today's society.

Being in the mauka part and cultural sacred sites

I want you to add sky and land in our program

Cultural input on the collection of TEK from the perspective of the visiting islanders. For example, if it is culturally inappropriate for an opio to sit down with and interview an elder, then we set up a situation that was culturally inappropriate. How can we address this in the future.

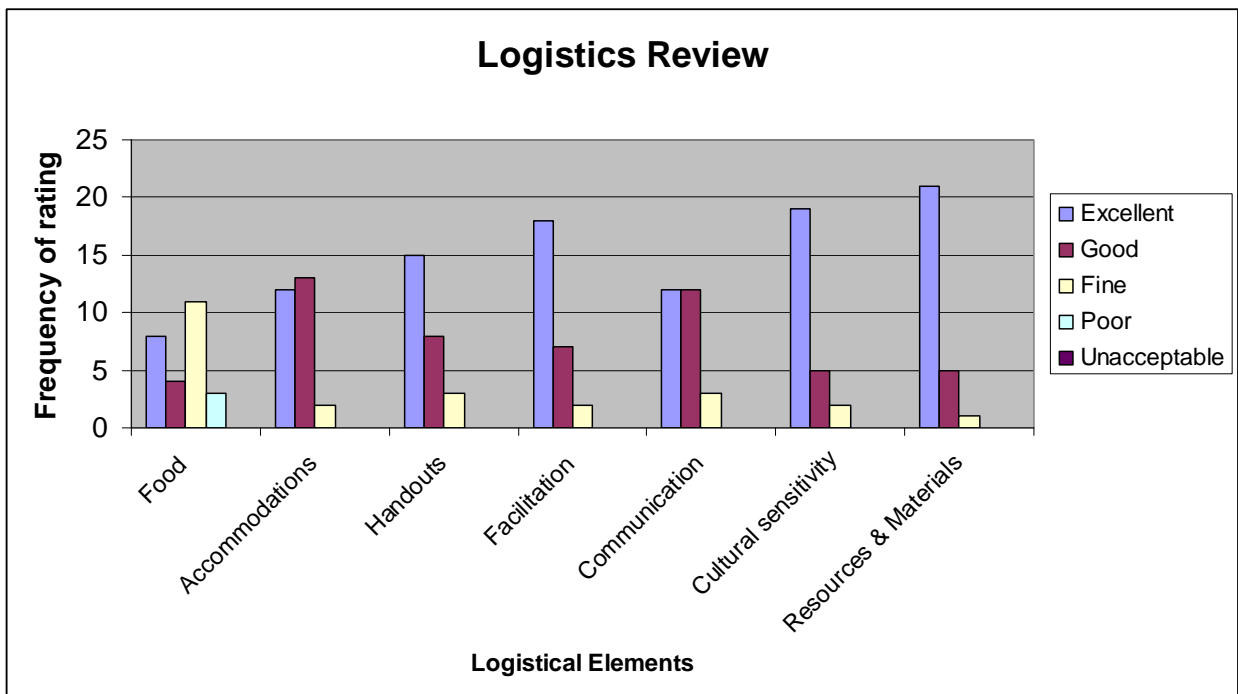
Food preservations (traditionally)

More interviews with people not from your community, and exchange of information.

Nothing

### 13. Please rate the following logistical elements according to the following scale:

1=Excellent, 2=Good, 3=Fine, 4=Poor, 5=Unacceptable



|                | Excellent | Good | Fine | Poor | Unacceptable |
|----------------|-----------|------|------|------|--------------|
| Food           | 30%       | 15%  | 41%  | 11%  | 0%           |
| Accommodations | 44%       | 48%  | 7%   | 0%   | 0%           |
| Handouts       | 56%       | 30%  | 11%  | 0%   | 0%           |

|                       |     |     |     |    |    |
|-----------------------|-----|-----|-----|----|----|
| Facilitation          | 67% | 26% | 7%  | 0% | 0% |
| Communication         | 44% | 44% | 11% | 0% | 0% |
| Cultural sensitivity  | 70% | 19% | 7%  | 0% | 0% |
| Resources & Materials | 78% | 19% | 4%  | 0% | 0% |
| Overall Program       | 74% | 26% | 0%  | 0% | 0% |

## 14. What do you think were the most effective elements of the workshop?

No comment

One of the keys was the resource teams knowledge, professionalism, and cultural sensitivity and knowledge to know how and when to talk to the practioners. Also, the inclusion of youth was very powerful to perpetuate customs and traditions

sharing of knowledge between each other and technology

the leadership, organization, and the deep love that we all came from the land, and places, and participants sharing and technical support

having the kupuna, makua here to share and see the actual product

cultural sensitivity

how we came up with the word oceania and learned ways to improve on TEK practices.

interaction between everyone from different aina. Being able to discuss without being offended or offending others

the demonstrations, use of technology

the most important elements in the workshop were all the people involved making it happen

participants

haivng elders and youth providing resource kits

participation hands on

focusing on our youths

expanding network of communicaties. Enhance goals through technology

Bringing the different people together and mold us as one people called Oceania people

The "free time" we spent sharing songs and mele; getting to know our Oceania cousins; experience of sharing problems/threats and how they address them.

Connecting Oceania

No comments

Meles, hands-on practice, sharing of practices, good sharing time the one evening.

sharing traditional knowledge

Visual aids and hands-on learning

Swimming

Cross-sharing between participants. The Ho`okena venue and experiences and the hospitality.

One of the most effective tools were the accompanying of youth with makua on tech lessons (opela wa`a, lama ku upena)

## 15. How could this workshop be improved?

No comment. Nothing to be improved. 😊

No CRTF meeting

make it a little more organized and trained leaders ahead of time

more time to explore the aina and ocean. Other than that nothing.

advance notice would have helped us to prepare more traditional knowledge and fish gathered and prepared would have been great

more time, not so early and not so late

we should have more resources and materials

If this one is worked out and for the people and NGO's and govt. to work together

Books or materials to be handed out before arrival to go over and not much outside of that.

it was awesome

I think that the workshop was a huge success and will be improved by having these workshops again.

Food. Can we have fish and poi, native Hawaiian diet

mor prep with technology people rethink how outputs can be explained early on. And Uncle Herbert Caters.  
none

consistent, once or twice a year

Go and try out different venues and in this way we can meet as many people as there are.

Increase number of youth participants

More hands on and maybe more time

Work with the local people to take their ideas to improve their program

A bit more time

Make more interactions and activities

Working more on Hawaiian culture

A little more break time

Nothing

I wouldn't change a thing

Certain facilitators should calm down during stressful times. This will help ease the group. Don't ever use this caterer again.

**Q16. Would you like to receive additional instruction in this topic in the next 12-24 months? If so, please describe the top two items you would like the training to focus on:**

**Topic 1:**

"Main elements" but I hope all workshp would be like this one

topic 1: Anything cultural we have a lot to learn from each other's cultural hands on activities at one of our oceanic cousin's communities.

technology: one week seminar

more traditional practice demonstrations

seminar workshop on oral history

capturing traditional knowledge through media

documentation of the time each species having babies and nursery

Topic: TEK management options and management tools

how to do management for your aina structurally. 1. paper layout 2. presentation 3. implementation

documenting traditional knowledge

traditional indigenous knowledge, ways of knowing non-western

food prep and cooking shows

educational technology processes

hands on activity with the youths

traditional practice-more time (Hawaii)

Topic 1: Workshop

Topic 1: Utilizing Traditional Knowledge in Today's Society

Hands on work and maybe music and hula

I want you to improve our life skills

Topic 1: adapting traditional knowledge with/into moder day

Topic 1: Culture

Topic 1: Teaching/implementing traditional management today

Topic 1: Knowledge transfer

## Topic 2:

Scuba diving

same as above

culture

how to gather archival information also incorporation of ancient sites and traditional knowledge

seminar workshop and tech workshop

underwater photography

follow up on the implementation of what we say we will do

Traditional Knowledge policy making

TEK training

traditional fishing methods

video filmmaking

indigenous use of technology on web and cultural/global communication

no topic

traditional practice-more time (Oceania)

Hands-on

Other

other: Gatherings similar to this and study tours (visits)

Other: Kaho`olawe mission. Build a kahua lele for productivity.