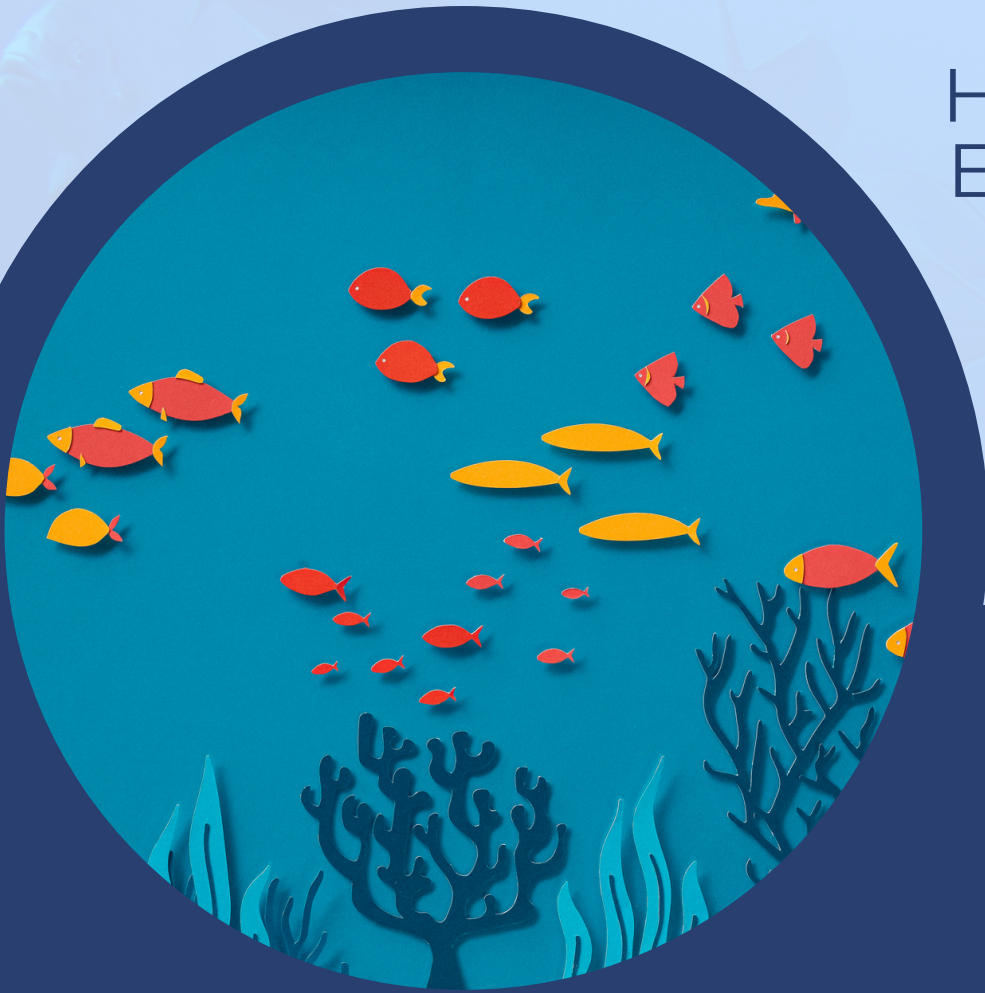




NOAA NMFS PIRO HCD

# 2022 ANNUAL REPORT

Hawai'i Fisheries  
Extension Agent



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FY 2022

# Overview of Position

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The Hawai'i Fisheries Extension Agent (HFEA) acts as the bridge between local fishers, scientists, and resource managers. The primary goal is to build and foster positive personal relationships with individuals and key stakeholders in the fishing community to ultimately promote pono (sustainable) fishing practices.

The HFEA serves as a liaison and provides a source of accurate and neutral information by conducting projects and performing different types of outreach and education. These outreach events may include attending fishing tournaments, fishing club meetings, and community events in addition to conducting shore-based and harbor-based fisher outreach.

This position works directly with Hawai'i's Division of Aquatic Resources (DAR) to advance communications associated with the State's management actions to protect coral reefs and coral reef resources.

The HFEA may assist with fisheries-related projects such as those that mitigate protected species interactions, serve as a member on fisheries related groups, and/or develop and produce reports, articles, outreach materials, or guidance documents for fisheries related issues.

Alex conducted work as the HFEA for the past 8 months and built foundational relationships with the fishing community, federal and state partners, local educators, and more.

The Hawai'i Fisheries Extension Program (HFEP) is funded by the National Marine Fisheries Service (NMFS) Pacific Islands Regional Office (PIRO) Habitat Conservation Division. In FY 22, the HFEA's activities helped advance the 2018 National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program (CRCP) Strategic Plan goals, objectives, and targets for the Fisheries (F) Pillar. These targets are identified throughout this report.



# Outreach

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## Fishing Tournament Outreach

- Attended 5 tournaments in FY 22
- Interacted with ~295 fishers
- Provided resources, resource management information, etc.
- Conducted fishing tournament outreach on Oahu, Maui, and Hawai'i Island

## Shore-based Fisher Outreach

- Conducted shore-based fisher outreach on 13 occasions
- Interacted with ~184 fishers (some of which were seen on multiple occasions)
- Distributed Hawai'i (HI) Fish Measurement Guides & other resources

## Community Events

- Attended 5 community events
- Audience typically included families, young students, and inexperienced fishers
- Interacted with ~250 individuals

## Fishing Club Meeting Outreach

- Participated in two fishing club meetings in FY 22
- Interacted with ~45 fishers
- Provided resources, resource management information, contact information, etc.
- Interacted with fishers of all experience levels

## Harbor-based Fisher Outreach

- Conducted 13 harbor-based fisher outreach events
- Interacted with ~128 fishers
- Most of these fishers were well experienced (some included charter boat fishers, captains, and crew)
- Opportunistically collected mahi mahi stomachs for a Pacific Islands Fisheries Science Center (PIFSC) study

## Scientist and Fisher Exchange (S.A.F.E.)

- Hosted two S.A.F.E. Meetings
- Topics: Herbivore Management & Drone Fishing Ban
- ~65 participants

# S.A.F.E. Meetings

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The **Scientists and Fisher Exchange (S.A.F.E.)** is a meeting to provide a safe and comfortable environment where genuine exchange of information can improve collaboration and communication, build positive relationships, encourage understanding, and foster respect and trust among scientists, resource managers, and fisheries stakeholders.

## Goals of S.A.F.E. Meetings:

- Provide opportunities for discussion and exchange of accurate information among scientists, managers, and fishers
- Increase awareness and knowledge about nearshore fisheries
- Provide a place to listen, learn, and understand diverse viewpoints while respecting and understanding stakeholders
- Create opportunities for collaboration among scientists, managers, and fishers

## May 2022 - Improving Herbivore Data Collection

- Stacia Marcoux (DAR) and Alex Filous (University of Hawai'i) presented their work on the newly proposed Sustainable Herbivore Management Plan and herbivore stock assessment analysis, respectively
- ~35 fishers, scientists, and resource managers discussed how to increase fisher participation in data collection to further herbivore stock assessments
- The input provided throughout the meeting assisted DAR increase fisher participation and stakeholder engagement in local fisheries management and increased the fisheries dependent data used to complete or update stock assessments of coral reef taxa.

CRCP Strategic Plan Target F1.3: By 2026, 75% of key coral reef fisheries taxa have completed stock or population assessments that inform current stock or population status and provide quantitative management advice.

CRCP Strategic Plan Target F1.4: 50 percent of Coral Program fisheries research projects include engagement, participation, and cooperation with local stakeholders in development and implementation.

## September 2022 - Drone Fishing Ban in Hawai'i

- David Sakoda (DAR) and Ian Garrod (Division of Conservation and Resource Enforcement, (DOCARE)) presented on the legislation that passed regarding the ban of drone fishing
- 26 fishers, scientists, and resource managers discussed the nuances of the drone fishing ban, what constitutes a fair drone fishing permit, and ways to enforce and strengthen compliance of the law
- The discussions educated the fishing community on the new regulation and provided DAR and DOCARE staff insight on ways to strengthen compliance and develop a drone fishing permit

CRCP Strategic Plan Target F2.2: By 2026, 50 percent of domestic and/or foreign partner agencies have adopted or implemented a new or improved approach to strengthen enforcement and compliance.



# Fisher Outreach

As the HFEA, Alex conducts a few different types of fisher outreach including tabling at fishing tournaments, attending fishing club meetings and events, and conducting on-the-ground shore-based and harbor-based fisher outreach. Throughout all levels of fisher outreach, the HFEA provides a source of accurate, unbiased information to the fishing community and distributes resources such as HI Fish Measurement Guides, regulation booklets, barbless circle hooks, and educational decals.

CRCP Strategic Plan Target F2.2: By 2026, 50 percent of domestic and/or foreign partner agencies have adopted or implemented a new or improved approach to strengthen enforcement and compliance.

**Fishing Tournament Outreach:** Alex attended fishing tournaments on Oahu, Maui, and Hawai'i Island interacting with both shore-based and boat based fishers. During tournament outreach, Alex connected with fishing shop owners, a local fishing tv show producer, fishing club executive members, and multiple generations of fishers.

**Fishing Club Events:** The members of the Oahu Kayak Fishing Club were extremely welcoming and asked questions regarding regulations, scientific projects, protected species interaction mitigation, and resource management.

**On-the-ground Fisher Outreach:** One of the best ways to interact with fishers is just by going up and talking to them. On a weekly basis, Alex talked story with fishers at local fishing spots throughout the east and windward side of Oahu as well as at He'eia Small Boat Harbor and Kewalo Basin Boat Harbor. Many are friendly, open to talking, ask questions, and appreciate the resources provided.



An example of an outreach booth at a fishing tournament



Local fishing tournament weigh-in



Hawai'i Fisheries Extension Agent

# Community Outreach Events

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Community based education and outreach event: Kapunahala Summer Fun Event

In addition to interacting with local fishers, the HFEA also attended community events to teach keiki (children), visitors, and residents about pono (sustainable) fishing practices.

In 2022, Alex attended the World Sea Turtle Day celebration at Sea Life Park and tabled a booth with fellow NOAA colleagues. This event was tailored for families and children to teach them about life history, behaviors, and fishing around sea turtles that are found around Hawai'i.

Further, Alex attended two Summer Fun events in which he taught students about fisheries management and the importance of minimum size limits. Alex developed a game in which students measure cut-outs of local coral reef fish species and use the HI Fish Measurement Guide to determine if they are a legal size to keep or not. As a wrap-up to this activity, Alex talked to the students about the importance of catching specific sized fish and the advantages of size limits, bag limits, and slot limits.

# DAR Collaboration

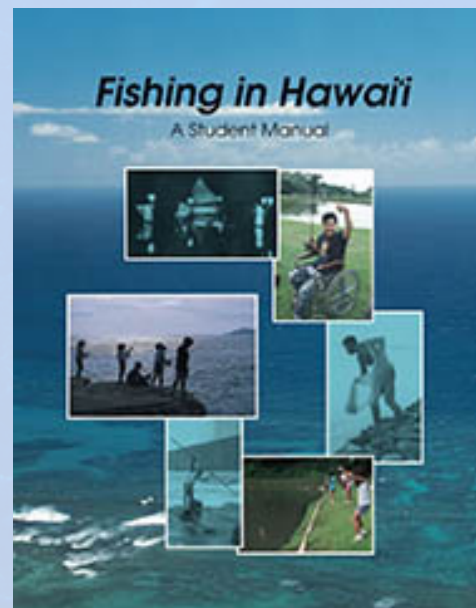
Part of the HFEA's responsibilities is to work with DAR to promote and communicate efforts regarding coral reef conservation. Alex works closely with DAR Program Manager, David Sakoda, and provides monthly updates, plans S.A.F.E. Meetings, and coordinates with other DAR team members as needed.

Alex attends the DAR Fisher's Working Group Meetings where key fisheries stakeholders get together to discuss time-relevant topics of interest. Alex is also working with the Holomua 30x30 team to connect with local fishers to build place-based management working groups and develop education and outreach materials as the place-based management is created.

CRCP Strategic Plan Target F1.5: By 2026, 75 percent of key MPAs have various tools and products developed from biological and socioeconomic assessments and disseminated to relevant stakeholders.

Additionally, Alex works with the DAR Education and Outreach Team to increase the efficacy of promoting pono fishing practices. Alex attends fishing tournaments, assists in Pono Fishing Classes, conducts outreach, and develops educational materials alongside DAR Education Specialists.

The HFEA largely serves as the nearshore fishery liaison and acts as a bridge between the efforts conducted by DAR and NMFS.



DAR pono fishing resources that are commonly distributed to the public and fishing community



# Protected Species Mitigation



Endemic Hawaiian monk seal hauled out on the beach.

Another important aspect of the HFEA position is to aid with communications related to mitigating protected species interactions. Alex works with NMFS PIRO Protected Resources Division and the DAR Protected Species team to help mitigate protected species interactions.

The HFEA can use a number of different approaches to increase messaging to promote proper ways to fish around protected species. In some cases, Alex will visit areas where public reporting of hooking or entanglements occur and see if he can provide fisher outreach. For example, Alex frequents Kaiwanui Canal in Kailua because there have been multiple reports of accidental turtle catch.

Alex distributes and promotes barbless circle hooks as one tool in the toolkit to help mitigate protected species interactions.

As the HFEA, Alex also distributes "Fishing Around Sea Turtles" and "Fishing Around Monk Seal" decals and walks through the necessary steps if a fisher hooks or entangles a protected species.



Fishing around protected species education and outreach decals



# Value Added

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School of tuna, commonly found offshore

During the first 8 months as the HFEA, Alex worked to establish a presence, build foundational relationships, and gain trust among the local fishing community. Alex serves as the boots-on-the-ground for NMFS PIRO and DAR communications. This allows fishers to ask questions, air grievances, anonymously report fishing violations, and find a reliable source of neutral information, while also allowing government agencies to hear about and understand points of dissatisfaction from within the fishing community.

The HFEA supports fisheries related projects such as assisting the DAR Holomua 30x30 team connect with Maui based fishers. The DAR Holomua team is working to launch a community engagement process to allow fishers to help develop place-based management to support the 30x30 efforts. Likewise, Alex opportunistically supports the Pacific Islands Fisheries Science Center Ecosystem Sciences Division to collect mahi mahi stomachs and connect local fishers with scientific research initiatives.

Alex supports the NOAA PIRO Communications team and DAR Education and Outreach team. Alex participated in multiple community events and created curriculum, games, and activities in association with the PIRO Communications team. Additionally, the HFEA supported the DAR Education and Outreach team by assisting with pono fishing classes, providing outreach and distributing HI Fish Measurement Guides to local fishing shops, and jointly providing outreach at local fishing tournaments and educational events.

# Moving Forward

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Ulua swimming nearshore

There are a number of things Alex will work to improve upon on as he continues his work as the HFEA to positively impact fisheries management in Hawai'i:

- Develop/support a greater number of **fisheries related projects** that support NMFS and DAR conservation and management
- Develop more **educational and outreach materials**
  - Update and improve the HI Fish Measurement Guides
- Make use of **media** to provide education and outreach to local fishers
- Develop a more **regular schedule** to increase trust and reliability from the fishing community (i.e. visit the same fishing spot/harbor at the regular time intervals)
- Expand the **geographic range** of fisher outreach
  - During the first 8 months, Alex worked to solidify a presence at a select few fishing spots/harbors and it is time to expand that reach
- Tap into the fishing clubs and/or **specific fishing communities** (i.e. kayak fishers or spear-fishers) better
- Increase outreach to **female, houseless, and younger fishers**
- Increase outreach and develop projects to support the reduction of nearshore **fishing related marine debris**