



*Sept. 2020 to March 2021*

### Grant Update & Review

**NOAA PIRO Marine Educational Training (MET) Grant:** *Marine Science Education and Training from a Hawaiian Perspective on Kaho'olawe: A Pilot Program for Maui Youth.*

•The Ocean Program was awarded a \$15K mini-grant from NOAA. The grant project focuses upon providing marine science students from Maui High School specialized curriculum with the help of KIRC staff. The curriculum integrates Native Hawaiian knowledge and traditional practices into science-based approaches to marine resource conservation and management. In March, five students (the grant obligation is for 16 students) and two teachers made a trip to Kaho'olawe where they learned about the importance of the mauka and makai relationship and the equal value of qualitative (cultural) and quantitative (western science) knowledge through “hands on” field work and site visits. The students participated in coastal plantings, coastal surveys and learned and implemented in water survey techniques.



**Maui High School  
marine science  
students and faculty  
learn the importance  
of a native coastal  
dune system while  
planting 'aki'aki in  
Honokanai'a**

**NOAA NFWF Nets to Energy Marine Debris Removal Grant:** *Removal of Derelict Fishing Gear from Keoneuli Beach in Kanapou Bay on Kaho'olawe, Hawai'i.*

•This \$76K, 3-year (Sept. '19-'22, including extension) grant project will remove a minimum of five tons of marine debris from Keoneuli during three accesses to the area. An unique aspect of this project is the attempt to divert all the debris from entering any landfill. Debris collected from Keoneuli will be either shipped to Oahu's H-Power (Covanta Energy) to be used as fuel and power local homes and businesses, recycled with a partner that will be using plastics to create building material, or the debris will be bundled and repurposed as sediment reduction material in the mauka areas on Kaho'olawe.

**Cooke Foundation Grant:** *engaging Hawai'i communities through Kaho'olawe culture, history and coastal restoration.*

•This one-year (Dec '20-Dec. '21) grant provides \$18K in supporting the mission of educating community members the KIRC's vision and continuing coastal restoration in Honokanai'a and Honukanae. With this grant project, staff will begin creating a baseline data set of the current and changing beach slope.



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### On Going Projects

#### **Coastal Restoration**

- Over the reporting period of September '20 to March '21, Ocean Program staff and community volunteers have planted 3,618 native plants (3,474 'aki'aki and 144 naio) and removed non-native grasses in Honokanai'a and Honukanaenae. All efforts are to reduce the sedimentation runoff that enters the nearshore ecosystem, protect the coastal region from surf/tide inundation and to re-establish a native dune system on the island. Staff have also begun to monitor the erosion effect of wind upon the sand dunes at Honukanaenae by placing organic barriers as a catchment system.

#### **Homemade Fish Aggregation Device (FAD) Removal**

- In March '20 a net measuring approximately 160 feet in length was found adhered to the reef off Keanakeiki. Ocean Program staff assisted with dive operations and the removal process. The net was repurposed for an upcoming art display at a visual arts center, Hui Noeau, on Maui.



**Homemade FAD found off of Keanakeiki**

#### **In water surveys and data collection**

- In efforts to monitor the effects coastal plantings in Honokanai'a are having upon coral reef health and sedimentation runoff, the Ocean Program conducted coral surveys and deployed and retrieved a sediment trap within the bay. Sedimentation runoff samples are currently being analyzed to be compared with the last 2-month deployment of the trap. The percent of coral coverage at survey sights within Honokanai'a show a slight decrease and still recovering from the extremely warm summers of 2019 and 2015.



**FAD netting being pulled on board the 'Ohua**



**Courtney collects photo image of coral for data analysis**