



## Kaho'olawe Island Reserve Commission

### 2. OLA I KE KAI O KANALOA

Ocean Resources Management Program

*May 2015-Sept. 2015*

#### Ongoing Projects

##### **NOAA Marine Debris Grant**

- 'Oawawahie debris removal

Through the marine debris grant extension and support from Zapata staff, the last remaining 800 pounds of debris was flown out of 'Oawawahie and Hakioawa. On June 30<sup>th</sup>, staff flew into Hakioawa to remove debris via helicopter that had been previously bagged by volunteers and staged by Zapata staff. This event marks the close of the field work required of the grant. A total of nearly 12 tons (11.94) of debris was removed through this grant, exceeding the 10 ton obligation.

##### **JTMD/DLNR Marine Debris Funding**

- In June staff was contacted by a representative (Barbara J. Lee) from the DLNR Chair's office regarding the possibility of funding a marine debris clean up project on Kaho'olawe. The monetary support is related to Japan Tsunami Marine Debris (JTMD) funding. A proposal was submitted along with a budget request of \$31,590 to conduct a clean up and removal project in Kanapou in December.

##### **DOH III**

- The last three sediment traps that remained in Hakioawa were removed in May. Due to water conditions and clarity, the traps could not be located for removal at the same time the traps at Hakioawa Iki and Kuikui were taken out. The traps had been in the water collecting sediment since June 2014.



Above: Approximately 800 pounds of debris was removed from 'Oawawahie and Hakioawa in June.



Left: Staff removes bio-fouling that has accumulated on the sediment traps in Hakoawa. The traps had been collecting data for 12 months.



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### Ongoing Projects

#### HCF Grant

● Between May and Sept. staff conducted 5 dives focusing on the removal of non-native/invasive fish from the Kealaikahiki Ili. The efforts were able to produce 276.75 pounds of biomass and 227 individual fish. To date we have removed 340 fish equaling a total of 434 pounds of the 500 pound grant requirement. Also a part of the 12 month grant staff is looking at changes in the overall coral reef health in Honokanai'a. To do this we have set up 18 individual photo plots in the bay that can be re-visited so that photos can be replicated to monitor benthic change (growth, bleaching, algal blooms, etc.) over time. In Sept. staff collected photo images at each plot to compare to pictures taken 10 month ago. The comparative analysis is currently being done, however we did notice a relative abundance of coral bleaching in Honokanai'a that is consistent with what is occurring around the State.



Left: An example of a bleached cauliflower coral head



Right: A speared Roi with a freshly eaten Upapalu in it's mouth

#### Outreach and Education

● Along with Public Information Specialist, Kelly McHugh, staff attend the Rotary Club of Wailuku's monthly morning meeting on Aug. 27 and also conducted an interview with DLNR's Dan Dennison on May 21 on Kaho'olawe. Both speaking events were focused upon the importance of the work that the KIRC is doing.

● During the month of May Kaiser (Wailuku Clinic) displayed the art work of students from Iao Preschool. The art work was constructed from recycled material, the vast majority being marine debris from Kanapou.



Left: Kelly is interviewed with the 'Ohua in the background.



Right: Iao Preschool students pose with their art teacher.



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#### Collaborations & Partnerships

##### **Division of Aquatic Resources (DAR) Maui**

● Abnormally high water temperatures throughout the State is believed to be a major contributor to recent coral bleaching events. To monitor and record water temperatures around Kaho'olawe staff is working with Darla White from DAR Maui/Eyes Of the Reef and has placed 6 temperature loggers in Honokanai'a and Honoko'a. At each site a logger is set at 1 meter, 3 meters and 8 meters. The loggers will collect temperature data for 12 months.

##### **NOAA, Univ. of Hawaii & The Nature Conservancy (TNC)**

● From June 15-19 staff conducted an island wide underwater survey of marine resources. With the assistance of divers representing UH and TNC and vessel support from TNC and NOAA, the completion of 5 different surveys (fish, resource fish, macro-invertebrate, rugosity, and coral) were conducted at 55 sites around Kaho'olawe. This recent survey expedition mirrors the survey efforts conducted in 2009, a comparison with the two sets of data can now be made to see any changes in the resources over time.



**Left: Divers conducting underwater surveys @ Waikahalulu**



**Right: The ADCP Sentinel V in place @ Honokanai'a**

##### **Univ. of Hawaii**

● Working with Ocean Francis, an Assistant Professor at UH's School of Ocean & Earth Science, staff deployed an ADCP Sentinel V off the southern point of Honokanai'a in 25 ft of water. The ADCP Sentinel V is an underwater wave and current recorder that will collect data on the strength and power of water movement in the location. This preliminary study is looking into the potential to convert wave energy into a power source for Base Camp in the future. On shore, a weather station was installed to correlate the marine data with weather patterns.

##### **USCG & NOAA**

● NOAA personnel from the Pacific Islands Regional Office (PIRO) conducted an aerial survey around Kaho'olawe utilizing the USCG dolphin helicopter on Sept. 28<sup>th</sup>. The survey produced the discovery of the newest monk seal pup to be born on Kaho'olawe. The mother seal is RV16, this is the fourth pup she has given birth to on Kaho'olawe. RV16 herself was born on Kaho'olawe in 2005.

**Right: Monk Seal mom, RV16 w/her newest pup born at Laepaki**

