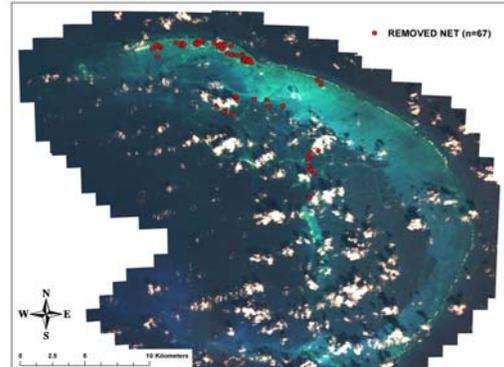




2007 Northwest Hawaiian Island Marine Debris Update

Results of second cruise, September 17-October 4, 2007

The NOAA Pacific Islands Fisheries Science Center (PIFSC) Coral Reef Ecosystem Division (CRED) Marine Debris Team successfully completed its second Northwestern Hawaiian Island cruise of 2007 aboard the NOAA ship *Oscar Elton Sette*. The team removed a total of 6.9 metric tons (over 15,400 pounds) of debris from the reefs and beaches of French Frigate Shoals Atoll over the course of twelve operational days.



Ikonos image of French Frigate Shoals with 2007 debris location points overlaid

The Northwest Hawaiian Islands, recently collectively designated as the Papahānaumokuākea National Marine Monument, provide critical breeding habitat for the endangered Hawaiian monk seal, the threatened green sea turtle, and the endangered humpback whale. Due to the islands' location in the center the north pacific gyre, a circular system of prevailing ocean currents that collect debris from around the pacific, a disproportionately large amount of derelict fishing gear is deposited here. The combination of sensitive breeding species and the potentially lethal entanglement hazards posed by the marine debris makes the removal effort a critical mission. During the first 2007 debris cruise, one live green sea turtle was successfully freed from a large multifilament net, while another was found dead, entangled just below the surface and unable to breathe. In addition to the immediate threat of megafauna entanglement, this derelict fishing gear may also damage or smother sensitive reef habitat, act as a vector for the introduction of non-native species, and present a hazard to boat navigation.



A diver works to free a net from the reef at French Frigate Shoals

Over the course of twelve days of operations, divers surveyed 9.13 km² of reef at French Frigate Shoals, utilizing both towboard and swim surveys to locate derelict fishing gear. 5,554 kg of debris was successfully removed from the reefs in this manner. In addition, the beaches of the various islets were opportunistically surveyed and entanglement hazards removed, yielding 1,442 kg of emergent debris. All debris collected at French Frigate Shoals was transported back to Honolulu aboard the *Oscar Elton Sette* and transferred to Schnitzer Steel Hawaii Corp. for recycling and energy generation.

The PIFSC would like to thank NOAA's Coral Reef Conservation Program and Marine Debris Program, Schnitzer Steel Hawaii Corp., Covanta Energy, the U.S. Fish and Wildlife Service, the State of Hawaii, and the US Coast Guard for contributing their time and services to the ongoing marine debris recovery project. For more information on marine debris removal efforts in Hawaii, please visit the NOAA PIFSC Coral Reef Ecosystem Division website: <http://www.pifsc.noaa.gov/cred/mdr.php>