



NOAA Teacher at Sea
Margaret Flanagan
Onboard NOAA Ship OSCAR ELTON SETTE
June 12 – July 12, 2007

NOAA Teacher at Sea: Maggie Flanagan
NOAA ship OSCAR ELTON SETTE
Mission: Lobster Survey
26 June 2007
Necker Island

Project Log

We just spent an exciting week setting lobster traps at Maro Reef. Sliced mackerel is our preferred bait, and we scrub the bloody patches that drip to deck every day. We hauled back many lobsters, as well as eels, crabs, urchins, and fish. Shark and Octopus can really break up the traps, and ocean conditions can be hard on the gear, so we make repairs as needed. I was

proud to put my sailor skills to work helping to splice new bridles on traps. (Splicing is weaving a line back into itself to create a loop, which is used to attach the trap to a fishing line.)



NOAA Teacher at Sea, Maggie Flanagan, repairs a trap aboard NOAA Ship OSCAR ELTON SETTE.

In the past week our Commanding Officer, Karl F. Mangels, shared a little history on The Marine National Monument area created out of the Northwest Hawaiian Islands. This status is the most protected, but also complex to initiate. The US Fish and Wildlife Service, NOAA, and the State of Hawaii, among others, have targeted this area for preservation for many years. Recently President Bush moved quickly to legalize the Monument status, but it is taking time to work out the details of regulations and procedures, considering the multiple jurisdictions involved. Regulations indicate all activities must be approved by permit, including scientific research, and all ships must

have vessel monitoring systems. But, access for native Hawaiian cultural activities is preserved as several of the islands are ancient holy sites. Midway Atoll retains special



Watch out when there's an eel in your trap! Most of the local species have sharp teeth, and are quick and eager to use them to gain their freedom.

status and will be open to more public visitation. All commercial fishing in the Monument waters will be phased out by 2011, and oil and gas exploration and extraction is prohibited. Having been part of a research crew in the Monument for a week now, I appreciate all these efforts at conservation. There is little dry land

surfacing out of the Pacific here, but the bird life and sea life are precious, including rare seals, sea turtles, and albatrosses.

Personal Log

Working at sea makes me think often of the legacy of sailors before me. Though he was a global voyager, Captain James Cook's influence is heavily felt in the Pacific. He honed his seamanship skills in the coasting collier (coal cargo) trade in Britain and honed his surveying skills in Canada, helping the British Navy fight the French. He charted the St. Lawrence River and the coast of Newfoundland, but was a surprise choice among his contemporaries for the Pacific voyages due to his lack of noble title and lack of Royal Navy training. His first command aboard *Endeavour* in 1768 was to observe the transit of Venus viewable from Tahiti. A replica of *Endeavour* now sails out of Australia, and for \$1,000 Aussie you can too! The mission of Cook's second voyage to the Pacific in 1772 was to "complete the discovery of the Southern Hemisphere." He took command of *Resolution* and penetrated the Antarctic circle several times. Both *Endeavour* and *Resolution* were converted North Sea colliers, sturdy vessels familiar to Cook from his merchant marine experience. For the third voyage, *Resolution* also carried the latest equipment, including a Gregory Azimuth Compass, apparatus for distilling fresh water from seawater, and a new five inch marine chronometer, the K1, by Larcum Kendall. The chronometer provided for even better chart making as it was easier to use than lunar

measurements and proved more accurate for finding longitude. In 1778, sailing to find a northwest passage between the Atlantic and Pacific, Cook encountered the Hawaiian Islands. Natives were friendly to the Captain and his crew, and when *Resolution's* foremast cracked badly in February 1779, they returned to Kealahou Bay on the big island of Hawaii to down rig the mast and float it to the beach for repairs. Misunderstandings developed as from both sides, resources were taken and tempers flared. When Cook went ashore with marines to seek settlement, a crowd gathered and became aggressive. Cook shot a Hawaiian, and in the retreat to the bay, Cook was clubbed and stabbed from behind, dying in the surf. Two other important figures were also witnesses that day in Kealahou Bay. William Bligh of *Bounty* infamy was one of the ship's officers, and Kamehameha, who unified the islands to become the first King of Hawaii, was nobility of the village ashore. Cook left quite a legacy of knowledge with his charts and logs, and a legacy of British influence around the globe. He accomplished surveys of the Pacific from Australia to Alaska. *Resolution's* officers demanded Cook's body be returned, but it came back as pieces of bone and flesh, which were buried at sea. There is a monument to Captain Cook in the form of an obelisk on Kealahou Bay, and it's curious to think that perhaps missing parts of his remains are buried there. Interestingly, that little part of Hawaii is technically British soil even to this day. Now, Kealahou Bay is also a Marine Life Conservation District filled with coral, schools of tropical fish, and even spinner dolphins – another legacy this historic site can offer for the future.