by Rebecca M. K. Hommon and Donna Stovall



Photo by Donna Stovall/USFWS

## Seabees Renovate Habitat for Endangered Birds

Answering a request from Donna Stovall, manager of the Fish and Wildlife Service's national wildlife refuges on the Hawaiian island of O'ahu, a Navy team recently created some critical mudflat habitats for endangered water birds on the shores of historic Pearl Harbor. These West Loch mudflats are home to a number of Hawaiian waterbirds, including four endangered species and a variety of migratory waterbirds. The endangered waterbirds include the koloa or Hawaiian duck (Anas wyvilliana), the ae'o or Hawaiian stilt (Himantopus mexicanus knudseni), the 'alae-ke'oke'o or Hawaiian coot (Fulica americana alai), and the 'alae'ula or Hawaiian moorhen (Gallinula chloropus sandvicensis). While munitions are loaded or unloaded around the corner at the pier on the West Loch Naval Magazine, the birds safely go about their routine, protected from human interference by an Explosive Safety Quantity Distance Arc that limits land uses in the area.



Hawaiian moorhen USFWS photo

The site is a 5-acre (2-hectare) pond within the Honouliuli Unit of the Pearl Harbor National Wildlife Refuge. This refuge was created as a mitigation measure to replace muddy habitat lost when Honolulu's "reef runway" was built. While the underlying land and water is owned by the Navy, the refuge is managed by the Fish and Wildlife Service. Over the years, the Honouliuli Unit has provided decreasing value to waterbirds because of the increasing growth of invasive plants and weeds. Service staff had attempted to create clear spaces by changing the water levels, however it wasn't enough to make the area suitable habitat for waterbirds. "Many of the mounds in the pond were too large and high to be affected by water level manipulations," said Donna Stovall. Additional work with heavy equipment was needed to create conditions favorable for certain plants, insects and other organisms that provide food for the birds.

In August 2000, Navy Construction Battalion Unit 413 (CBU-413), a Seabee unit, answered the Refuge Manager's request for help and at the same time benefitted from some real-life training. Two Seabee heavy equipment operators maneuvered a bulldozer and grader to sculpt the bottom of the pond. Putting their Navy engineering skills to work in this training exercise, EO2 Charles Stinson and EO1 Michael Bradley reshaped some of the mounds into islands, removed others, and constructed a drainage system according to a restoration plan designed by the refuge staff. In the end, the team had created critical mudflats for foraging, islands for stilt nesting, and channels to easily direct water to all parts of the pond.

This project was another demonstration of the Navy's strong partnership with the Service's national wildlife refuges in Pearl Harbor. For years, sailors and their families have volunteered numerous weekend hours creating new habitats, food sources, nesting and foraging areas, and clearing away vegetation and trash at the James Campbell and the Honolulu

units of the Pearl Harbor Nation Wildlife Refuge Complex. These voluntary efforts now allow 5,000 third-graders and others who visit the refuges to get a closer look at the visiting and resident waterbirds, shorebirds, and waterfowl, improving public understanding of the contributions of Pearl Harbor to the island's ecosystem.

According to Stovall, "This joint venture once again demonstrates the strong partnership between the Navy in Hawaii and the Fish and Wildlife Service. Without the Navy's help, we would not have the additional acreage of habitat needed to support Hawaii's native birds as well as the migratory birds that visit each year."

Rebecca M. K. Hommon is the Regional Counsel for Navy Region Hawaii, and is based in Pearl Harbor, Hawaii. Donna Stovall is the manager of the Oahu National Wildlife Refuge Complex. Using bulldozers and other earthmoving machinery, Navy Seabees created habitat for the endangered Hawaiian stilt.

Photos by Donna Stovall/USFWS





Hawaiian ducks USFWS photo

