



Department of Defense Legacy Resource Management Program

PROJECT 14-086

National Public Lands Day 2014

Tracey P. Adams, Teresa Crane and Mallory Shramek
National Environmental Education Foundation
Washington, D.C.

February 13, 2015

This document is unclassified and may be released to the public.

**DEPARTMENT OF DEFENSE
LEGACY RESOURCE MANAGEMENT PROGRAM (14-086)**

National Public Lands Day 2014

On September 27, 2014, 175,000 volunteers participated at 2,132 National Public Lands Day (NPLD) sites to improve parks and other public lands in all 50 states, the District of Columbia and Puerto Rico. NPLD volunteers contributed an estimated \$18 million in public land improvements by removing 500 tons of trash; collecting 23,000 pounds of invasive vegetation; building and maintaining 1,500 miles of trails; and planting 100,000 trees, shrubs and other native plants. Many NPLD events included an environmental education component to teach volunteers about land stewardship. In 2014, NPLD continued to focus on promoting the health benefits of outdoor recreation. Sites were encouraged to integrate recreational activities for adults and youth into their events, such as hiking, birding, biking and fishing.

The Department of Defense provides funds to the National Environmental Education Foundation (NEEF) for National Public Lands Day projects on military lands open to the public for recreation. Since 1999, National Public Lands Day has received \$2,406,585.76 through the Legacy Resource Management Program (Legacy). In 2014, a total of \$138,978 was distributed to installations for materials and supplies. The Legacy funds were used to enhance Department of Defense (DoD) lands through various cultural and natural resource improvement projects. Participating in NPLD provides the natural and cultural resource managers the means and labor to complete small installation-specific projects that may not otherwise get done due to budget or staffing limitations. These projects improve habitat and biodiversity for common and rare species alike, often reducing the need for intense management of these species.

The National Environmental Education Foundation received 43 applications for Legacy awards of up to \$6,500 each for 2014 NPLD projects. In September, NEEF notified 25 sites that they were selected to receive a Legacy Resource Management Program Award. NEEF awarded Legacy funds to sites by sending payment directly to the installation or reimbursing vendors for all items purchased that pertained to the awarded project. The branches awarded Legacy Resource Management Program funding consisted of seven Air Force, five Army, eight Army/Air National Guard, one Marine Corps and four Navy sites.

Over 1,520 volunteers took part in various natural and cultural resource improvement activities that were offered at the 25 Legacy sites. Many Legacy sites organized work projects to improve habitat for pollinator species including bees, birds, bats and insects. Other natural resource activities performed by volunteers included removing invasive plants, restoring rivers, enhancing dunes, constructing trails and planting native trees and wildflowers. The cultural resource activities included preserving burial sites, repairing historic structures and installing educational signage.

Legacy Sites 2014

<u>United States Air Force</u>	<u>Amount Awarded</u>
Bellows Air Force Station Hawaii	\$6,500.00
Eglin Air Force Base Florida	\$5,638.50
Homestead Air Reserve Base Florida	\$6,069.64
Langley Air Force Base Virginia	\$6,212.00
Malmstrom Air Force Base Montana	\$6,500.00
Shaw Air Force Base South Carolina	\$6,500.00
Tyndall Air Force Base Florida	\$6,500.00
<u>United States Army</u>	
Fort A.P. Hill Virginia	\$1,700.00
Fort Leonard Wood Missouri	\$2,918.00
Makua Military Reservation Hawaii	\$4,917.42
Redstone Arsenal Alabama	\$6,322.50
Umatilla Army Depot Oregon	\$6,500.00
<u>United States Army/Air National Guard</u>	
Bellows Air Force Base Hawaii	\$6,500.00
Camp McCain Training Center Mississippi	\$5,852.00
Camp Murray Washington	\$6,100.00
Camp Ripley National Guard Training Site Minnesota	\$6,500.00
Fort Indiantown Gap Pennsylvania	\$6,500.00
Fort McClellan Army National Guard Training Center Alabama	\$1,754.63
Fort Pickett Virginia	\$4,475.00
Papago Park Military Reservation Arizona	\$6,493.68
<u>United State Marine Corps</u>	
Marine Corps Logistics Base Albany Georgia	\$6,500.00

United States Navy

Joint Base Pearl Harbor-Hickam Hawaii	\$3,151.33
Naval Air Station Oceana Virginia	\$6,360.00
Naval Support Activity Hampton Roads Virginia	\$6,013.30
Naval Weapons Station Seal Beach California	\$6,500.00

United States Air Force



Bellows Air Force Station | Hawaii Cultural and Natural Resource Project: Sand Dune Restoration

Pollinator Project

Project Date: September 12-18; November 19 and 23, 2014

Project Summary: NPLD projects to enhance the dune ecosystem and preserve Polynesian burial sites at Bellows Air Force Station (BAFS) took place in September, October and November of 2014. BAFS was one of the first locations settled by Polynesians in Hawai'i. Dunes were used as burial sites, so dune preservation also keeps native burials intact.

Events included introductions, project overview and Hawaiian blessing. During the project overview, participants were briefed on Hawaiian customs to ensure they acted respectfully to protect the land. They were also given instructions on coastal native plant identification and propagation. Volunteers then set out to build the dune ecosystem by cutting trees, removing invasive plants, assembling irrigation lines, spreading mulch, setting log perimeter and planting and watering vegetation. In total, participants added more than 2,200 native plants, picked up 40 pounds of trash and removed 30,250 pounds of invasive plants, which included 25 mature Ironwood trees.

Interaction between the installation and local community volunteers during this dune restoration project created a positive working relationship benefitting both the environment and the Hawaiian community. In addition to volunteers from the base, participants included: two local elementary schools, civic clubs, community-based nonprofits, an after school program and the University of Hawai'i Environmental Center at Manoa. The University's internship program will continue to support this dune restoration projects to ensure its continued success and improvement. Other volunteer groups are also interested in supporting other natural resource enhancement activities on base. Craig Gorsuch, the project manager, noted "The felt sense for most participants during the service project was one of joy, gratitude, satisfaction and community."



Contact: Craig Gorsuch, Environmental Program Manager | (808) 259-4213

Eglin Air Force Base | Florida Natural Resource Project: Weaver Creek Rehabilitation

Pollinator Project

Project Date: November 5- 7, 2014

Project Summary: At Weaver Creek, located on Eglin Air Force Base, 71 volunteers worked a total of 477 hours during four full day planting events. Using hand trowels, shovels and post-hole diggers, participants installed 1,576 trees, shrubs and forbs on approximately two acres. Included were many flowering species attractive to pollinators and 463 Longleaf pines grown out from Eglin cones. The group also removed invasive Cogon grass. This Legacy project also included three half day work projects which gave participants the opportunity to build bat and owl nesting boxes.



After all of the work days concluded, project leaders emailed a survey to the volunteers. Their favorite parts were being able to give back to the land, planting trees, learning facts about wildlife and building the bat boxes.

Contact: Patricia Williams, Research Associate II | (850) 883-1192

Homestead Air Reserve Base | Florida Natural Resource Project: Endangered Species Habitat Enhancement

Pollinator Project

Project Date: Late March and/or Early April of 2015

Project Summary: The Homestead Air Force Base NPLD Legacy project will occur in late March and/or early April of 2015. The proposed work will benefit a habitat where pollinators and two federally listed endangered plant species are found. Work projects include removal of invasive vegetation, clearing and construction of footpaths/nature trails for educational use, planting of endemic pineland species that benefit pollinators and installation of several bat houses. Field work will be separated over two different weekends, the first for clearing and path construction; the second for planting of endemic species.

Contact: Dr. Michael J. Andrejko, Natural Resources Program Manager | (786) 415-7344

Langley Air Force Base | Virginia Cultural and Natural Resource Project: Bethel Park Restoration Project

Pollinator Project

Project Date: September 25 to December 1, 2014; various days

Project Summary: In total, 108 volunteers from Langley Air Force Base and the local community participated in a series of work days. Projects completed as part of the Legacy Award included the creation of a nature trail at the Battle of Big Bethel Civil War Monument; collecting and recycling 1,692 old tires; removing two tons of wood and invasive species debris; planting 87 native trees, shrubs and flowers to create a pollinator garden; removal of 60 pounds of invasive vegetation, construction of wildlife nest boxes and a floating dock for wildlife observation and fishing.



The completion of each project helped raise awareness of and enhance the natural and cultural resources at Bethel Park Outdoor Recreation and Family Campground. The new nature trail offers an opportunity for park visitors to learn about the historic Battle of Big Bethel while traversing through a scenic woodland and overlook to the reservoir. Construction of the floating dock enhanced opportunities for park visitors to observe wildlife or freshwater fish. Creation of the native pollinator garden was the most rewarding project detail. The pollinator garden was designed by the Hampton Master Gardeners and planted by volunteers with a diversity of native trees, flowers and shrubs with blooms from early spring to late summer. This particular project cultivated the park's landscape with an area that will support the health and abundance of local pollinator species.

Contact: Thomas J. Olexa, Natural Resources Manager | (757) 764-1090

Malmstrom Air Force Base | Montana Natural Resource Project: Garden Maintenance

Pollinator Project

Project Date: October 30 to November 1, 2014

Project Summary: Malmstrom Air Force Base is located on a prairie landscape characterized by long, harsh winters, dry summers and a great deal of wind sweeping across the open country. Most areas of the base lack trees leaving the buildings exposed to wind, heat, cold and dust. To diversify the landscape, benefit wildlife and reduce the base's energy costs, 44 volunteers worked a combined 352 hours planting native vegetation. In total 36 large trees and 25 large shrubs were installed along with 26 pollinator-friendly perennials added to the garden.

Ten of the trees were planted in honor of fallen Airmen. The individual responsible for determining the honorees learned a great deal about the sacrifices of fellow Airmen. One individual commented, "I never knew the stories behind these incredible people." The memorialization ceremony will take place in 2015.



Contact: Dr. Elin Pierce, Fish & Wildlife Biologist | (406) 451-1803

Shaw Air Force Base | South Carolina Natural Resource Project: Wildlife and Pollinator Habitat Enhancement

Pollinator Project

Project Date: September 20 and September 27, 2014

Project Summary: Shaw Air Force Base has been the recipient of a DoD Legacy Award for many years. Each conservation project builds upon prior efforts and this continued in 2014. Thirty volunteers worked a total of 360 hours to cultivate and treat areas of forested understory, which included picking up 200 pounds of trash, removing invasive vegetation from a 50-acre section and later spreading seed in that section. Interpretive signs were installed as part of a second project.

The work accomplished the goal of improving and enhancing the on-going conservation efforts already in place at Poinsett Range. Fertilizing and planting pollinator friendly vegetation along with invasive species removal, will enhance the quality of habitat used by a large variety of wildlife, especially bees and bats. The interpretative signs are not only informative but have an esthetic quality that also enhances the program. The project had a positive impact on the overall ecosystem by providing food, cover and shelter to a variety of wildlife species across the entirety of the range.

David Davis, the project coordinator and wildlife biologist, commented “The biggest thing I believe our volunteers learned this year is the plight of the pollinator. They had no idea the importance of the wild honey bee or the amount of insects bats consume.”

Contact: David Davis, Wildlife Biologist | (803) 895-5325

Tyndall Air Force Base | Florida Natural Resource Project: Shoreline Cleanup

Project Date: September 20 and September 27, 2014

Project Summary: On September 20 and 27, Tyndall Air Force Base held events to clean up the shoreline. In total, 1,685 pounds of trash and debris were removed from undeveloped pristine coastal beaches that are home to endangered species including shorebirds, beach mice and sea turtles.

In addition to the direct cleanup, Tyndall retrofitted 25 trash receptacles to prevent wildlife from getting in to the trash and spreading into undeveloped areas where it could risk entering bays and bayous. This will also help prevent predatory animals, such as coyotes, from coming to the sensitive coastal areas.

On base personnel also created an educational display using photographs donated by an enthusiastic volunteer who conducts year-round shoreline cleanups. A watershed pollution model was also purchased and used to educate children and families at National Night Out. It will remain a vital tool in teaching the importance of keeping pollution out of the watershed.

Contact: Wendy Jones, Wildlife Biologist | (850) 283-2822



United States Army



Fort A.P. Hill | Virginia Cultural and Natural Resource Project: Garrett Farm and Port Royal Museum

Project Date: September 25 and 27, 2014



Project Summary: Garrett Farm, located within Fort A.P. Hill (FAPH), was the site of the capture of John Wilkes Booth after the assassination of President Abraham Lincoln. The Port Royal Museum of American History is 2.5 miles from Garrett Farm and houses a number of items related to John Wilkes Booth and Garrett Farm. FAPH conducted two work days to prepare these areas for use during county-sponsored events as 2015 marks the 150th Anniversary of the assassination. On the first work day, volunteers used chainsaws to cut dead and fallen trees at Garrett Farm into manageable pieces. For the next work day, volunteers picked up 100 pounds of debris, removed over one ton of the cut wood and cleared eighty pounds of invasive vegetation. Volunteers participated in FAPH's Archaeological Resource Protection Act training session which raised awareness of preservation laws that affect federal lands.

The project included a video and photographic documentation component that will be used to create off-site materials. These materials will allow tourists to view the site in a museum setting as access to the Farm is currently restricted due to safety and security risks.

Contact: John Mullin, Cultural Resource Manager | (804) 633-8761

Fort Leonard Wood | Missouri Natural Resource Project: Stone Mill Spring Bank Rehabilitation

Project Date: September 27, 2014

Project Summary: Over three workdays, 19 soldiers in the Engineering School at Fort Leonard repaired shoreline along a 40 foot section of the Big Piney River that had sustained severe damage during a 2013 flood. This project restored access to Stone Mill Spring Branch Recreation Area (SMSBRA), a site that can only be accessed through Fort Leonard Wood. SMSBRA provides outdoor recreation opportunities for the community and is a popular trout fishing destination.

The class of soldiers surveyed the area, engineered a design for repair, and transported the materials in place to stabilize the area. This project gave them a real world project opportunity that they otherwise would not have had. Due to weather difficulties, Fort Leonard Wood will plant trees and vegetation in early spring.

Contact: Thomas Glueck, Branch Chief | (573) 596-2814



Makua Military Reservation | Hawaii

Cultural and Natural Resource Project: Restoration of Gulch Ecosystem in Kahanahaiki

Pollinator Project

Project Date: September 27 and November 15, 2014



Project Summary: The native forest of Kahanahaiki, located within Makua Military Reservation (MMR), is home to several endangered species, including the Cyanea, a plant that nearly went extinct in 1995. Over the course of two workdays, 18 volunteers worked 144 hours to restore the native gulch habitat of Kahanahaiki. Volunteers focused on removing the invasive downy wood fern along the gulch bottom and slopes, controlling a dense groundcover of 240 pounds of weeds throughout a 300 square foot area. Volunteers also planted 20 native plants and scattered 1,500 native plant seeds in the cleared area. Several of the plants were for native pollinators, including the Kamehameha and Koa butterflies whose populations have been declining.

Volunteers participated in an interpretive hike on both workdays as hiking was the only means to access the work site. Staff from the O’ahu Army Natural Resources Program shared information on management strategies, natural history information on the plants and wildlife and cultural information on the traditional use of native plants.

Contact: Kimberly Welch, Environmental Outreach Specialist | (808) 656-7741

Redstone Arsenal | Alabama

Natural Resource Project: Path to Nature Enhancements

Pollinator Project

Project Date: November 29 and December 3, 2014

Project Summary: Adults, children and a local Boy Scout troop maintained a trail, repaired and stained a boardwalk and updated the environmental and cultural outdoor education center. Volunteers also completed mud repair to the replica Mississippian Era Mud Hut. For the second event, the Redstone Arsenal community performed additional trail maintenance, including chainsaw work and repairing and staining an additional boardwalk. In total, 47 volunteers contributed 210 volunteer hours to maintain three miles of trail, remove 20 pounds of trash and eradicate 200 pounds of invasive vegetation. The fire department also installed native bee houses and planted pollinator friendly plants.

Contact: Shannon Allen, Ecologist | (256) 876-3977

Umatilla Army Depot | Oregon Natural Resource Project: Burrow Masters

Project Date: September 30 and October 1-2, 2014

Project Summary: The burrowing owl is endangered in Canada and is a Species of Special Concern in the United States. Since 2008, Umatilla Army Depot has been working to conserve this species and now stands as the leading demographic study area in the U.S. The design of their artificial burrows allows access to readily capture and band adult and young owls each year. In 2008, there were only three to four pairs of owls on the Depot and now there are 31. During the three-day event, nine volunteers upgraded 26 burrows and performed maintenance at 42 artificial burrows. Pails associated with accessing the nest chambers and the corrugated tunnels were enhanced. Wire mesh was also placed directly under the nest chamber to eliminate access by pocket gophers which plug the nest chamber with sand.



This three-day hands-on training program focused on the design, installation, and use of artificial burrows for the purpose of conservation, research, and management of burrowing owls. Nine owls were captured allowing volunteers to engage with the owls directly and help with the banding, examination, data collection, and release of live owls. Three "burrow cams" were made to allow the Depot to examine the interior contents and tunnel length of owls nesting in the burrows.

Contact: Jeff Mach, Natural Resources Conservation Manager | (503) 584-3493

United States Army/Air National Guard



Bellows Air Force Base | Hawaii Cultural and Natural Resource Project: Puha Stream Riparian Restoration

Pollinator Project

Project Date: September 27 and October 29, 2014



Project Summary: Over a series of three workdays a total of 110 volunteers helped restore 5,430 square feet of wetland/riparian habitat along the stream at Bellows Air Force Base. Native plants outplanted included aki aki grass, mao'uakiaki grass, akulikuli, bacopa and smooth edge hala. Volunteers also picked up trash, spread mulch and cut keiki mangroves (invasive wetland species). The September work project began with a native Hawaiian blessing and ceremonial chant by a Hawaiian Kahu (Minister) and included an informational/educational brief about the history of the area and the reasons for this riparian restoration project.

Project participants included those from an after-school youth group, young adults from the National Guard's Youth Challenge Academy, a Cub Scout pack, Air Force and Hawaii Army National Guard members and community volunteers.

Contact: Angela Kieran-Vast, Conservation Program Manager | (808) 672-1255

Camp McCain Training Center | Mississippi Natural Resource Project: Hardwood Forest Restoration

Project Date: November 14, 2014

Project Summary: Camp McCain Training Center conducted its annual National Public Lands Day project with volunteers from the local high school horticultural club, a garden club and staff from Camp McCain. Fifty bottomland hardwood trees were planted in an open hay lease field. The project restored an area to a vegetative type that is native and will provide excellent wildlife habitat. A briefing was given by staff that explained the mission of Camp McCain and the coordination between the military mission and the natural resource mission. Volunteers contributed a total of 60 hours on the project.

Contact: Mark Williams, Natural Resources Specialist | (662) 294-0305



Camp Murray | Washington

Cultural and Natural Resource Project: Murray Creek and American Lake Restoration

Pollinator Project

Project Date: November 15 and December 1, 2014



Project Summary: Nearly 100 volunteers spent two days replanting 210 native species to control erosion along and reduce sedimentation in the water at Murray Creek and American Lake. To minimize the spread of invasive weeds and shrubs that commonly grow in the riparian areas, volunteers also pulled 100 pounds of vegetation. Staff provided visitors with an overview of the installation's history, restoration efforts, and plant/tree identification. The Stream Team taught participants—which included Cub Scouts Pack 462, the Washington Youth Academy cadets and Air Guard personnel—on how to properly plant the shrubs and trees.

Tom Skjervold, Camp Murray's environmental program manager, said, "I was delighted as I came in to see where we have made more great progress again in

riparian restoration. I greatly appreciate the steady press this project has enjoyed thanks to the sustained efforts of a dedicated and motivated team and volunteers, and for NPLD Legacy funding support."

Contact: Rowena Valencia-Gica, Environmental Specialist 4 | (253) 512-8704

Camp Ripley National Guard Training Site | Minnesota

Natural Resource Project: Access to the Outdoors

Pollinator Project

Project Date: September 26, 2014

Project Summary: On National Public Lands Day, 50 area high school students and 15 Camp Ripley employees planted 50 trees and 500 native prairie seeds, removed 20 pounds of invasive vegetation, spread mulch, installed three trail benches erected a wildlife viewing platform and maintained one mile of trail. They spent a combined 296 hours on these activities.

One of the biggest challenges to the DoD site is access to the Mississippi River. Creating a safe and secure nature viewing structure on the shores provides more people with the opportunity to see it.

Contact: John Maile, Natural Resource Manager | (320) 616-2722



Fort Indiantown Gap | Pennsylvania Cultural and Natural Resource Project: Native Plant Awareness Conservation Project

Pollinator Project

Project Date: September 27, 2014

Project Summary: Fort Indiantown Gap is the only live-fire, maneuver military training facility in Pennsylvania, balancing one of the region's most ecologically diverse areas with its military mission. The site is one of two locations in the East that have Regal Fritillary butterflies. Project leaders organized nine different events that were attended by 76 participants, resulting in 412 volunteer hours that helped beautify high-visibility areas and improved the integrity of the habitat.



The events involved removing 6,000 pounds of trash and debris from recreation areas, removing two acres of invasive brush, collecting two pounds of native seed, performing handicap-accessible platform maintenance, stocking 300 pheasants and landscaping with nectar plants for the adult Regal Fritillary butterfly and other pollinators.

Contact: Rita Meneses, Cultural Resources Manager | (717) 861-9415

Fort McClellan Army National Guard Training Center | Alabama Natural Resource Project: Disabled Hunters Access Enhancements

Project Date: November 15-16, 2014

Project Summary: Fort McClellan provides public hunting opportunities as part of their natural resources management plan. Volunteers spent about 300 hours constructing sportsmen blinds designed to assist disabled hunters, spreading crushed rock for parking areas and wheelchair-friendly paths leading up to the blinds, and planting 25 oak trees along a creek bank. Afterwards the Boy Scouts set up camp for an overnight campout, which also included a tour of the installation's simulations center.

Contact: Leah Nerem Storino, Natural Resources Program Manager | (256) 847-4548



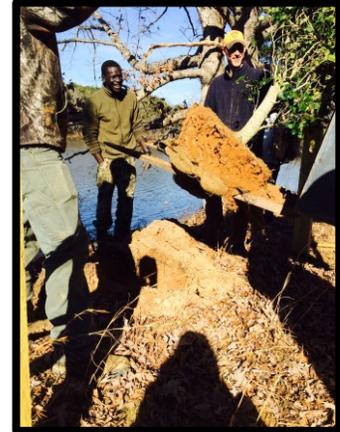
Fort Pickett | Virginia Natural Resource Project: Rain Garden Installation

Pollinator Project

Project Date: September 27, 2014

Project Summary: The Nottoway Reservoir boat access/picnic area on Fort Pickett has a pavilion that does not have gutters, causing erosion near the lake. On National Public Lands Day, 20 volunteers removed 40 pounds of trash, installed a rain garden and infiltration area to attract pollinator species, built a split rail fence to prevent pedestrian access to the steep bank of the lake, installed bat houses for six different species, and planted 15 native trees. They also lined timbers along the access trail for erosion control and posted a sign depicting the importance of the watershed.

Contact: Major James C. Shaver, Environmental Officer | (434) 298-6391



Papago Park Military Reservation | Arizona Cultural and Natural Resource Project: Site Enhancements

Pollinator Project

Project Date: December 7, 2014

Project Summary: Volunteers spent 36 hours creating an educational seating area around their headquarters and aviation administration buildings. After planting 20 pollinator plants, installing several signs describing the vegetation, and putting in a couple of benches, volunteers met with Black Hawk pilots and had the opportunity to sit in the helicopter. They also heard more about how sustainability management plays a role on the site how it benefits the community.

Contact: Dorenda Coleman, Sustainability Manager | (602) 629-4261



United States Marine Corps



Marine Corps Logistics Base Albany | Georgia Cultural and Natural Resource Project: Nature Trail and Natural/Cultural Resources Center Enhancements

Pollinator Project

Project Date: Spring 2015

Project Summary: Due to unforeseen circumstances this trail project will be completed in Spring 2015. Natural Resources staff prepared the trail bed by removing exotic or noxious plants, developing a design for the wattle/daub structure and other Archaic Indian camp elements with the assistance of a Native American subject matter expert, obtained digging permits, developed a landscape and materials list, purchased native wildflower and grass mixes, and cut wood to construct the drying rack and skin stretching frame.

This project will provide multiple benefits. The nature trail will connect to the larger boardwalk trail and include interpretive signage, therefore, has educational and recreational benefits. The native landscaping will provide habitat for pollinators and other wildlife, provide examples to the community of incorporating native plant materials in landscapes and eliminate the industrial look of the Natural and Cultural Resources Center. The Archaic Indian hunting camp elements will provide visitors a chance to first-hand view how native peoples lived and made use of natural resources.

Contact: Julie M. Robbins, Natural and Cultural Resources Manager | (222) 639-9946

United States Navy



Joint Base Pearl Harbor-Hickam | Hawaii Cultural and Natural Resource Project: Ahua Reef Wetlands Restoration and Halealoha Haleamau Burial Platform Enhancement

Pollinator Project

Project Date: October 4, 2014



Project Summary: Two events were held simultaneously on the same day at Joint Base Pearl Harbor-Hickam (JBPHH). The first event involved restoring the Ahua Reef wetland by clearing the area of invasive Pickleweed and replacing it with native plant species. JBPHH's Natural Resource Specialist gave an educational brief about the area, explaining why this work is important to the wetland and native birds. For the second event, volunteers enhanced the Halealoha Haleamau Burial Platform, a site that contains the remains of ancient Hawaiians. Volunteers cut the surrounding Naupaka hedge and planted Ti Leaf along the perimeter. JBPHH's Archaeologist and Cultural Resources Specialist gave an educational brief on the surrounding area and the significance of the burial platform and the Navy's responsibility to maintain it.

Overall, 75 volunteers worked a total of 225 hours, adding 60 new plants, removing 200 pounds of trash and 800 pounds of invasive vegetation. Project manager, Patty Colemon, commented "Every year, with the help from Legacy/NEEF, we are able to educate perpetuate, maintain and reach out to our military and civilian communities. The volunteer responses are inspiring and offer so much appreciation for our natural and cultural resources on our base."

Contact: Patty Colemon, Environmental Program Manager | (808) 473-0369

Naval Air Station Oceana Dam Neck Annex | Virginia Cultural and Natural Resource Project: Dune Restoration

Pollinator Project

Project Date: September 12-13, 2014

Project Summary: In partnership with the National Aquarium in Baltimore, Naval Air Station Oceana Dam Neck Annex held an event to restore dunes that were damaged during a storm. The dunes provide habitat for wildlife, but also create a unique natural landscape training component and a line of site visual barrier from the sea. Over 200 volunteers covered fencing and trees with firmly packed sand and planted 20,500 plants including *Ammophila brevilgolata*, *Baccharis halimifolia* and *Prunus maritima*. The plants help to stabilize and build the dune through a more naturalized process.

Staff educated participants about the need and importance of the dunes, both for natural resource conservation and military mission requirements. Staff also provided information on the process of proper planting and the steps utilized to repair the dunes. Volunteers included sailors aboard the USS Harry S Truman, other active duty military members and their families, retired military personnel, the local community and a Girl Scout troop.

Contact: Michael Wright, Natural Resources Specialist/Manager | (757) 433-3461

Naval Support Activity Hampton Roads Portsmouth Annex | Virginia Natural Resource Project: Shoreline Enhancement and Nature Garden

Pollinator Project

Project Date: September 18-19, 2014



Project Summary: Volunteers participated in an oyster gardening workshop hosted by the Elizabeth River Project and the Chesapeake Bay Foundation. Naval Support Activity Hampton Roads Portsmouth Annex received 6,000 spat (baby oysters) in six cages. Volunteers helped to secure the cages with rope and tie them along the Lafayette River and Portsmouth Annex piers. This program encouraged oyster population growth, the Chesapeake Bay's best natural filters. Once grown, the adult oysters will be returned to the Chesapeake Bay Foundation for planting on sanctuary reefs. Volunteers also participated in shoreline restoration near the Naval Medical Center Portsmouth, a large hospital complex on the main branch of the Elizabeth River. Activities included planting 30-bald cypress trees, five dogwoods, five service berry and six redbuds along the upper buffer and bank face of the shoreline.

Project leader held a second event to create a Pollinator Garden. Over five to seven days, volunteers planted 167 perennials and shrubs and 51 trees. This garden provides wildlife habitat and attracts pollinators, such as hummingbirds, bees and butterflies. The garden is also a place for wounded warriors and personnel to relax and enjoy the view of the Scotts River.

Contact: Linda Hicks, Environmental Director | (757) 836-1862

Naval Weapons Station Seal Beach | California Natural Resource Project: Native Vegetation Restoration

Pollinator Project

Project Date: October 16 and 18, 2014

Project Summary: Naval Weapons Station Seal Beach and Seal Beach National Wildlife Refuge hosted two volunteer events to restore native vegetation to several acres of upper salt marsh habitat and adjacent upland habitat. Volunteers included Boy and Girl Scout troops, students and employees from Boeing, Toyota and Disney. Over the course of the two events, 175 volunteers contributed over 700 hours to remove invasive plants, prepare the land for restoration, and plant 1,220 native plants. This was one of the highest plant totals since the first of these annual events 11 years ago.

These upland restoration areas provide habitat and shelter for state and federally-listed endangered bird species, including the federally-endangered light-footed Ridgway's rail and California state-endangered Belding's Savannah Sparrow. These areas also provide an important buffer between wetland habitat and agricultural lands.

Contact: Bob Schallmann, Conservation Program Manager | (562) 626-7290

