



Natural Selections

Legacy Program Update

The Legacy Program initiates FY 2009 pre-proposal review with Service representatives: The Legacy Program received 230 pre-proposals submitted through the Legacy Tracker in response to the RFP solicitation announced in May 2007. A total of 149 natural resources pre-proposals, and 62 cultural resources pre-proposals and 19 integrated (natural and cultural) resources pre-proposals were received online. Invitations to submit full proposals will be announced through the Legacy Tracker at www.DoDLegacy.org by mid October, 2007.

Legacy Project Highlight of the Month

Legacy Project 07-86 Department of Defense National Public Lands Day 2007

In 2007, 36 out of 49 applications were selected to receive Legacy funds were approved. The following are just a few examples of work done at the selected military installations. At Fort Lewis, Washington, volunteers removed invasive Reed Canary Grass and other invasive plants while improving habitat for native bird species. At Fort Dix in New Jersey, volunteers restored the shoreline of an eroding lake. At Columbus Air Force Base in Mississippi, volunteers created several butterfly gardens. At Quantico Marine Corps Base in Virginia, volunteers enhanced the historic Prince William County Courthouse.

NPLD projects that take place on military installations are eligible for DoD Legacy funding through the maximum amount awarded to each site was \$6,500. Funds may be used for tools and equipment, materials, and enhancements to land used by the public, but not for T-shirts, food, or labor. The application is posted on the NPLD website at www.publiclandsday.org and applications are due at the end of each June.

See Legacy, page 6



In The News

Helping Hands for America's Lands: National Public Lands Day Sept 27th

By Claudia Kessel
National Environmental Education Foundation

One out of every three acres of land in the United States is designated as public land. This equates to about 600 million acres nationwide. Throughout the country land managers depend heavily on efforts of volunteers to help maintain and enhance these lands that many consider America's most precious resource.

The importance of volunteerism in our nation's parks, forests, wildlife refuges, and other public areas is celebrated each year on National Public Lands Day.

National Public Lands Day (www.publiclandsday.org) is America's largest single-day volunteer event. On the last Saturday of every September people of all ages get outdoors to plant trees and native vegetation, remove trash and invasive plants, construct hiking trails, maintain campgrounds, and improve wildlife habitat in parks throughout the country. In the process parks [National Public Lands Day 2008, page 7](#)

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Naturally Speaking

From the Desk of L. Peter Boice,
DoD Conservation Team Leader and Director, Legacy Program



According to Labor Department statistics, more than 60 million persons aged 16 or older, or 26.2 percent of the population, participated in a volunteer activity in the year ending September 2007. Within DoD, opportunities to volunteer are not always apparent. One exception is National Public Lands Day (NPLD).

On September 27, 2008, the Legacy Program will fund 38 sites in 22 states and the District of Columbia. This is a huge leap from where we started in 1999 with just eight sites in four states. As Claudia Kessel notes in this month's "In the News" this is the tenth consecutive year that DoD has participated.

A quick scan of this year's DoD NPLD sites reveals that three closely related activities – invasive weed removal, habitat restoration, and native vegetation planting – remain favorite volunteer activities. Well, at least they are activities favored by our resource managers to get volunteers involved! "B" activities also are favored – no, not bees, but Birds, Bats and Butterflies. Fortunately, the pollinator gardens being added this year will probably help some of our native bees as well.

Again this year, DoD has included a small but important cultural resources component in its NPLD activities. We are funding eight cultural resources projects, including historic graveyard restoration, cannon cleaning, historic building repairs, and interpretive kiosks and trails.

Enhanced awareness of our natural and cultural resources is an essential component of most NPLD events. Even when volunteers are not directly working to improve the appreciation of our resources by future visitors, they are themselves gaining a similar awareness – through direct participation, from listening to brief overviews from our resource managers, and from talking with other volunteers.

It's been my privilege over the years to have held leadership positions in several volunteer-based organizations – from a regional environmental newspaper and a cooperative nursery school to church vestry and Girl Scouts. But whether you can afford the extended commitments that come with activities such as these or can afford only to donate the few hours' commitment of an NPLD event, the key is to find the level of commitment that best suits you – and volunteer! After all, as the Labor Department has found, we are a country of dedicated and hardworking volunteers, and this especially true for those of use who care about our precious natural and cultural resources.



SMR Conference Update

Call for papers hit the streets



SMR 2009: Call for Papers

Thank you for your suggestions for natural resources track sessions at the Sustaining Military Readiness (SMR) Conference, set for 9-14 August 2009 in Phoenix, Arizona. The natural resources track lead has taken heed of your suggestions and is calling for papers! Broad conference themes include: energy, partnerships, sustainability, emerging issues, and the future. Papers may pertain to one of the above themes, or another subject relevant to the DoD natural resources community such as: ecosystem management; bird conservation; invasive species; endangered species; conservation strategies; readiness and range sustainment, and others. Abstracts should be approximately 500 words and submitted no later than 15 November. Please send your abstracts by email to Pedro Morales, Pedro.Morales.ctr@osd.mil. Note: A call for posters will be issued in late winter.





NEW! Natural Resources Compliance: January 13 -16, 2009, Port Hueneme, CA. This course offers instruction in specific natural resource laws, regulations, policies, Executive Orders, DoD Instructions, and other guidance, noting Service-specific requirements. Course addresses stewardship, preservation, and process; fish, game, and wildlife management laws; protection of wetlands, waterways, and other protected ecological areas; forest and land use management laws; and interservice cooperation. Practical exercises and guest speakers are included. This course is approved by the Interservice Environmental Education Review Board (ISEERB). Click [here](#) for course description or visit <https://www.netc.navy.mil/centers/csfe/cecos/>.

NEW! Environmental Negotiation Workshop: December 9 – 11, 2008, San Diego, CA. This three-day ISEERB approved course provides instruction on the negotiation and communication skills necessary to achieve productive agreements with regulatory and public stakeholders. The class aims to make attendees more knowledgeable and comfortable in the negotiation process in order to have confidence in a negotiation. It stresses the human, organizational and public aspects of building constructive relationships with stakeholders and installation management. Case studies and role playing provide an opportunity for every student to apply the information presented in class. Click [here](#) for course description or visit <https://www.netc.navy.mil/centers/csfe/cecos/>.

USEPA Online EMS Training Course: (Online) This online course provides an overview of how environmental management systems (EMS) can support facility programs. The course takes about one hour to complete and may be found at: <http://www.epa.gov/epaoswer/ems/ems-101/ems101.htm>.

WORKSHOP RESULTS! Guidance for the Establishment, Use, and Operation of Conservation Banks: TNC worked with the Environmental Law Institute, the EPA, and USACE, with financial support from some private foundations, in developing a two-day training course designed to familiarize TNC staff with the legal and administrative requirements for implementing mitigation projects under Section 404 of the Clean Water Act and the new regulations, while providing tools (including model banking agreements) for planning and implementing wetland and stream mitigation projects. The workshop materials that were given to attendees of this course, including a training binder and additional resources, are now available online at no charge. You can download them at <http://conserveonline.org/workspaces/mitigationtraining>.



Announcements and Events of Interest

A Short List of Future Events of Interest to the Conservation Community



NEW! ACES 2008: Using Science for Decision Making in Dynamic Systems: December 8-11, 2008 in Naples, Florida. ACES (A Conference on Ecosystem Services) is holding their annual meeting in Naples Florida. As the issue of ecosystem services and their valuation and location becomes an increasingly important factor in resource management and conservation; decisions relating to prioritizing conservation and development locations, managing public lands, and evaluating the impacts of change are posing new challenges for policy makers. These important decisions require an understanding of the services provided by ecosystems and ways that they can be valued and used in decision making. The purpose of ACES 2008 is to provide a needed forum for sharing information on state-of-the-art methods, tools, and processes related to ecosystem services and their effective use in decisions. The interdisciplinary nature of ACES 2008 will facilitate interactive discussions and networking to create and build partnerships while sharing lessons learned from the field. Visit <http://conference.ifas.ufl.edu/aces/index.html> for more information.

NEW! 9th National Conference on Science, Policy, and the Environment: Biodiversity in a Rapidly Changing World: Dec 8-10, 2008, in Washington, DC. The National Council for Science and the Environment (NCSE) invites you to participate in the 9th National Conference on Science, Policy, and the Environment: *Biodiversity in a Rapidly Changing World*, to address the challenge the changing world poses to biodiversity (and to humanity). The conference will provide an opportunity to look at what is happening to biodiversity in the context of radical climate disruption, human population rise, land use changes, globalization and other economic forces. We will collectively develop a 21st century biodiversity science and conservation strategy. For more information and to register visit <http://ncseonline.org/Conference/Biodiversity/>

The Wildlife Society 15th Annual Conference: November 8-12, 2008 in Miami, FL. The conference is an excellent opportunity to learn and debate cutting-edge research, management practices, and policy issues. A variety of workshops will provide hands-on training in new management techniques. It's also a great place to network among 1,500 wildlife biologists from across the U.S., Canada, the Caribbean, and worldwide. You're sure to come away with ideas and inspiration for tackling the challenges in your daily work environment. During this conference, DoD is sponsoring a 1/2 day symposium on "Biodiversity Management in the Department of Defense". To register or for more details visit <http://joomla.wildlife.org/miami08/>.

8th Annual NAPPC International Conference: October 22-24, 2008, in Washington, DC. The work of the NAPPC partnership has brought significant attention to the plight of the continent's pollinators. From the NAS NRCS Study on the Status of Pollinators to the US Postal Service Pollination Stamps to the IABIN Western Hemisphere Pollinator Data Portal to National Pollinator Week, this collaboration needs your help to keep our momentum moving forward for pollinators. Wednesday, October 22, 2008 will include an optional pollinator field trip to Plummers Island and the National Museum of Natural History Coevolution Hall, followed by an opening evening reception at the Organization of American States where invitations will be extended to the Ministers of the Environment, the Ministers of Agriculture, and numerous Ambassadors from across the Western Hemisphere. For details visit www.napppc.org or to register go to www.regonline.com/NAPPC2008.

35th Annual Conference on Ecosystems Restoration and Creation: November 6 - 8, 2008 at the John R. Trinkle Building located on the Plant City Campus of the Hillsborough Community College (Plant City, Florida). Kiran C. Patel Center for Global Solutions at University of South Florida is joining the Institute of Florida Studies in co-hosting this year's Conference. The Conference provides a broad forum for exchange of results of the latest research and experience with restoration, creation, and management of ecosystems. The theme of this year's conference is "Assessment of Wetland Mitigation and Mitigation Banks". Visit <http://www.hccfl.edu/ifs/conference/index.html> for details.





Volunteer removes invasive plants from NIOC Sugar Grove in West Virginia during NPLD 2007



Boy Scout volunteers plant wildflowers and other native vegetation at Randolph Air Force Base in Texas during NPLD 2007

The following DoD installations are receiving funding for natural resource projects for the 2008 National Public Lands Day from the DoD Legacy Resource Management Program:

Army

- Camp Blanding Joint Training Center
- Camp Ripley
- Fort Custer Training Center
- Tennessee Army National Guard
- Fort Carson
- Fort Dix
- Fort Drum Military Installation
- Fort Leavenworth
- Fort Lee
- Fort Lewis
- Camp McCain Training Center
- Kahanahaiki, Makua Military Reservation
- Redstone Arsenal
- Yakima Training Center

Marine Corps

- Marine Corps Logistics Base Albany

Air Force

- Shaw Air Force Base
- Andrews Air Force Base
- Beale Air Force Base
- Patrick Air Force Base
- Randolph Air Force Base
- Vandenberg AFB
- Fairchild AFB
- Eglin AFB

Navy

- Charleston Naval Weapons Station
- Naval Air Station Oceana
- Naval Submarine Base New London
- Naval Support Unit Saratoga Springs
- Naval Weapons Station Seal Beach
- NIOC Sugar Grove
- Truman Annex, Patio Beach, Naval Air Station
- US Naval Academy



National Public Lands Day 2008, continued from page 1

managers educate the public about the environment. Children and adults alike have an opportunity to experience the wonders of the natural world.

National Public Lands Day is a program of the National Environmental Education Foundation (NEEF) is a Congressionally chartered non-profit organization that provides objective environmental information to enable Americans to take positive action on environmental issues in their daily lives, and to protect and enjoy the environment.

History of National Public Lands Day

National Public Lands Day began in 1994 when volunteers performed projects on a handful of sites on federal lands managed by the Bureau of Land Management, US Forest Service and National Park Service. Over the years National Public Lands Day has grown significantly. September 27, 2008 will mark the 15th anniversary of National Public Lands Day. Nearly 120,000 volunteers and community partners are expected to contribute an estimated \$13 million in improvements at over 1,500 public land areas in all 50 states—including federal, state, and local public lands.

Volunteers in Action

Since its inception, National Public Lands Day has succeeded in getting people outdoors to discover the parks, forests and beaches in their local communities and has encouraged their participation in outdoor recreation activities. The program has helped increase volunteerism on public lands, including Department of Defense installations open to the public for recreation.

These volunteer efforts provide millions of dollars in public land improvements every year while building partnerships between the public and private sectors. National Public Lands Day assists land managers with their volunteer events by offering them free publicity, materials, and resources. Organizers also develop yearly themes to focus on different environmental education subjects. In 2007 National Public Lands Day focused attention on the threat of invasive species to public land areas. Information, tips, and resources were provided to site managers through press releases, newsletters, and the National Public Lands Day website.

Carrying on the Legacy of the Civilian Conservation Corps

Individuals, land managers, and local communities that participate in National Public Lands Day build upon the magnificent and lasting legacy of the Civilian Conservation Corps (CCC). The CCC was a federal program started as part of President Franklin D. Roosevelt's New Deal which aided those who desperately needed a job during the Great Depression. The CCC employed over 3 million Americans between 1933 and 1942. Young American men were put to work at camps in every state building roads, trails, bridges, fences, dams, campsites, lodges, and cabins. They planted an estimated 3 billion trees, fought forest fires, mapped land areas and lakes, and constructed park facilities that now provide the basis of America's recreational infrastructure.

In 2001, National Public Lands Day was officially designated to carry on the legacy of the CCC during a "passing of the torch" ceremony. To commemorate the CCC's 75th anniversary in 2008, National Public Lands Day is encouraging volunteers across the nation to plant 1 million trees on public lands between Arbor Day on April 25th



Volunteers at Naval Weapons Station Seal Beach help restore habitat during the 2007 NPLD event by removing noxious weeds and planting native flowers, grasses and shrubs.

and National Public Lands Day on September 27th with the goal of inspiring new generations to carry on the land stewardship legacy the Civilian Conservation Corps built through their hard work.

Partnerships: Federal Agencies

National Public Lands Day has developed innovative partnerships with governmental agencies as well as non-profit “friends” groups and other conservation organizations. National Public Lands Day works with 8 federal and 38 state land management agencies and hundreds of county and city park departments. National Public Lands Day is a fee free day on federally managed lands. Volunteers who participate in National Public Lands Day at federally managed sites are rewarded with coupons for free entry into their public land areas.



Volunteers perform trail rehabilitation at Martis Creek Lake National Recreation Area in Truckee, California.

The Department of Defense, with funding from the DoD Legacy Resource Management Program joined the NPLD partnership in 1999 to support volunteer habitat restoration projects on military installations throughout the United States. DoD has provided financial support for NPLD events for the past 10 years. The military benefits from enhancing and restoring lands for recreation with much of this work directed to improving natural habitat for wildlife or cultural resources. Additionally, the military benefits by inviting the community to learn about these lands and understand the unique challenges surrounding natural resource management on DoD installations. Over the past 10 years, at least 250 National Public Lands Day events have taken place at Department of Defense sites and thousands of volunteers have come out to lend a hand to improve and enhance these lands for the public’s benefit.

Inspiring the Younger Generation

With the growing concern about children’s disconnect from nature, National Public Lands Day provides a perfect opportunity to introduce children and families to the natural world. In just 15 years, this exciting and rapidly growing effort to link communities with their local parks has expanded to include over 120,000 volunteers across America. For more information or to get involved on this year’s event, celebrated September 27, 2008, visit the National Public Lands Day website at www.publiclandsday.org.



Students of the US Naval Academy, in Annapolis MD, participate in the 2005 NPLD event at Greenbury Point.

Did You Know?

Little Did You Know Conservation Could Be So Much Fun!



It's Flamingo! – The Flamingo Tongue Snail, *Cyphoma gibbosum*, is a marine gastropod, lives sub-tidally on shallow reefs in the Caribbean and southern Atlantic Ocean, ranging from North Carolina to Brazil. *Cyphoma gibbosum* is commonly found individually, or in pairs, on sea fans and sea whips.

It is about one inch long and can be observed attached to gorgonians upon which it exclusively feeds. Unlike nudibranchs, Flamingo tongue snails have a shell; however, the shell is typically not visible in living animals due to the mantle flesh covering it. When alive, the snail appears yellow-orange with irregular shaped spots ringed in black. However, the mantle can be retracted, exposing the shell. This snail is extremely over-collected and must be protected.



The Flamingo Tongue snail is found in the Caribbean. It feeds on seafans and gorgonians. In this photo it is on the seafan *Gorgonia ventalina*.

All adult *C. gibbosum* live and feed on gorgonian corals, and females oviposit encapsulated eggs onto the bare axis of gorgonians, which are exposed by the snails' feeding activities. Oviposition occurs roughly on a lunar cycle, although individual females can lay several egg masses within a cycle. The eggs develop into planktonic larvae while still encapsulated on the surface of the coral colony. However, the duration of the planktonic phase is unknown.

Roughly a week and a half after oviposition the larvae hatch out of the capsules and spend an undetermined length of time feeding on plankton. The larvae metamorphose into juveniles and gradually grow to adult form. Many tiny (<5 mm) juveniles can be found on gorgonian coral colonies, and are rarely seen on any other substrate, suggesting that larvae settle specifically onto gorgonian colonies. Juveniles tend to hide under branches of the coral colonies during the day and remain on the same colony for long periods. In contrast, adults are visible during the day and move frequently between coral colonies.

Cyphoma gibbosum has few natural predators. Hogfish, pufferfish, and the Caribbean Spiny lobster are found to be major predators. The mantle of the Flamingo Tongue snail is unpalatable and therefore is rejected or ignored by fish. The behavior of *C. gibbosum* suggests that the mantle provides protection through its distasteful qualities. However, fish can attack the snail and there have been presence of mantle tears. This distastefulness may arise from the sequestering of gorgonian chemicals on which the animal feeds. *C. gibbosum* coloration and aggregations warn potential predators of the presence of toxic compounds that the snail has obtained from its food sources. *C. gibbosum* has developed an effective defense from its prey.

On the other hand, this particular snail has become increasingly uncommon throughout Caribbean and southern Atlantic Ocean due to the over-collecting by scuba divers and snorkel divers. Due to human predation, *Cyphoma gibbosum* populations are rapidly declining.

The Flamingo Tongue snail is a widespread and common predator of allelochemically rich gorgonian octocorals on Caribbean coral reefs. Lives and feeds on gorgonian corals and therefore has different reasons for choosing different coral species and it chooses gorgonians on the basis of their suitability as sites for egg laying and/or as sites for predator avoidance. Also, prey preference may be correlated with the snail's age in addition to gregariousness, coral spicule size, and food quality. However, there were no inter-specific prey preferences.

The Flamingo Tongue snail consumes gorgonians without ill effect even when these species of gorgonians contain high concentrations of sclerites or toxic secondary metabolites. The Flamingo Tongue snail will rarely kill its host, and most damaged gorgonians can regenerate their lost tissues. Many gorgonian compounds are noxious or toxic, and seem to discourage predators. By obtaining these secondary chemicals from gorgonian prey, the Flamingo Tongue snail is distasteful which leads to decreased susceptibility to predation.



Contact Us

Who we are and where to find us!



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