



# Natural Selections

## Legacy Program Update

**The Legacy Program announces FY 2008 approvals on the Legacy Tracker:** The Office of the Assistant Deputy Under Secretary of Defense for Environment, Safety and Occupational Health has approved the release of Round 2 Legacy funding for 14 projects. Round 2 project approvals and turn-downs are listed on the Legacy Tracker at [www.DoDLegacy.org](http://www.DoDLegacy.org).

## Legacy Project Highlight of the Month

**Legacy Project 05-103 Management Strategies for Reversing Declines in Landbirds of Conservation Concern on Military Installations**

Land management actions can reduce the risk of wildfire in shrubland or grassland adjacent to military ranges, or reduce understory fuel loads in forested areas. This research assesses the effects of these management actions on local bird communities and the reproductive success and population sizes of many species of landbirds.

Results demonstrated that frequent spring burning of a shrub community surrounding a MAPS station (nets shown in blue) at Fort Leonard Wood, Missouri is expected to a) contribute to a firebreak, b) restore native oak savannah, and c) create habitat for Field Sparrows. Similar management recommendations have been developed for other installations in this study.

The main objective of this project is to provide land management recommendations for landbird species of conservation concern intended to maintain productive populations, reverse local population declines, and create more high quality breeding habitat. If a population decline was detected in historical data (starting 1994) for a BCC species at an individual installation it was designated a "species of management concern". In that case, researchers collaborated with base commanders, natural resource managers, and GIS specialists to a) identify areas where the species is successfully  
*See Legacy, page 4*



## In The News

### Naval Base Coronado Natural Resources Conservation Team receives 2007 Chief of Naval Operations Environmental Award

MC2 (SW) RYAN VALVERDE  
Naval Base Coronado Public Affairs

SAN CLEMENTE ISLAND, Calif., — Chief of Naval Operations (CNO) Adm. Gary Roughead recently announced Naval Base Coronado's (NBC) Natural Resources Conservation Team winner of the 2007 CNO Environmental Award in natural resource conservation.

The NBC team won the award for their work on Channel Island Fox conservation efforts. "(The award) recognizes the hard work and efforts and the contributions of both awardees in developing the Navy's conservation program for the San Clemente Island Fox at San Clemente Island," said NBC Natural Resources Specialists Ruben Guieb.

*[Environmental Awards, page 5](#)*

## INSIDE THIS ISSUE

- 1 [Legacy Program Update](#)
- 1 [Legacy Project Highlight of the Month](#)
- 1 [In The News](#)
- 2 [Training](#)
- 3 [Announcements and Events of Interest](#)
- 6 [Did You Know?](#)
- 7 [Contact Us](#)

# Training

**FEATURED! Migratory Bird Conservation: A Trust Responsibility:** April 8-11, 2008, at Ft. Carson, CO. This course is designed to give participants a working knowledge of the legal and conservation implications of the MBTA, with special attention to the responsibilities of the Fish and Wildlife Service and the Department of Defense for migratory bird conservation. Partnerships, resources and initiatives which address migratory bird conservation will be discussed in detail, providing participants an excellent overview of how they can further implement migratory bird conservation. Special topics for this course will include Sikes Act, BASH, Executive Order MOU, and the Department of Defense Incidental Take authorization. To Register or for registration questions: Send an application to Rebecca Haynes by FAX to 703/358-2272. Contact for questions on the course content: Chris Eberly, Department of Defense Partners in Flight at ceberly@dodpif.org Phone: 540-349-9662

**FEATURED! Conservation Law Enforcement Workshop:** April 15-18, 2008, at the National Training Center in Phoenix, AZ. The DoD Legacy Resource Management Program has funded a project to develop a DoD Conservation Law Enforcement course. This is a three and a half day course that uses a series of practical exercises and scenarios for managers and senior Law enforcement officers to demonstrate and apply knowledge of: Authority and Jurisdiction; Principles of Federal Law Enforcement; Tort and Liability; Federal Criminal Laws and Enforcement; DoD Law Enforcement Policy; Use of Force; Managing Critical Incidents and related stress; Investigations; Law Enforcement Planning. Target Audience: DoD Conservation Law Enforcement Officers and Line Managers who supervise Conservation Law Enforcement Officers or Special Agents. Participants must attend with his/her counterpart law enforcement officer (only 15 CLEO pairs available – max 30 attendees). You may register for the course on the CECOS website, visit: <https://www.npdc.navy.mil/csfe/cecos/>

**COMING SOON! 2008 NMFWA Training Workshop:** March 25-28, 2008 in Phoenix, Arizona. For details visit the National Military Fish and Wildlife Agencies announcement at [http://www.nmfwa.org/2008\\_Meeting/index.cfm](http://www.nmfwa.org/2008_Meeting/index.cfm).

**Airport Wildlife Management:** March 5-7, 2008 - Dallas/Fort Worth, TX. The Embry-Riddle Aeronautical University's Wildlife Hazard Management Seminar is acceptable to the FAA Administrator and meets all the requirements for Compliance with Advisory Circular 150/5200-36 on training and part of the wildlife management requirements of Title 14, Code of Federal Regulations, Part 139. For details see their brochure at [http://wildlife.pr.erau.edu/general/DFW\\_flyer.pdf](http://wildlife.pr.erau.edu/general/DFW_flyer.pdf)

**Riparian Zone Ecology Restoration/Management:** June 23-27, 2008, in Phoenix, AZ. This course addresses planning and management issues that pertain to riparian (streamside) ecosystems in a variety of ecological and geographical settings. Emphasis is placed on the ecology, restoration and stewardship of riparian habitats associated with Civil Works projects and activities. Students will receive instruction on the functions and ecological importance of riparian zones, conservation needs, and potential impacts resulting from various land use practices, restoration and management techniques that can be applied to maintain or improve riparian systems. For more details visit <http://pdsc.usace.army.mil/CourseListDetail.aspx?CtrlNbr=281>.



## Announcements and Events of Interest

**Call for Proposals! Funding Available for Environmental Technology Demonstration and Validation**, ESTCP is seeking innovative environmental technology demonstrations as candidates for funding beginning in Fiscal Year (FY) 2009. This solicitation requests pre-proposals via Calls for Proposals to DoD organizations and Federal (Non-DoD) organizations, and via a Broad Agency Announcement (BAA) for Private Sector organizations. **PRE-PROPOSALS ARE DUE BY THURSDAY, MARCH 13, 2008**. Detailed instructions for DoD, Non-DoD Federal, and BAA proposers (i.e., ESTCP's objectives, proposal submission requirements, a summary of the proposal evaluation process, and the relevant topic areas) are available on the ESTCP website: <http://www.estcp.org/opportunities>.

**64th Annual Northeast Fish and Wildlife Conference**, April 27 - 30, 2008 at the Marriott Seaview Resort Galloway, NJ. Presentations will be made in the following subject areas: Wildlife, The Impacts of Roads on Wildlife, Inland Fisheries (Freshwater, Diadromous, Fish Culture Health), Marine Fisheries, Conservation Law Enforcement, and Outreach. For more information visit <http://www.neafwa.org>.

**Integrating Invasive Plant Species Data in the Midwest: Solutions for Data Collection and Management** January 24-25, 2008 at the Pyle Center, in Madison, Wisconsin. Join regional data managers, resource managers, researchers, and members of the National Institute of Invasive Species Science to discuss how to address issues related to regional invasive species data collection, integration, and dissemination. Information and directions for the Pyle Center can be found at <http://conferencing.uwex.edu/pyle.cfm>. Hotel rooms are blocked at the Lowell Center (<http://conferencing.uwex.edu/lowell.cfm>), located just ½ block from the conference facilities. When making reservations, you will need to indicate the following reservation code: IISD. Additional information on the city of Madison can be found at <http://www.ci.madison.wi.us/Visitors/>. Workshop fee: \$40 (pre-registration); \$80 (day of event). This fee includes lunch on both days. Maximum 200 participants, so register early! Pre-Registration Deadline: January 4, 2008

**National Mitigation & Ecosystem Banking Conference**: May 6–9, 2008, at the Hyatt Regency Hotel in Jacksonville, Florida. Learn from & network with the nearly 400 attendees the conference draws, offering perspectives from bankers, regulators, and users. Participate in several workshops covering: Stream Banking, a Primer on Banking issues, as well as Field trips, Regulator, Banker & User Forums and Interactive sessions on banker, regulator and user perspectives. For details visit <http://www.mitigationbankingconference.com/>

**2008 National Arboretum Invasive Plant Management Conference: Prevention Strategies** March 18, 2008 at the National Arboretum Administration Building, Washington, DC. This course will address prevention of invasive species on private and public lands in the United States. Speakers include Michael Lusk from the USFWS, Randy Westbrook from the USGS and Melissa Bravo from the Pennsylvania Dept of Agriculture. For a complete list of speakers, please visit <http://www.usna.usda.gov/Education/events.html>. Discussion points will include international port of entry training to designing a data entry system for weed control programs. All land managers interested in understanding what currently exists with regards to invasive species prevention as well as those interested in starting their own prevention program should consider attending. There is a \$55 registration fee which includes lunch and snacks throughout the day. For more details visit <http://www.usna.usda.gov/Education/events.html> or contact Steven Manning at 615-969-1309 or [stevemanning@mindspring.com](mailto:stevemanning@mindspring.com).



*Legacy, continued from page 1*

breeding, b) monitor productive populations, and c) monitor the effects of implementing management intended to benefit declining populations.

The Monitoring Avian Productivity and Survivorship (MAPS) Program provides critically needed demographic data for 100+ species including many of continental and regional conservation concern. In 1991 the DoD Partners in Flight Program established about 100 MAPS stations on 32 DoD installations. A total of 78 stations were operated (six each on 13 installations in the eastern U.S.) for nine consecutive years (1994-2002). Since 2002, the project has focused on multiple breeding species of conservation concern at six stations on each of eight installations.

Combining the need for land management to enhance military Readiness & Range Sustainment with a suite of avian management guidelines, provides unique opportunities for simultaneously enhancing the military mission and conserving landbird species of conservation concern.

The Institute for Bird Populations has reported avian demographics for station-, installation-, and regional-scale demographics using banding data collected at up to 78 MAPS stations since 1994. They developed useful species-landscape models, and subsequent management guidelines, for ten birds of conservation concern breeding on DoD installations, including five forest/woodland species Acadian Flycatcher, Wood Thrush, Worm-eating Warbler, Louisiana Waterthrush, Kentucky Warbler, and five successional/scrub species, Bewick's Wren, Blue-winged Warbler, Prairie Warbler, Field Sparrow, and Painted Bunting (western population).

For six of the ten species The Institute for Bird Populations used the species-landscape models to predict the numbers of individuals that we expected to catch at each of eight new or recently managed stations located on six installations. Three models predicted adult numbers to within two individuals of the observed numbers. The other seven models underestimated the number of birds banded by between 10 and 40%, much of these differences attributed to the effects of weather. Overall, the models appear to be useful in predicting the effects of management on species of conservation concern. However, more years of data are required to test predictions of reproductive success.



Frequent spring burning of a shrub community surrounding a MAPS station (nets shown in blue) at Fort Leonard Wood, Missouri is expected to a) contribute to a firebreak, b) restore native oak savannah, and c) create habitat for Field Sparrows.





San Clemente Island Fox

Guieb and his colleague Wildlife Biologist Kelly Brock, led a scientific body that developed a robust fox monitoring program that when applied produced more accurate population numbers backed by scientific data. Moreover, many island fox researchers now build their monitoring program around NBC's example.

"Previous monitoring sampling designs/methods and method of data analysis were not scientifically defensible (or flawed) which then resulted to biased or inaccurate population estimations," Guieb added. As a result of the teams work the Channel Island Fox has not been listed under the federal Endangered Species Act. "We are very pleased to be recognized for our work in natural resources conservation," said Naval Base Coronado Commanding Officer Capt.

Anthony Gaiani. "This award reflects the hard work and dedication of our natural resources team, which does so much to ensure that we balance responsible use of the environment with the need to train and operate."

The NBC team will now compete at the Department of Defense level against other natural resources conservations teams.

## **Army awards environmental stewardship**

U.S. Army News Release

Army programs making strides in endangered species protection, historic preservation, waste reduction, environmental cleanup and pollution prevention earned top level leadership recognition as the Secretary of the Army announced today, Feb. 14, the winners of the Army's highest honor for environmental stewardship.

Five installations, three teams and one individual will receive a 2007 Secretary of the Army Environmental Award for their achievements. This year's winning accomplishments include: restoring and maintaining the habitat of over one thousand animal and plant species; conserving water and controlling erosion to reduce the harmful effect eroded sediment has on endangered species, conducting extensive community outreach to share the history of archeological sites located on Army property; and using technology to clean and re-use soil for military construction projects.

Mr. Tad Davis, Deputy Assistant Secretary of the Army for the Environment, Safety and Occupational Health, is confident that the hard work the Army dedicates to sustainability and environmental stewardship will reap benefits for generations to come. "These Army environmental awardees are examples of how the Army is transforming its business and environmental practices to bridge today's requirements with tomorrow's needs. The awardees have improved installation efficiency and effectiveness, and therefore have helped assure operational capability for our Soldiers and an improved quality of life for their Families and surrounding communities."

The winners of the FY 2007 Secretary of the Army Environmental Awards include:

- o Camp San Luis Obispo, California Army National Guard - Natural Resources Conservation, Small Installation
- o Pennsylvania Army National Guard - Natural Resources Conservation, Team
- o Redstone Arsenal, Ala. - Cultural Resources Management, Installation

The Secretary of the Army Environmental Awards represent the highest honor in the field of environmental science conferred by the Army.



## Did You Know?

### **Some call it a Buffalo, others Bison, I call it tasty! –**

The American bison is the largest land animal in North America. Males can stand six feet from hoof to shoulder and weigh between 1000-2000 pounds. The biggest specimens on record have weighed as much as 1,140 kilograms (2,513 lb). Bison have a shaggy, dark brown winter coat, and a lighter weight, lighter brown summer coat. The heads and forequarters are massive, and both sexes have short, curved horns, which they use in fighting for status within the herd and for defense. Females are around five feet tall and weigh between 800-1000 pounds. The American Bison is a bovine mammal, also commonly known as the American Buffalo something of a misnomer as it is only distantly related to either of the two "true buffaloes": the Water Buffalo and the African Buffalo.



American Bison, (*Bison bison*).

The American bison once was found in most of Canada, the United States and parts of Mexico. Wild populations are now limited to national parks and refuges. The American bison is a grazer. Its diet is made up of mostly grasses and sedges. It will occasionally eat berries and lichen. In winter, the bison uses its head and hooves to move snow off the vegetation. The American bison spends the warm hours of the day resting, chewing its cud or wallowing in dirt. It is most active in the early morning and late afternoon.

Bison live in a variety of groups. Females and young males may live in groups of up to 20 bison. Males also can live in groups of up to 20 males, or they can live in smaller groups or individually. Mature males and females usually live apart except during breeding season. Each bison group has a dominant male or female.

Its two subspecies are the Plains Bison (*Bison bison bison*), distinguished by its smaller size and more rounded hump, and the Wood Bison (*Bison bison athabasca*), distinguished by its larger size and taller square hump. Wood Bison are one of the largest species of cattle in the world, surpassed in size only by the massive Asian Gaur and Wild Asiatic Water Buffalo, both of which are found mainly in India and Southeast Asia.

Bison mate in August and September; a single reddish-brown calf is born the following spring, and it nurses for a year. Bison are mature at three years of age, and have a life expectancy of approximately 15 years in the wild and up to 25 years in captivity. One very rare condition is the white buffalo, where the calf turns entirely white. It is not to be confused with albino, since white bison still possess pigment in the skin, hair, and eyes. White bison are considered sacred by many Native Americans. The only continuously wild bison herd in the United States resides within Yellowstone National Park. Numbering between 3000 and 3500, this herd is descended from a remnant population of 23 individual mountain bison that survived the mass slaughter of the 1800s by hiding out in the Pelican Valley of Yellowstone Park.

---

## Contact Us

For further information about the Legacy Resource Management Program please contact:

[L. Peter Boice](#)  
Conservation Team Leader

[Jane Mallory](#)  
Natural Resource Management Specialist  
703-604-1774

[Pedro Morales](#)  
Natural Resource Management Specialist  
703-604-1933

[Hillori Schenker](#)  
Cultural Resource Management Specialist  
703-604-1724

---

## Disclaimer

Every effort is made to provide accurate and complete information. However, with the hundreds of documents available online, often uploaded within short deadlines, we cannot guarantee that there will be no errors. With respect to documents and information referenced by means of hyperlinks on this publication, neither the U.S. Government, the U.S. Department of Defense (DoD), Plexus Scientific (website contractor) nor their employees and contractors make any warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose with respect to documents available from Department of Defense websites, or from independent parties outside of DoD. Additionally, the U.S. Government, DoD, nor Plexus Scientific assume no legal liability for the accuracy, completeness, or usefulness of any information, product, or process disclosed herein and do not represent that use of such information, product, or process would not infringe on privately owned rights.



Requests to be added or removed to the *Natural Selections* distribution list may be sent to [Pedro.Morales.ctr@osd.mil](mailto:Pedro.Morales.ctr@osd.mil).

