



Natural Selections

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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. This list will be posted and updated periodically on the Legacy Tracker at www.DoDLegacy.org.

Legacy Project Highlight of the Month

[Legacy Project 07-339 Predator-proof Fencing for Invasive Species Control in Hawaii: A Comprehensive Prioritization and Implementation Plan to protect native species](#)

Invasive species are the primary threat to island ecosystems – invasive species are responsible for approximately 66% of all recorded island extinctions. Removing damaging invasive species from islands is the most effective management tool to protect and restore island ecosystems. However, some islands are too large to achieve complete eradication. In these situations, predator-proof fencing – which can keep all terrestrial vertebrates out of an area – has been used widely outside of the U.S. with extraordinary results. The use of predator-proof fencing on military installations may be a cost-effective tool to help land managers protect and manage their installation's natural resources and increase the ability to train in the area.

The overall objective of this project is to prioritize DoD sites in Hawaii where predator-proof fences can be built to protect and restore listed species. The final product is a review of this technology and its use worldwide and a detailed prioritization and implementation plan for building demonstration predator-proof fences in Hawaii. These resources can be used by all DoD land managers to assess the applicability and cost-effectiveness of this technology on their installations.

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In The News

Tribes join eagle-preservation fight

Apache groups want birds back on endangered-species list

By [Kate Nolan](#)

The Arizona Republic Feb. 1, 2008 12:00 AM

While Arizona's 45 pairs of bald eagles attempt to breed this winter near the state's overdeveloped rivers, legal efforts to put them back on the federal endangered-species list have received a boost from three Apache tribes.

The U.S. Interior Department de-listed all North American bald eagles Aug. 8, despite an appeal by Gov. Janet Napolitano and a petition by Arizona conservationists to re-examine the case for protecting Arizona's birds.

The San Carlos Apache Tribe, Yavapai-Apache Nation and Tonto Apache Tribe on Tuesday filed a brief in U.S. District Court. The brief supports a federal lawsuit brought by conservation groups that calls on the U.S. Fish and Wildlife Service to reconsider the desert-nesting bald eagle as a distinct population and

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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 NMFVA 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.

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

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/>



Legacy, continued from page 1

Once demonstration fences are built there will be extensive ecological data collected to show the impacts of the technology.

This project followed a 7-step process to achieve its goals:

1. Review of fence projects worldwide, including costs and results;
2. Data collection for sites in Hawaii in collaboration with local natural resource managers;
3. Prioritization of Hawaiian DoD installation sites for conservation;
4. Site visits for ground-truthing and further assessment;
5. Development of plans for construction and monitoring, including cost analysis; and
6. Development of implementation plans for priority sites with detailed budgets.



Fencing to keep damaging invasive species out of an area is an effective management technique.

This project provided DoD land managers in Hawaii and beyond with a model plan for a cost-effective means of protecting and restoring threatened and endangered species and ecosystems impacted negatively by invasive animals. The comprehensive prioritization and implementation plan provides a roadmap for protecting high-value conservation areas while maintaining training exercise areas.

This project provided DoD with a completed prioritization of sites within Hawaii and detailed implementation plans for the top four priority sites where predator-exclusion fencing technology could be tested. These plans include detailed budgets for fence construction, pest removal and recommended methods for monitoring ecological impacts of the fences. A thorough review of conservation fencing with a focus on predator proof-designs was completed. When funding becomes available, the next step is to build demonstration fences at the highest-priority sites.



Apache Tribes, continued from page 1

resume endangered-species protections.

The Apache tribes filed a "friend of the court" brief saying federal authorities failed to consult with tribes appropriately before the de-listing or to notify them when the de-listing decision was made. The filing includes rare information on the religious significance of bald eagles as well as scientific evidence supported by the Apache tribes' work with the eagles.

'An ancient insight'

Tribal lawyers said the tribes agree with scientific arguments presented in the lawsuit brought in January 2007 by the Center for Biological Diversity and Maricopa Audubon. The suit claims federal authorities ignored significant scientific evidence that supports continuing to list the Arizona eagles.

"The science was adequately presented in the lawsuit, but there's another valuable insight into this, an ancient insight. The Interior secretary was required by law to consult with the tribes and by failing to do so did not have all available information, including information that goes to the science, that could only and uniquely be provided by these Apache tribes," said attorney Joe Sparks, whose Scottsdale law firm represents the tribes.

Sparks said other Arizona tribes have ancient and religious records of the eagle, but the Apache tribes are the first whose tribal elders have authorized them to disclose the information, which can be made public only with the approval of spiritual leaders.

Dispelling a myth

One belief tribes hope to dispel is the idea that eagles didn't exist in the Southwest in great numbers before the U.S. started keeping records. Apache and other Arizona tribes say eagles have been at the center of their religions as long as they have existed.

In legal terms, the brief serves as a courtesy to provide the judge with information otherwise unavailable, in this case supporting the plaintiffs.

"We're elated the Apache are being more expressive of their knowledge of the desert-nesting bald eagle. After all, they've known of the eagle much longer than the rest of us. And they too have been ignored by the Fish and Wildlife Service," said Robin Silver, of the Center for Biological Diversity.

The case is scheduled to be heard at 3 p.m. Tuesday (February 5, 2008) before U.S. District Court Judge Mary Murguia in Phoenix.

Original source: <http://www.azcentral.com/arizonarepublic/local/articles/0201eagles0201.html>

Recent Natural Resources Documents On [DENIX](#) and Web

**The New DENIX Web Site is now available at <https://www.denix.osd.mil>
However, the site is still under construction and will not be fully functional
until further notice.**

***Natural Selections* staff is removing this section from our newsletter until we
can justify bringing it again!**

Did You Know?

S	A	L	V	I	N	I	A	M	O	L	E	S	T	A	D	P	A	N	E	N	F
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R	I	P	A	R	I	A	N	R	X	R	E	G	A	L	E	L	K	C	I	P	L
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F	E	U	R	E	U	R	O	T	I	A	L	A	N	A	T	A	F	L	O	H	D

Find all these words on the puzzle above

- | | | | |
|-------------------------------|--------------------------|----------------|------------------|
| american burying beetle | dickcissel | installation | pussytoes |
| american chestnut | dolphin | Jane | regal |
| black abalones | epiphytes | legacy | right whale |
| box turtle | Eurotia lanata | loggerhead | riparian |
| broad wing hawk | fangtooths | mardon skipper | salvinia molesta |
| browntree snake | flamingo | migratory | shrublands |
| buffer | goliath grouper | nighthawk | woolly star |
| cheatgrass | gopher tortoise | Peter | |
| coqui | Haliaeetus leucocephalus | phlox | PUZZLE BY Pedro |
| coral reefs | Hillori | phragmites | |
| Delhi Sands Flower Loving Fly | indigo snake | pocket gophers | |

DoD Conservation Word Search Puzzle: A word search, word find, word seek, word sleuth or mystery word puzzle is a generic word game that consists of seemingly random letters arranged in a grid, that usually has a rectangular shape. The object of the game is to find and mark all of the words hidden in the grid. Word Search puzzles are one of the most commonly played games in the world.

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