

Department of Defense Legacy Resource Management Program

\mathcal{N} atural Selections

Volume 3, Issue 11 November 2007

Legacy Program Update

The Legacy Program completes Full Proposal review with Services Reps: During the month of November, representatives from each of the Military Services met with DoD Legacy Staff to review all 132 Full proposals received by the Legacy Program for consideration for funding in FY 2008. The Legacy Program received a total of 95 natural resource proposals and 37 cultural resource proposals. The Legacy Program anticipates announcing full proposal approvals through the Legacy Tracker at www.DoDLegacy.org by late December, 2007.

Legacy Project Highlight of the Month

<u>Legacy Project 04-213 Strategy for the Cooperative</u> <u>Recovery of Rare Species Affecting Training Ranges</u>

Five candidate species pose a threat to ongoing training activities at Ft. Lewis and McChord Air Base. The objective of this project is to reduce this threat by facilitating the cooperative recovery of these species throughout their natural ranges. The project will not only promote the on-the-ground recovery of these species, but will also test specific techniques which can then be transferred to other installations facing similar threats.

Prairie and oak woodlands comprise one of the rarest habitats in the Pacific Northwest and the United States. Species dependent upon these habitats are becoming increasingly at risk for survival. Ft. Lewis and McChord Air Base provide large amounts of habitat for these species and may soon be burdened with substantial recovery obligations due to restrictions related to species listed as threatened or endangered under the Endangered Species Act of 1973. Five species have recently been proposed as candidates for federal listing. These species are two butterflies, the Mardon skipper and Taylor's checkerspot; two mammals, the western gray squirrel and the mazama pocket gopher; and one bird, the streaked horned lark.

See Legacy, page 4



In The News FWS program would allow outsourcing of conservation efforts

By <u>Eryn Gable</u>, Special to Land Letter, November 19, 2007 Freelance Journalist

The Fish and Wildlife Service is moving ahead with a new program that would allow federal agencies to offset the effects to endangered species on public lands through conservation efforts on non-federal lands, as long as there is a net benefit to the species. While many conservationists are watching this development with interest, some believe it is just another example of government shifting its responsibilities to the private sector.

The program, called "recovery crediting," was <u>first</u> <u>announced</u> by President Bush last month as a conservation tool to provide incentives for private landowners to conserve endangered species and act as environmental stewards of the nation's natural resources.

"Conservation success resides in nurturing a nation of

Conservation, page 5

INSIDE THIS ISSUE

- 1 Legacy Program Update
- 1 <u>Legacy Project Highlight of the Month</u>
- 1 In The News
- 2 Training
- 3 Announcements and Events of Interest
- 7 Recent Natural Resources Documents On DENIX
- 8 Did You Know?
- 8 Contact Us

Training

FEATURED! <u>Applied Plant Conservation Workshop</u>: March 2-8 2008, at the Bishop Museum, Honolulu, Hawai'i. The Center for Plant Conservation, with botanists nationwide, has created a curriculum covering key conservation topics. The workshop sponsored by the DoD Legacy Program is open to DoD personnel only. Participants will receive pragmatic tips, information resources, contact lists of experts and an opportunity to get your questions answered by experts in the field. There will be over 17 topics taught throughout the week, including academic and practical components such as population evaluation-demography, population viability analysis, plant conservation genetics, restoration and management (ex-situ and in-situ), tools and Partnerships, and many more! Register for this unique workshop by visiting their website at http://www.centerforplantconservation.org/2008dodpcworkshop.html

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.

NEW! Interagency Consultation for Endangered Species: January 28-February 1, 2008 Shepherdstown, WV. Acquire basic information on conducting interagency consultation under section 7 of the Endangered Species Act. Address key information needs and procedures, with a focus on the information needs related to biological assessments and biological opinions and emphasis on interagency exchange of information and solutions to support species' conservation. Contact Rhonda Miller 304-876-7325 before11/28/07. Course registration fee is \$850. Details at http://training.fws.gov/branchsites/CSP/Schedule.html.

NEW! <u>Airport Wildlife Management:</u> 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

<u>Riparian Zone Ecology Restoration/Management:</u> 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.

<u>Natural Resource Compliance:</u> January 15-18, 2008 in Corpus Christi, TX. 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). For details visit https://www.cecos.navy.mil/coursedetail.cfm?courseid=42.

Announcements and Events of Interest

Desert Tortoise Council, 33rd ANNUAL MEETING AND SYMPOSIUM: CALL FOR PAPERS AND POSTERS. February 22-25, 2008, in Las Vegas, NV. The Desert Tortoise Council will host its Thirty-third Annual Symposium on Friday, Saturday, Sunday, and Monday, February 22 to 25, 2008 at Sam's Town, Las Vegas, Nevada. Titles and abstracts for sessions or contributed papers and posters are requested. The Council welcomes pertinent papers on turtle and tortoise biology and conservation. Please submit your abstract by December 1, 2007. For registration and call for paper details view page 5 of their Fall newsletter at: http://www.deserttortoise.org/newsletter/2007fall.pdf.

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/

Partners in Environmental Technology Technical Symposium & Workshop: December 4-6, 2007 at the Marriott Wardman Park Hotel in Washington, D.C. This conference assembles environmental researchers and technology developers with the defense user and regulatory communities to showcase cutting edge environmental technologies and ideas, as well as communicate the most difficult challenges of our defense establishment. The conference has a comprehensive technical program consisting of concurrent sessions highlighting proven environmental technologies, as well as technologies needed to address emerging DoD environmental challenges. Full registration in advance is \$415. For online registration and details visit http://www.serdp-estcp.org/symposium/.

Legacy, continued from page 1

The listing of these candidate species would pose a serious threat to training activities at Ft. Lewis and McChord Air Base. In order to reduce this threat, The Nature Conservancy has initiated a project that promotes cooperative recovery of these species throughout their range. This will help share the burden of species recovery over a variety of partners and locations. It will also help minimize impacts on military training lands if these species are listed.

This ongoing project builds on the regional conservation strategy and cooperative actions suggested in the *Endangered Species Range Action Plan* towards a comprehensive program, encompassing partners acting across the full geographic range of the species. In short the project promotes cooperative recovery of rare species by working beyond political and geographic barriers to work with all organizations and individuals that will assist in the recovery process. This results in efficient, effective recovery with the greatest probability of success while accommodating military training and operations.

The project's framework involves a three-tier strategy. The primary components of the framework are: Information Transfer, Linking of Entities and Generating Incentives. Efficient Information Transfer allows all partners to utilize the best available practices for specific restoration and recovery actions; directly linking practitioners and the results of their recovery actions with researchers and other land managers. Information Transfer is also an important step in bringing new partners to the recovery program. Informing organizations of the regional and national importance of potential recovery actions can be helpful in gaining acceptance of recovery goals. Typical techniques used for this component include web sites, one-on-one meetings and larger workshops and conferences.

The formal Linking of Entities is important to facilitate production and implementation of regional goals and to share resources. Methods to link entities range from the quite formal US Fish and Wildlife Candidate Conservation Agreements to an informal Statement of Unity. Each of these agreements can make defining goals and sharing resources more efficient as roles and relationships between organizations are predefined.



Two mammals (top), the western gray squirrel (left) and the mazama pocket gophers (right) and two butterflies (bottom), the Taylor's checkerspot (left) and Mardon skipper (right) are targets for conservation through this project. A fifth targeted species; the Streaked Horned Lark is highlighted in the Did You Know? section on page 9.

The third major component of the framework is Generating Incentives. While entities may agree with the recovery of rare species, many also require specific incentives to initiate recovery actions. The most obvious incentive is financial resources. The project helps focus funding on priority recovery actions by generating conservation plans and working with funding agencies to support those plans. Incentives can be non-financial as well. The offer of technical assistance can be critical in getting partners to undertake new recovery actions. Similarly, an offer to supply the skilled labor needed to complete an action can be a strong incentive for positive action. Overcoming the hurdle of obtaining propagules of native plants or rare species can also be a strong incentive facilitating recovery actions.

The implementation of facilitation efforts within this framework will be closely tracked and the success and costs of each technique documented. These efforts will facilitate the transfer of lessons learned during the project to other military installations facing the threat of candidate or listed species.

Conservation, continued from page 1

citizen stewards," said Deputy Secretary of the Interior Lynn Scarlett in a statement. "The recovery crediting system creates incentives for federal agencies to join with local communities to conserve federally protected species and give them a helping hand on the road to recovery." Section 7 of the Endangered Species Act requires federal agencies to conserve threatened and endangered species and ensure that their actions do not jeopardize listed species or harm critical habitat.

The recovery crediting system works by creating a "bank" of credits that federal agencies can accrue through conservation actions on non-federal lands. The agencies can store these conservation credits for use at a later time to offset the effects of their actions on federal lands. Credits must be used to benefit the same species for which they were accrued. The Fish and Wildlife Service will review each recovery crediting system to ensure the net conservation benefit outweighs any potential impacts that could occur through the project's implementation.

Fort Hood model

The program is modeled on a pilot program developed at Fort Hood in Texas involving FWS, the Defense Department, Texas State Department of Agriculture and other agencies. Under the pilot program, the U.S. Army has funded habitat conservation and restoration projects on more than 7,000 acres of private land surrounding the military base to benefit the endangered golden-cheeked warbler. Fort Hood is home to the largest known population of golden-cheeked warblers in its breeding range.



The Bush administration is promoting a new program that would allow federal agencies to offset adverse impacts to endangered species on public lands by paying for conservation programs on private land. The program grew from a pilot at Fort Hood, Texas, where military exercises threatened the golden-cheeked warbler and other birds. Photo by Steve Maslowski. Courtesy of Fish and Wildlife Service.

Steve Manning, president of the Texas Watershed Management Foundation, a nonprofit group that is administering the pilot project, said the three-year pilot project is about halfway complete. The groups have finished the first phase of the project -- developing a process for the Army to acquire credits from private landowners -- and are now working on the "debit" side, figuring out how these credits can be spent at Fort Hood.

The system works by assigning landowners a credit value based on the amount and quality of habitat on their land. Landowners then bid against each other for funding provided by Fort Hood, much as they would to participate in the Agriculture Department's Conservation Reserve Program. The lowest bidder with the best project wins.

Environmental Defense biologist David Wolfe said the system works much like an insurance policy for Fort Hood. By investing money in private lands, the Army accrues credits in a "bank," which it can later use. For example, instead of having to stop training exercises and consult with the Fish and Wildlife Service after a wildfire temporarily degrades habitat on the base for the warbler, the Army can use some of the credits from its bank, Wolfe said.

Manning, a fifth generation rancher in central Texas who grazes cattle on Fort Hood, said the program has proved to be a win-win-win situation. "There's an obvious benefit to the Army in gaining greater training flexibility and operational certainty through the use of the credits, and there's a benefit to the landowners involved by providing an additional revenue stream when they're paid to manage endangered species. Then, there's a third benefit to endangered species, which have more habitat being managed and protected," he said.

John Herron, director of conservation for the Texas chapter of the Nature Conservancy, said the pilot program at Fort Hood provides a good model that could be replicated nationwide. "I think it's great to try to provide this incentive for conserving endangered species" on non-federal lands, he said.

Even so, Herron said there is much to be worked out. For example, he said, the agencies need to figure out how to treat the data in a way that protects the confidentiality of private landowners while ensuring that the system's progress can be monitored.

Restricted info

Kieran Suckling, policy director of the Center for Biological Diversity, said that one of the major problems with the Fort Hood program is that public knowledge and oversight of the program is very restricted. "The public is not permitted to know which landowners are participating, what land is involved, what management is taking place, and when monitoring occurs, the public is not permitted to see the monitoring reports," he said. These limitations make the program "a fantastic giveaway of federal dollars to private landowners with absolutely no accountability at all," Suckling said. It probably also makes the program illegal because there is no way of verifying whether it meets the "best science" test established by the Endangered Species Act, he said.

But Wolfe said there is some level of public oversight of the program. For example, he noted that the monitoring reports expected to be published in the next few years will be publicly available as part of the scientific literature. Additionally, the staff of the Fish and Wildlife Service, which the public has entrusted to manage wildlife, will get to see all the information coming out of the program, except the names of the landowners involved and the exact location of the ranches. Suckling characterizes the Fort Hood pilot program as a "net harm" program that has been a disaster for the golden-cheeked warbler, noting that the program was established so the Army could receive permission to kill half of the endangered species on its property, amounting to the single largest take permit in the history of the Endangered Species Act.

Suckling worries about the implications of instituting such a program on a broader scale, and he questions why the federal government is setting up a system to allow the destruction of critical habitat on public lands. "Now, we're going to reduce the formerly high standards of public lands and attempt to purposely shift the species onto private lands, where we have very little control over what happens to them," Suckling said. "That's a disastrous policy."

But Wolfe said the program and others like it could be a model for future conservation efforts. The program is unique because it provides incentives for private landowners and looks at the entire range of a species, he said. "The scale and potential scope are at a level that could have a profound impact on the recovery of species," Wolfe said. The Fish and Wildlife Service is accepting public comments on its draft guidance on the recovery crediting system until Dec. 3.

Gable is an independent energy and environmental writer in Woodland Park, Colo. This article originally appeared in Land Letter. Copyright 2007 E&E Publishing LLC. Used with permission.

DoD representatives attend CESU Managers Meetings across the South

Several CESU Manager's meetings hosted by partner universities in recent weeks help strengthen network ties

By Pedro Morales

Legacy Resource Management Program Staff

Biloxi, MS. The Cooperative Ecosystem Studies Unit Network was established with the goal of providing resource managers throughout the federal government with high-quality research, educational support, and technical assistance by amassing the resources and expertise of 17 host universities, 13 federal agencies and more than 200 partner organizations in a unique Nation-wide network for in-depth ecosystem.

The Department of Defense actively participates in this network and just recently sent representatives to three back to back meetings hosted by CESU partner institutions in the South. Earlier last month Mr. William Hunt, Regional Coordinator for the Piedmont South Atlantic CESU represented DoD at the PSA-CESU managers meeting. Shortly after the PSA-CESU meeting, the Gulf Coast CESU (GC-CESU) and the Desert Southwest CESU hosted their managers meetings. At the GC-CESU Regional Managers meeting Dr. Roel Lopez, from the DoD Sustainable Ranges Office, introduced a proposal to the partner institutions in which he pitch the idea of having the Gulf Coast CESU and the PSA-CESU partnering together to form a joint CESU, which would serve as the "research arm" of the Southeast Regional Partnership for Planning and Sustainability (SERPPAS).

The Desert Southwest CESU DoD's regional Coordinator, Val Morrill, Yuma Proving Ground and Pedro Morales, from the DoD Conservation Office attended the first Joint Meeting of the Desert Southwest, Great Basin & Rocky Mountain Cooperative Ecosystem Studies Unit (CESU) Managers meeting in Salt Lake City, UT, to brief partner members of DoD's natural and cultural resource needs, and explore potential partnerships and interagency collaboration in the region. DoD is a member of the Desert Southwest CESU and is mulling the potential to joining the Rocky Mountains CESU. Attending the DS-CESU managers meeting was also Dr. Ostergren, Professor at Northern Arizona State University and Chair for the Colorado Plateau CESU for which DoD is also a member.

Recent Natural Resources Documents On DENIX and Web

NEW! Existing Geospatial Knowledge of Gopher Tortoise Population and Abundance: ERDC/CERL SR-07-5 A number of key Army installations in the southeastern United States support numerous at-risk species. Many of these species have the potential to cause severe training restrictions in the future. To avoid the loss of training capacity, a proactive strategy for species conservation across the range must be developed. The gopher tortoise (Gopherus polyphemus) may be the most prominent and most widely distributed of these at-risk species in the Southeast. In the case of the tortoise, a proactive strategy will require a basic understanding of its current abundance and distribution, better understanding of its habitat requirements, development of population viability analysis methods, agreement among regulators and land managers on population goals, and methods to efficiently monitor gopher tortoise populations over time with regard to the established population goals. Data on the gopher tortoise were collected from academic, national, state, and local sources. All data were captured in tabular or GIS vector and raster formats. Data received at the Construction Engineering Research Laboratory were entered into spatial data layers as appropriate, and appended with quality-checked metadata to describe the dataset. See document at http://libweb.wes.army.mil/uhtbin/hyperion/CERL-SR-07-5.pdf.

Endangered Species Management Plan for Fort Hood, Texas: FY06-10 ERDC/CERL TR-07-11. Army Regulation (AR) 200-3 requires installations to prepare an Endangered Species Management Plan (ESMP) for all listed and proposed T&E species. The installation ESMP should be used as a tool to achieve conservation objectives for populations of listed and proposed T&E species and to minimize impacts on the training mission. AR 200-3 further encourages, but does not require, the development of ESMPs for all candidate species, and recommends that an integrated ESMP covering all T&E species be prepared if more than one such species occurs on an installation. The U.S. Fish and Wildlife Service Biological Opinion for Fort Hood (March 2005) provides requirements and guidance for endangered species management on Fort Hood. This ESMP is written specifically for use by natural resource managers and leaders of training operations on Fort Hood to accomplish military training objectives while meeting conservation objectives for T&E species. The objective of this ESMP is to provide a comprehensive plan for maintaining and enhancing populations and habitats of Federally listed endangered species and species of concern on Fort Hood while maintaining mission readiness in a manner consistent with Army and Federal environmental regulations. See document at http://libweb.wes.army.mil/uhtbin/hyperion/CERL-TR-07-11.pdf.

Burrow Collapse as a Potential Stressor on the Gopher Tortoise (Gopherus polyphemus) ERDC/CERL TR-07-33. The gopher tortoise is a species of concern throughout the Southeast, and is a keystone species throughout its range. It is federally listed as "Threatened" in part of its range and has been proposed for listing elsewhere. During forest thinning and harvesting, and during military training exercises, tortoise burrows are often accidentally run over. No formal studies of the potential for tortoise injury resulting from burrow collapse had been conducted in the natural environment, however. This research was designed to determine the potential for tortoise injury from the direct crushing of the burrows or loss of life through inability to escape from a collapsed burrow. Forty intentional burrow collapses by heavy equipment were studied. Data were acquired on pre- and post-collapse movement patterns and several general health and physiological measures. No tortoises appeared to have any life-threatening injury, and all tortoises self-excavated, with excavation intervals ranging from an hour to 85 days. All tortoises remained within a normal home range of their collapsed burrow, resulting in little change in movement patterns after burrow collapse. Changes in home range, number of burrows used, daily movement patterns, or the mean distance moved by the tortoises does not appear significant. If you wish to access/download the document (64 pages, 2.3 mb) in pdf format, the address is: http://libweb.wes.army.mil/uhtbin/hyperion/CERL-TR-07-33.pdf.

Redesign Notice

DENIX is currently being redesigned and an intensive analysis, cleansing, and migration of web site content is currently in process. The planned launch of the redesigned web site is scheduled for December 3, 2007. In preparation for the launch, the current DENIX website will be 'frozen' and no new content will be posted effective October 1, 2007.

Did You Know?

A horned bird passing by (population decline)! -The Streaked Horned Lark (Eremophila alperstris strigata) is one of the most "stunningly distinct and beautiful subspecies" of Horned Lark, with a breeding range that is isolated from other subspecies. The Streaked Horned Lark has a dark brown dorsal surface, yellowish underparts. a walnut brown nape and yellow eyebrow stripe and throat. This subspecies is conspicuously more yellow beneath and darker (reddish) on the back than any other subspecies of horned lark in the Pacific Northwest. It is a member of the family Alaudidae in the order Passeriformes. This lark was originally named Alauda alpestris, which means "lark of the mountains" and in 1909 was renamed the Pacific Horned Lark. There is genetic data that suggest that the Streaked Horned Lark was once part of a larger Pacific Coast lineage, but appears to have been evolving independently for some time. This lark is a small ground-dwelling bird. The males are larger than the females with a wing span of 95-102mm and are about 65 mm in length.



The Streaked Horned Lark (*Eremophila alperstris strigata*) nests on the ground in sparsely vegetated sites in short-grass dominated habitats.

The Streaked Horned Lark is one of 21 subspecies of horned larks in North America; 15 subspecies occur in western North America. Subspecies of horned larks are based primarily on differences in color, body size, and wing size. Western populations of horned larks are paler and smaller than eastern and northern populations.

The Horned Lark gets its name from black occipital feather tufts or "horns" that stand up on males, but are not as prominent on the females. Their plumage is marked with a black breast band, black lores (the space between the eye and the bill) and black cheek patches that contrast with their yellow to white eyebrow stripe, ear coverts and chin. The nape, back, rump, and upper surface of the tail are shades of brown streaked with dusky brown to black. The streaked horned lark nests on the ground in sparsely vegetated sites in short-grass dominated habitats.

The Streaked Horned Lark was historically described as a "common breeder" that could be easily observed within the South Puget Sound prairies, in areas of southern British Columbia and throughout the Willamette Valley of Oregon. However, more recent history shows that the grasslands of these areas have shrunk in size by 80%, with only 3% remaining in their native condition. As a result of lost habitat, this lark is no longer present in several of its historic breeding locations. In fact, currently there are only six known Streaked Horned Lark populations in the southern Puget Sound lowlands, four of which occur on Fort Lewis Military Installation and McChord Air Force Base. The military bases maintain some of these populations because the vegetation is kept low by mowing, there are frequent fires which eliminate Scotch broom, and training activities maintain sparse vegetation, which larks select for nesting and foraging. Due to its dramatic population decline, the Streaked Horned Lark is now a Federal and State candidate species for listing. It is also listed as a State Sensitive species by the Oregon Department of Fish and Wildlife.

Contact Us

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

L. Peter Boice Conservation Team Leader

<u>Jane Mallory</u>
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 $\mathcal N$ atural $\mathcal S$ elections distribution list may be sent to Pedro.Morales.ctr@osd.mil.