



Natural Selections

Legacy Program Update

FY 2010 Pre-Proposals Due to the Legacy Office no later than Friday, July 31, 2009: The Legacy Resource Management Program is currently accepting Pre-proposals through their website, the Legacy Tracker, at www.dodlegacy.org. Visit the website's Info and Guidelines page for details.

National Public Lands Day (NPLD) Application Deadline Extended to June 12!: Applications for NPLD Legacy funds are available for base-level projects on any military installation that supports the goals of National Public Lands Day (NPLD) and emphasizes natural and cultural resource management. This year Legacy is promoting a special emphasis on pollinators. The deadline for submitting applications is extended to June 12, 2009. For more information visit NPLD website at <http://www.publiclandsday.org> or contact Claudia Kessel, at claudia@neetf.org, Robb Hampton, rhampton@neetf.org, or Jane Mallory, with the Legacy Program at Jane.Mallory.ctr@osd.mil.

Legacy Project Highlight of the Month

Legacy Project 03-173: Cultural and Biological Survey of Caves at Fort Leonard Wood Missouri Preliminary Investigation

The Maneuver Support Center (MANSCEN) at Fort Leonard Wood (FLW) is located in the Ozark Plateau region of south central Missouri. The Mark Twain National Forest borders the installation on three sides. Geologic features such as rock outcrops, karst topography (caves and sinkholes), and sheer bluffs that commonly rise 200 feet in elevation border narrow, flat, alluvial floodplains. Sixty three known caves occur within FLW boundaries.

Biologically, FLW is located at the crossroads of several natural biome divisions in the United States. This transition area is where the western edge of the eastern

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In The News

Fort Drum Fish & Wildlife and Cultural Resources: Bats & LeRay Mansion

By Ray Rainbolt and Chris Dobony
Fish and Wildlife Management Program, Fort Drum, NY

In the last few years, Fort Drum's Fish and Wildlife Management Program has been intimately involved in the construction boom occurring on Fort Drum Military Installation in northern New York. Most of this work has been in the form of reviewing plans and projects to analyze potential impacts to fish and wildlife resources, and in particular, the federally endangered Indiana bat.

However, this past spring, Fort Drum's Fish and Wildlife Management Program began a construction project of its own. In cooperation with Fort Drum's Cultural Resources Management Program and the Public Works' Engineering Branch, a bat house was constructed in the LeRay Mansion Historic District in Fort Drum's Cantonment Area.

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The Value of an Integrated Approach to Resource Management

This month's issue of Natural Selections focuses on "integrated" Legacy projects – those that incorporate both natural and cultural resources considerations. These projects have been a small but important part of Legacy since its inception. In Year One (FY 1991), Legacy's first integrated project, initiated at Fort Polk, Louisiana, and Fort Hood, Texas, developed an "integrated, automated system to manage biological, cultural and geophysical resources." By Year Three, Legacy had funded nearly 100 integrated projects.

DoD's natural and cultural resources programs have much in common.

- ❖ Perhaps most importantly, both manage for the long-term stewardship of DoD's – and our Nation's – irreplaceable resources.
- ❖ Both programs have historically been underfunded and often misunderstood, though projects funded and implemented through Legacy and other means have done much to facilitate greater understanding.
- ❖ Natural and cultural resources provide countless opportunities for recreation, enjoyment and education – for our uniformed troops and their families, as well as veterans and members of nearby communities.
- ❖ Both programs are ideally suited to support partnerships – for greater understanding of the resources, for restoration projects, and for actual management and resource use.
- ❖ One additional commonality, little explored to date, is the high likelihood that both natural and cultural resources will be significantly and unalterably affected by climate change.

Probable impacts from the changes that will likely be occurring to our climate have been the subject of much debate and discussion recently. Regardless of which model is most accurate, no one can deny that the consequences to natural resources will (and are already) significant. For example, although the specific consequences of climate change on habitats and species, both rare and common, are largely unknown, it is now a generally accepted fact that such changes will be widespread and profound. Potential impacts on coastal and polar regions also are relatively easy to grasp, at least at the macro scale. Increased drought (or its companion, increased rainfall!), the spread of invasives and pests, elevated fire hazards, earlier snowmelt... all are factors just beginning to be studied in depth.

Increased attention also is being directed to the consequences of climate change on cultural resources. The science of assessing such impacts on historic buildings and archaeological sites is at an early state of development. However, as with natural resources, cultural resources have a wide range of resilience and sensitivity to such effects. What's more, the severity of such impacts can vary widely, and can be happening as a day-to-day weathering process or as a catastrophic event such as a windstorm, flood or fire. Coastal archaeological sites, areas traditionally linked to intense human occupation, can be either exposed or washed away from flooding caused by sea level rise. Historic buildings can have elements such as windows and roofs destroyed by intense windstorms. Wildfire, exacerbated by drought, destroys historic buildings and landscapes, and can damage archaeological sites and artifacts on or close to the surface. And, to prove that not all resource 'integration' is good, they can incur significant loss of structural integrity if covered by rapidly growing invasive vines thriving on warmer temperatures.

Although I've focused in this column on the value of integrating natural and cultural resources concerns, the same concept can be applied in a broader context. Opportunities abound to integrate our stewardship-based programs across DoD, and most especially with military mission needs and with our long-range planners. Likewise, on-base natural and cultural resources efforts can be linked with conservation partners and supported by off-base programs.

We continue to seek new proposals that demonstrate the effectiveness of an integrated natural and cultural resources approach. The just released call for FY 2010 Legacy preproposals is a golden opportunity to tap your creative juices for suitable ideas. So, send those ideas in, and let's see what you've got in mind!

Ask Legacy

Letters to the Staff of the Legacy Resource Management Program



Dear Legacy,

I am a wildlife biologist on a small installation. A little while back my Commander gave me cultural resources to manage as well! Yipes! What do I know about lithic scatter? Anyway, I have taken the CECOS course on Cultural Management Laws and Regulations, the ACHP courses on Section 106 and even the AICCC courses. But I need to know more!!! Do you know of any other opportunities for cross training that could help me?



Signed,

Too many hats.

Dear Hatboy,

Calm down, Collateral Duty, breathe deep, everything will be ok. We are here to help.

The courses you have taken are really good ones, but there may be more. Our first suggestion is to check out our Cultural Resources Update newsletter (aka The CRUD) for announcements of other good courses being offered. If you don't already get the CRUD, contact Legacy's Hillori Schenker (hillori.schenker.ctr@osd.mil) and she will add you to the distribution list.

Another good opportunity is coming your way this summer. The 2009 Sustaining Military Readiness Conference (SMRC or The Smirk!) will have Cultural and Natural Resources workshops and tracks crammed with great sessions that should interest you, no matter what hat you are wearing. There will also be service breakouts and plenty of time to network. And there will be fieldtrips! Visit the Arizona Wing Commemorative Air Force (CAF) Museum and see cool planes on sticks! Or visit the Gila River Indian Community! Or how about the Biosphere?! Or other neat destinations! The SMRC will be in Phoenix Arizona (we know) from August 9 through August 14 (we know, we know). Yes, it will be a bit toasty but you're DoD. You are supposed to be tough. Suck it up, man! Besides the hotel is brand spanking new, beautiful, fully air conditioned and even equipped with misters on the outdoor patios. Plus it's right across the street from restaurants, theatres, a Coldstone, and museums. It will be awesome. You would be a fool to pass up this great opportunity. To find out more about the conference, visit the website at: <http://www.smrconference.com>. See you there!

Signed,

L.



Dear Legacy,

My dog got into my file cabinet and tore up my data! I am reconstructing the lost pages but this is taking time since I need to get the raw data from my field notes. So nothing was permanently lost but now my Legacy project is overdue. What can I do?

Signed,

Blame it on Fido.



Dear Fido,

So the old "My dog ate my homework" bit. Well, well. You gotta love the classics. Here are a couple of suggestions you may find helpful.

First, dump the pooch and get a cat. No one ever moaned the words "Fluffy ate my homework". Kitties don't do that. It's not their style.

Second, if you think you will not be able to meet your deadline or if your Legacy project is already overdue, you can ask for your due date to be revised by applying for a no-cost extension. This request is done electronically, through the Tracker. Just log on, go to your project file in the Tracker and go to the Action and Review tab. From the "Action" pull down menu, choose "Request a No Cost Extension" and then fill in the requested information.

Once you submit this, it comes to the Legacy staff and we determine if an extension is justified, given your reason for delay. We will then change the due dates on your expected products and the completion date of your project in the Tracker. We then will contact the contracting office in Huntsville and let them know so they can update their contracts and files.

An extension can be 3 months, 6 months, all the way up to 2 years, but because we want to be efficient and cost conscious (it costs us each time we submit a change to the contracting office) we ask that applicants consider their requests carefully and consider asking for at minimum 6 months. If you don't need that much time, there is no law that says you HAVE to wait that long to finish. Go on, finish early! See how good you will feel! The sense of accomplishment! Not to mention no more annoying reminders from the Tracker!

Signed,
L.



Dear Legacy,

I wanted to get some information off of DENIX, but couldn't find much. I know the site has been having problems. What's the story? Is there any other place I can go to get information?

Signed-
Annoyed

Dear Annoyed,



As many of you may know DENIX (the DoD's Defense Environmental Network and Information eXchange website or www.Denix.osd.mil) has been experiencing some tough times since the redesign. A lot of material (particularly in the Conservation page) didn't get migrated from the old site to the new. Additionally there were other function problems. Then, just as the team from Delta Resources Inc. was getting the site on the road to recovery, BAM! DENIX got hit what might be the website's equivalent of a myocardial infarction. But Delta was quick with the paddles and zapped it back to sinus rhythm (Legacy has been watching a lot of old ER episodes). So, now the team is working hard and furiously on getting the content back, so don't give up on DENIX.

But in light of these events Legacy decided that it would be beneficial to have our project material available other places as well. To that end, all the project fact sheets from completed Legacy projects are now available on the Legacy website www.dodlegacy.org. Also many completed project deliverables for bird-related projects will soon be available on the DoD Partners in Flight website (www.DoDPIF.org). We are also working on expanding the Legacy Tracker capabilities so that eventually completed project materials for all Legacy projects will be downloadable from the Legacy website. The site will contain a lot more program information, previously only available on DENIX. This is still in the works, so don't try to look for it yet. We will keep you posted on the progress of the Legacy site improvements in Natural Selections and the CRUD, so keep an eye out for further announcements.

Signed,
L.



Legacy, continued from page 1

deciduous forest meets the savanna tall-grass prairie. The high diversity of life forms is reflected in the flora and fauna documented on the installation. Forested areas dominate the landscape outside the cantonment with 44,470 acres (17,996 ha); 1,552 acres (628 ha) of the property are wetlands.

Ongoing international military activities accelerated the need for training in caves. When this project was initiated, military training in caves was not permitted due to incomplete, partial, or outdated cultural and biological inventories, lack of adequate mapping, and other safety issues. This project established a strategy, plan, and priority list for managing cave resources from a military training, biological, geophysical, cultural, and historical resources standpoint. The project also has helped natural resource managers establish "cave policy" for installations that facilitates management for natural, cultural, military training, and recreation resource issues as increased regulation and pressure is put on cave ecosystems.

This Legacy project developed and field-tested a program for inventorying and monitoring caves. The project identified a number of caves, which can be utilized as training sites. Over reliance on previous cave surveys, The Native American Graves Protection and Repatriation Act (NAGPRA) consultation and notification process when human remains were discovered, and the availability of experts to classify invertebrate cave life took much more time than expected.

The initial phase of the project involved communicating with the military training community to find out the exact cave training scenarios needed and exact details on what type of military activities would occur in each type of cave training.

The Directorate of Public Works (DPW) Natural Resource office then made contact with both federal (U.S. Fish and Wildlife Service) and state (Missouri Department of Conservation) regulators and discussed the intent and scope of the project.

After these initial discussions, project managers defined the type of biological species surveys and other cave characteristics to record. Based on the previous cave survey, which was limited in scope and outdated (new caves had been discovered and species of concern had changed), FLW decided to do a new and more complete set of biological surveys for all caves.



Radio-controlled robotic devices such as this allow caves to be surveyed with minimal impact or disturbance.



Based on results of this inventory, nine caves have been identified as suitable for military training.

The FLW Directorate of Public Works Natural Resource Branch has responsibility for management of both biological and cultural resources on FLW. In the past, various types of cultural surveys and The National Register of Historic Places (NRHP) testing had been conducted on specific caves due to vandalism, but the vast majority of caves had limited or incomplete data. Project managers decided to do a complete systematic set of surveys for all caves due to the sensitive nature of human remains and potential burial sites.

Based on results of this inventory, nine caves have been identified as suitable for military training. This will allow a set of three caves for each military scenario. Specific standard operating procedures are being developed for each training scenario, along with safety risk assessments and use/monitoring protocols for the DPW Natural Resource Branch to monitor military cave training units. To date there have been limited opportunities to assess impacts of military training on cave resources. Initial data from military training scenarios and based on DPW Natural Resources cultural/biological and safety guidelines suggest that training impacts are no more detrimental than educational (post-elementary school class field trips) activities already permitted at one cave (Miller cave) on the site.

Human remains were discovered in a number of caves. Most were disturbed from previous vandalism but one intact burial was discovered. Because of the human remains, these sites had to be surveyed differently, and the NAGPRA

consultation and notification process requires additional time. If another installation plans to conduct surveys in places where human remains could be discovered, it should have a NAGPRA consultation process in place. This process can save time and potential non-compliance actions, which could impact military training. Separate funds from the cultural resource program should be on hand if mitigation of cultural resource sites is required due to significant cultural deposits discovered during the survey project. The only biological constraint was the amount of time involved for the identification and classification of invertebrate cave life.



Military cave training protocols need to consider bats (Indiana bats) and other natural resources that may be found in caves.



Cultural resources discovered in caves are documented and given special attention.

Many of the invertebrates that live in caves require a detailed examination for identification to the species level. Compounding this, there are only a moderate number of qualified scientists available for this identification work. Managers should be aware that the complete identification of invertebrate cave life could potentially take much longer than expected. In areas where few cave life surveys have been done, expect many new state and county records to be entered into the state biological databases.



Fort Drum, continued from page 1

The LeRay Mansion Historic District is part of the National Register of Historic Places and includes a mansion, farm manager's cottage, chapel, slave quarters and land office. The original LeRay Mansion was completed in 1808 but was later destroyed by fire. The current mansion was built in 1826-1827.

LeRay Mansion is now primarily used for visiting dignitaries, special events, and temporarily housing incoming officers and their families. However, there have been some permanent residents staying in the Mansion for quite some time. A colony of little brown bats (*Myotis lucifugus*) have been using the main attic area and the attic area above the kitchen as a maternity roost for raising pups every summer for a number of years.

This year the Mansion is undergoing a \$1.2 million renovation, and one of the management goals for Cultural Resources was to exclude all the bats from the Mansion. The concern was the potential damage resulting from a build-up of bat guano and additional health concerns from the bat's presence close to the living area of the Mansion.

While these are understandable concerns, there are a number of ecological benefits to keep bats in the area. Subsequently, the management goal for the Fish and Wildlife Management Program was to systematically, and non-lethally exclude the colony from the Mansion, yet keep the colony of little brown bats in the immediate vicinity. A compromise was easily accomplished by providing an alternate roost site for the bats. This action allowed the remodeling of the Mansion to protect a historical asset, while at the same time protecting an important biological resource.

When the Mansion underwent minor renovations in 2004, Fort Drum's Fish and Wildlife Management Program installed a bat house approximately 4' wide x 3' tall x 2' deep in an open area behind the farm manager's cottage approximately 200 yards from the Mansion. By the end of 2004, a few bats had found the new house and were roosting in it. By 2008, the numbers of bats using the house steadily increased to about 800, while the numbers using the LeRay Mansion have steadily decreased to about 300.



The "old" bat house constructed in 2004 and the "new" bat house constructed in 2009.

steady supply of drinking water. Nearby trees provide quick cover from predators when the bats emerge from their daytime roost.



Historic LeRay Mansion at Fort Drum undergoing current renovation. Both construction machinery and Cultural Resources personnel are on the scene.

Because the first bat house was capable of housing only 800-1000 bats at a time, a larger bat house was needed if all the bats were to be excluded from the Mansion. The new bat house is approximately 4' wide x 4' tall x 4' deep and capable of housing approximately 4,000 bats. The new bat house was constructed next to the old bat house due to the suitability of the site.

The location of a bat house is critical if it is to be successful and must meet several criteria including direct exposure to morning/early afternoon sun for at least 7 hours, located within 1500 feet of a water source, and located with 10-20 yards of a tree line. The sunlight acts as a thermal regulator for the bats and is needed to maintain optimal temperatures in the bat house throughout the day and evening hours. The body of water attracts insects, which bats eat, and provides a

Although little brown bats are not an endangered species, their future, along with many other species of bats, is uncertain due to an emerging disease issue that has been termed “White Nose Syndrome” (WNS). The name comes from the distinctive white ring of fungus that is typically present around the nose of afflicted bats. WNS was first reported in New York in 2006 and has now spread to bat colonies as far south as Virginia. The numbers of bats that WNS has affected is staggering, with tens of thousands of bats already thought to have died. Despite intensive research that is on-going, there is more unknown than known about the cause, transmission, and mortality rates of the disease.

The LeRay Mansion little brown bat colony is one of the few known large little brown bat maternity colonies in New York State. Subsequently, Fort Drum is currently cooperating with state-wide and nation-wide efforts to better understand the cause of WNS and what, if anything, can be done about it. Monitoring bats in the LeRay Mansion area will be more intense this year to see if Fort Drum bats are being affected as they have been in other areas of New York.

Joint Mission: Integrated Resources Management

By Hillori Schenker
DoD Legacy Resource Management Program

Each year the Legacy Resources Management Program funds a handful of projects that qualify as “Integrated.” These integrated projects support the management of natural and cultural resources on Department of Defense (DoD) installations. The following Legacy projects highlight a few integrated projects that will be available this fall:

National Public Lands Day (Legacy Project # 09-086)

This national partnership enlists volunteers to work with land managers to restore and enhance public lands and learn about resource conservation. Volunteers build trails and bridges, removal invasive plants, clean up trash, improve wildlife habitat, plant native vegetation, install interpretive signage, restore culturally historic sites, and many more activities. National Public Lands Day (NPLD) is a public-private partnership that promotes community participation in shared stewardship of natural and cultural resources and lands. The 16th annual event will take place on September 26, 2009.



Volunteers at the 2006 China Lake National Public Lands Day project cleaning up and stabilizing Old Fort Coso.

The deadline for applying for NPLD funding is June 12. Installations, this is your chance to get those site specific funds (up to \$6,500) and volunteer labor to help preserve, sustain, clean-up, or maintain one of your sites! To apply for funding, or for more information visit http://www.publiclandsday.org/managers/funding_and_awards.htm or contact Claudia Kessel, (202) 261-6478.

Using Indicator Species for Identification of Prehistoric Archaeological Sensitivity and Potential Site Integrity (Legacy Project #08-416)

This project’s guidance and technical report should help focus archaeological site identification at installations in the Northeast United States by using botanical indicators.

Early Native American occupation and impacts on vegetation are pervasive throughout the United States, including the vast land holdings of DoD installations. The funded research investigated the use of indicator plant species as means of rapidly and inexpensively identifying significant versus non-significant pre-European settlement Native American occupation areas, including villages, trails, gathering, and cultivation areas.

The research methods are based on comparing incidence, density, and distribution of indicator species in areas of known Native American occupation with selected control plots where Native Americans appear to have been absent. Study of indicator species is based on the idea that the presence and number of certain plant species, including trees, shrubs, and herbs, are an indicator of a specific site quality, habitat type, soil type, microclimate and

succession stage. Last season, the research team examined the known archaeological sites as control areas. This summer, sites of potential archaeological interest will be sought through the presence and number of plant species, and then vetted through archaeological testing.

The hope is to use this guidance a rapid inventory tool as well as for assessment of the potential integrity of certain cultural sites, and whether sites need to be protected if significant or can be used without intervention for military training and operations if deemed non-significant.



Wild Strawberry (*Fragaria virginiana*) and Indian Cucumber (*Medeloa virginiana*) are two possible botanical indicator species for identifying Eastern Woodland American Indian archaeological sites.

DoD Consultation Responsibilities to Native Hawaiian Organizations (Legacy Project #09-293)

This project will clarify DoD's consultation responsibilities to Native Hawaiian Organizations based on statutory and regulatory requirements by developing a consultation protocol or consultation standards that will apply uniformly in Hawaii.

On April 21-23, 2009, DoD held its first ever Native Hawaiian Cultural Communications Course (NHCCC) at the Marine Corps Base Hawaii, with funding from the Legacy Program. The course included faculty comprised of Native Hawaiian specialists in history, culture, intercultural communications and consultation, and DoD legal and program staff. The course is designed to help DoD military and civilian personnel understand the importance of working cooperatively with Native Hawaiian Organizations on projects which affect both Native Hawaiian cultural concerns and the DoD mission. Over 35 senior military and civilian personnel participated in the Executive Session on the first day. Over 50 action officer-level military and civilian personnel participated in the two-day course that followed. Post-training participant evaluations reflect a very positive outcome to the training and recommend that future training sessions be held.

The September 2008 release of the draft document for public review and comment generated over 200 oral and written responses from both the military and Native Hawaiian Organizations. The policy and protocols be available in the next few months.

Best Practices Tool for Tribal Interests and Natural/Traditional Resources (Legacy Project #08-406)

The study will address the possibility that some natural resources of interest to Native American Tribes are missed by conventional cultural and natural resources inventories. The best practices tool will reflect a practical approach to optimizing the identification, evaluation, and management of natural resources of importance to Tribes. This issue is not about focusing on cultural resources versus natural resources under traditional DoD management frameworks. Most DoD cultural resources managers are aware of and manage Sacred Sites (Executive Order No. 13007) or Traditional Cultural Properties (36CFR §800.16(l)(1)). However, plants used in traditional medicines, for example, or natural features that play a role in traditional songs or stories may be present on DoD lands but inadvertently missed in conventional inventories.

A report and other deliverables, such as electronic media suitable for use in training and web-site formats, will be produced to function as a "best practices" tool for DoD's cultural and natural resources managers. The present study will be limited to one geographic region for purposes of this year's effort, but it is anticipated that study results will be well suited for expanding to other regions using this DoD-wide best practices tool.



Training, Announcements & Events of Interest

Workshops, Interagency Training Announcements and Future Events of Interest to the Conservation Community



CALL FOR PROPOSALS! National Fish and Wildlife Foundation Call for Proposals Announcement: The National Fish and Wildlife Foundation (NFWF) is soliciting proposals for the 2009 Native Plant Conservation Initiative (NPCI) grants cycle. The NPCI grant program is conducted in cooperation with the Plant Conservation Alliance (PCA), a partnership between the Foundation, ten federal agencies, and more than 270 non-governmental organizations. PCA provides a framework and strategy for linking resources and expertise in developing a coordinated national approach to the conservation of native plants. Since 1995, the NPCI grant program has funded multi-stakeholder projects that focus on the conservation of native plants and pollinators under any of the following 6 focal areas: conservation, education, restoration, research, sustainability, and data linkages. For more information please visit www.nfwf.org/npci.

SPONSORED! Strategic Management of Invasive Species in the Southwestern United States: October 26-30, 2009 in Phoenix, AZ. This five-day invasive species workshop for installation personnel in the southwestern United States (AZ, CA, CO, NM, NV,) is sponsored by the Legacy Program. The workshop will provide participants with knowledge and resources that will enable them to improve land stewardship by building partnerships and effectively addressing invasive species problems. Invasive terrestrial plants of southwestern desert ecosystems will be emphasized but nonnative aquatic nuisance species and insects will also be covered. Science and management experts will address pressing ecological issues and explain key components of an invasive species management strategy. Participants also will learn about local, state, and federal invasive species initiatives and regional partnership opportunities. There is no charge for the workshop. Registration is not open yet; however, please contact Melissa Brown at weedcenter@montana.edu to be placed on a list to receive notices about this workshop.

SPONSORED! Strategic Management of Invasive Species in the Southeastern United States: December 7th-11th, 2009 at the Carolina Inn in Chapel Hill, NC. This five-day invasive species course for installation personnel and their strategic partners in the southeastern United States is sponsored by the Legacy Program. The workshop will provide participants with knowledge and resources that will enable them to improve land stewardship by building partnerships and effectively addressing invasive species problems with an emphasis on terrestrial plants of the southeast. Science and management experts will address pressing ecological issues and explain key components of an invasive species management strategy. Participants also will learn about local, state, and federal invasive species initiatives and regional partnership opportunities. Registration will be available online beginning May 20th, 2009. Please contact Steven Manning at steve@ipc-inc.org to be placed on a list to receive notices about this workshop.

American Indian Cultural Communication Course: July 14-16, 2009, Great Falls, Montana, near Malmstrom AFB. American Indian specialists in history, culture, intercultural communication and consultation, and DoD legal staff will teach this acclaimed training. Classes will be conducted from 0800-1700. A Wednesday evening program will also be part of the course instruction. You must attend the entire training program to receive a certificate of course completion. This FREE course provides valuable information for DoD employees whose work could affect Indian tribes and for those already working with tribes and tribal members. If you would like to REGISTER, please email the following information to Laura Berg, at lberg@teleport.com, as soon as possible but no later than June 17, 2009: 1) your first and last name; 2) military branch 3) installation location and mailing address; 4) rank, if applicable; 5) job title; 6) status as a DoD employee or contractor; 7) email address; 8) telephone number; and 9) briefly, reasons for taking the course and how it may relate to your job responsibilities.

2009 AWRA Summer Specialty Conference: Adaptive Management of Water Resources II: June 29 – July 1, 2009 in Snowbird, Utah. The overall goal of this conference is to establish a forum where more can be learned about the basis, theories, and practical aspects of AM; where we can gain a better perspective about national, regional and local directions, requirements and needs; and where experiences can be shared to improve existing programs and develop more rigorous, credible future programs. For details visit: <http://www.awra.org/meetings/SnowBird2009/>

Complicating Factors in Invasive Plant Management: Circumstances Beyond Our Control?: August 11-12, 2009 to be held at the University of Pittsburgh at Johnstown, PA. Managing non-native invasive species to mitigate the threat to the world's biological diversity is getting more challenging. Our quality of life depends on the health of our natural resources, but limited funding, human development, introduction of new species and complicated species interactions combine to make the job tough. In this seventh Mid-Atlantic conference attendees will not only obtain useful background on the issues surrounding this biological problem but will also learn: thresholds for action, tools for effective and efficient removal, what the new administration has done and plans to do to control invasive plants, and much more. For details visit: <http://www.ma-eppc.org/>.

13TH REGION 4 DOD-EPA-STATES ENVIRONMENTAL CONFERENCE: June 22-24, 2009 at the Sheraton Gateway Hotel Atlanta Airport in Atlanta, Georgia. The conference, co-hosted by the Department of Defense and Region 4 Environmental Protection Agency, will focus on environmental topics of national interest with specific relevance to military installations throughout the region. This year's theme, Sustaining the Environment for a Greener Future, mirrors the conference intent, which is to provide a forum where regional stakeholders can collaborate. Participants will address major challenges and share successes related to maintaining strong military readiness and fostering a sustainable future. Visit <http://www.region4dod.com/> for details.

Bat Conservation and Management Workshops - 2009: August 14-19, 2009, in Pennsylvania. Because bats are active mostly at night, they present unique challenges to wildlife biologists and naturalists trying to study their habitats and behavior. And reliable information about the resources and natural history of local bat species is essential for managing for their protection or continued survival. Recognizing this, BCI has developed a comprehensive curriculum for an introductory field workshop designed to train serious students of bat conservation in current bat research and management techniques. In this intensive 6-day, 5-night program, BCI biologists and professional colleagues conduct a combination of lectures and discussions, field trips to examine bat habitat, and hands-on training to capture and identify bats. Cost \$1395, rabies pre-exposure vaccinations are required. For details visit: <http://www.batcon.org/index.php/education/workshops/subcategory/82.html>

SAVE THE DATE! 9th Annual NAPPC International Conference: October 21-23, 2009 at the U.S. Environmental Protection Agency, Arlington, Virginia.

Secretary of Defense Environmental Awards: These awards recognize outstanding achievement in environmental management by the DoD components, at both domestic and overseas bases, to sustain military readiness, training and operational capabilities. This year for the category of Natural Resources Conservation the winner is:

Camp Ripley Maneuver and Training Center, Minnesota Army National Guard – Large Installation category

The installation achieved a number of major natural resources conservation goals across its 53, 000 acres and in adjacent communities which included enrolling 4,000 acres into the installation's Army Compatible Use Buffer (ACUB) and protecting an additional 18,000 acres in support of the buffer. Camp Ripley also developed new partnerships for ACUB funding and natural resources conservation management, and secured special legislation that returns state timber revenues to Camp Ripley for its reforestation and forest management program.





Dear *Natural Selections* Reader:

The DoD Legacy Resource Management Program is expanding the Legacy Tracker capability to allow for the download of fact sheets of completed Legacy funded projects. Many project natural and cultural resources fact sheets are now available online with more to come. In the next few weeks Legacy Staff will start uploading final reports to the website. The process of uploading expected products may take several weeks, but it is well worth it. Uploading material to DENIX will resume once that website recovers from its general systems failure from a few weeks back.

Here are a few samples of recently uploaded natural resources fact sheets on the Legacy Tracker (project number and title).

- 05-17 DoD Partners in Flight 2005
- 05-48 Military Armored Vehicle Reefs
- 05-86 National Public Lands Day 2005
- 05-103 Identify Management Strategies for Declining Landbirds
- 05-158 Grand Bay Banks Lake Stewardship
- 05-186 Modeling Overwintering Survival of Declining Landbirds
- 05-213 Strategy for the Cooperative Recovery of Rare Species Affecting Training Ranges
- 05-232 Manatee Alert Project
- 05-240 Sikes Act Integrated Natural Resource Management Plan (INRMP) Training
- 05-242 TER-S Technology Transfer
- 05-243 Migratory Linkages Burrowing Owls
- 05-244 Repatriation Easter Regal Fritillary Butterfly
- 05-245 Migratory Bird Monitoring Using Automated Acoustic and Internet Technologies
- 05-247 Biodiversity Hand Book Revision Phase I
- 05-249 Front Range Ecoregional Partnership
- 05-252 Reintroduction of Prescribed Fire in Coastal Plain Ecosystems to Reduce Wildland Fire Risk
- 05-255 Desert Tortoise Head Starting Project
- 05-258 Support of Southwest Strategy T&E Species Program Managers Team
- 05-264 Multi Species Management Using Modeling and Decision Theory
- 05-270 Development of Mission Avoidance Zones in the Eglin Gulf Test and Training Range
- 05-271 Prescribed Burns Effects on End Reptiles and Amphibian Species
- 05-273 Biodiversity Outreach Toolkit
- 05-275 Cooperative Conservation National and Regional Conference and Workshop Support
- 05-276 Technology-based Decision-support Planning Tools
- 05-278 Southeast Regional Partnership for Planning and Sustainability Mapping Effort
- 05-279 Compatible Land Use Planning and Stakeholder Engagement Implementation Process
- 05-280 Actions to Abate Critical Threats Gulf Coastal Plain Ecosystem Partnership (GCPEP)
- 05-281 State Wildlife Action Plan and INRMP's Workshop
- 05-282 Engagement with Academia and Research Centers
- 05-284 Integrating National Environmental Policy Act with Environmental Management System through GIS

06-1717 DoD Partners in Flight 2006
06-86 National Public Lands Day 2006
06-213 Strategy for Cooperative Recovery of Rare Species at Ft Lewis
06-243 Migratory Linkages of Burrowing Owls
06-280 Actions to Abate Critical Threats Gulf Coastal Plain Ecosystem Partnership (GCPEP), Phase II
06-290 Quantifying Impacts Groundwater Withdrawal on Avian Com
06-292 Assessing BASH risk potential of migrating and breeding Osprey in the Chesapeake Bay Region, Phase I
06-298 Pacific Islands TER-S Workshop
06-302 Role of DoD Lands for End Species Protection
06-306 Coral Ecosystem and Marine Resource Initiative
06-308 Remote Monitoring of Island Foxes
06-310 Southeast Region TER-S Workshop
06-322 DoD Coordination Conservation Issues with Bureau of Land Management
06-329 Analysis of California Migration Patterns using NEXRAD and On-the-ground Data
06-331 State-wide Conservation Forums to Facilitate

07-86 National Public Lands Day 2007
07-038 Digital Telemetry of Island Foxes
07-1717 DoD Partners in Flight 2007
07-270 Protected Species Habitat Modeling in Eglin Gulf Test and Training Range
07-292 Assessing BASH risk potential of migrating and breeding Osprey in the Chesapeake Bay Region, Phase II
07-305 Riparian Buffer Chesapeake Bay
07-334 North Carolina Sandhills Weed Management Area
07-337 Assessing the value of DoD lands in Alaska to an imperiled species, the Rusty Blackbird
07-341 Legacy Geospatial Data Warehouse
07-346 DoD Strategy to Support a Multi-Agency Bat Conservation Initiative Within the State of Utah
07-371 Natural Resource Assessment of Wake
07-377 Southwestern TER-S Workshop
08-086 National Public Lands Day 2008



2009 Sustaining Military Readiness Conference

An update on the SMRC



2009 Sustaining Military Readiness Conference Registration now open!

The 2009 Sustaining Military Readiness Conference will be held from Sunday, August 9th through Friday, August 14th at the Sheraton Phoenix Downtown Hotel in Phoenix, Arizona. Online registration is now open through the conference website. Please visit <http://www.smrconference.com> and register. The conference registration is free but mandatory. DoD personnel and stakeholders in Natural and Cultural Resource Management, Readiness, Sustainability, and Compatible Land Use are invited to join the DoD Legacy Resource Management Program, the Basing Directorate, the Directorate of Readiness and Training, Policy, and Programs, the Test Resource Management Center, the Office of the Director, Operational Test and Evaluation, and the Strategic Environmental Research and Development Program to:

- ❖ Exchange lessons learned from the public and private sectors!
- ❖ Share results of sustainability programs and projects!
- ❖ Participate in a broad spectrum of informative training workshops!

The conference registration is free but mandatory.

2009 Sustaining Military Readiness Conference call for Posters

The Sustaining Military Readiness Conference sponsors invite project managers to submit a poster for display in the exhibit hall. Posters should reflect success stories and lessons learned in projects which have helped sustain military readiness. The conference sponsors are particularly interested in projects related to energy, climate change, training and test ranges, partnerships, sustainability, management tools, emergent technologies and related influences on the US military today and in the future.

Posters will be displayed in two locations. Posters in the meeting room foyer will be viewed during breakfasts and breaks every day. Posters in the exhibit hall will be viewed during evening receptions and conference lunches every day.

There is no charge to exhibit your poster if accepted, however, poster exhibitors must attend the conference. There is no conference registration fee. For more conference details go to <http://www.smrconference.com>.

Poster Exhibitors Receive:

- ❖ Listing in the online and printed exhibitor directory received by all attendees, to include: Poster Location, Organization Name, Contact Name, Phone, Email and 400 character poster description.
- ❖ One (1) 4' x 8' poster face



Photo of the Month

Capturing the beauty of our natural resources



June 2009 Photo of the Month Winner!
Young Horned Owl, Fort Lewis
Washington, Observation Point 3 (OP3)
Submitted by *Natural Selections* reader: Craig D Milam
Fort Lewis, WA

Did You Know?

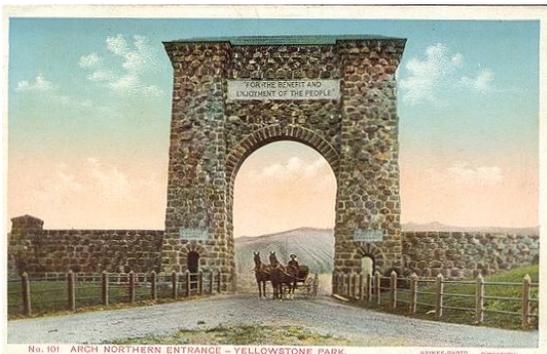
Little Did You Know Conservation Could Be So Much Fun!



For the benefit and Enjoyment of the People!– The United States military’s contribution to our knowledge of the nation’s natural resources has a rich history. In the early decades of our country, expeditions led by military officers such as Meriwether Lewis and William Clark, leaders of the 1803-1806 Voyage of Discovery, Charles Wilkes, commander of the 1838-1842 United States Exploring Expedition, and others, mapped and described the coasts, rivers, and interior of our young nation.

Many of these expeditions collected species of plants and animals that were new to science. Other expeditions collected cultural materials that expanded and preserved our knowledge of a rapidly changing human world. In 1857, over 2000 cultural artifacts gathered during the United States Exploring Expedition were transferred to the Smithsonian Institution resulting in the creation of the United States National Museum.

Today, these specimens and others collected by military explorers are some of the rarest and most important objects in the Institution’s collections. The United States military’s formal stewardship of our nation’s land began with the Army in 1886. Yellowstone, the world’s first national park was established in 1872. However, the park’s civilian administrators, with limited financial and human resources, were unable to protect Yellowstone’s natural features and wildlife from vandalism and poaching.



North Entrance to Yellowstone Park. Sign on top of tower says “For the benefit and Enjoyment of the People”. Photo by F. Jay Haynes

Yosemite’s military history, like that of Yellowstone, is well documented. The photograph to the right, taken in 1899, shows a part of the story that is not well known. It portrays soldiers of the 24th Mounted Infantry. The 24th was one of four African-American Army regiments that had established their identity and place in history during the Indian Wars as the Buffalo Soldiers. All of the soldiers assigned to the protection of these national treasures were guarding more than our nation’s natural resources. They were also defending the idea of a national park system for the benefit and enjoyment of all the people.

During the two World Wars of the last century, military training needs resulted in the Department of Defense acquiring a substantial land base of its own.

After WWII, natural resource stewardship activities, including erosion control, wildlife management, forestry, and farming, gradually became integrated with the overall operation of most military installations.

Portions of this month’s Did You Know? are excerpts from the Biodiversity Outreach Tool.

At the request of the Secretary of the Interior, control over Yellowstone National Park was assumed by United States Army in 1886. As the manager of Yellowstone, the Army developed regulations that put a strong emphasis on conservation. In fact, many of the policies initiated by the Army were later adopted and applied nationwide by the National Park Service.

The Army remained in charge of Yellowstone National Park for thirty two years until 1918 when control of the park, and Fort Yellowstone, was turned over to the newly formed National Park Service. Fort Yellowstone was designated a National Historic Landmark in 2003. Along with Yellowstone, the Army was also called upon to protect three other future national parks; Yosemite, Sequoia, and General Grant, the national park now known as Kings Canyon.



The 24th Mounted Infantry guarding our natural resources at what is know today as Yosemite National Park.

Contact Us

Who we are and where to find us!



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