



Natural Selections

Legacy Program Update

Legacy Office reviews full proposals with Service representatives: The Legacy Resource Management Program Review Committee met in mid-November to review the proposals. Currently, the selected proposals are on their way forward up the chain for legal review and approval by the Deputy Under Secretary of Defense (Installation & Environment). The authors of the first round of successful proposals will be notified in mid-January. Natural Resources received 98 proposals, requesting \$11.8 million. Cultural Resources received 39 full proposals, totaling a request for \$3.7 million. Announcements of all proposals approved will be made soon through the Legacy Tracker website at www.dodlegacy.org.

Legacy Project Highlight of the Month

Legacy Project 07-290 Quantifying impacts of ground water withdrawal on avian communities in desert riparian woodlands of the southwestern U.S.

Riparian woodlands in the desert southwest are an extremely important resource because they constitute <1% of the desert landscape, yet typically support >50% of the breeding birds. Riparian woodlands also provide shelter and critical food resources for dozens of species of Neotropical migratory birds that alight in these woodlands during their spring and fall migrations across the desert southwest. Ground water withdrawal (and subsequent loss of surface water) to support urban developments in the desert southwest has the potential to degrade or eliminate riparian woodlands throughout the region, including riparian woodlands along the San Pedro River adjacent to Fort Huachuca Military Reservation in Arizona. Military readiness could be jeopardized if limited resources are diverted from the military's mission at Fort Huachuca Military Reservation (and at other military installations in the southwestern U.S.) to deal with the recovery of potentially dozens of

See Legacy, page 3



In The News

Funding Available for Environmental Research and Development

By Strategic Environmental Research and Development Program Office
November 6, 008

ARLINGTON, VA, November 6, 2008—The Department of Defense (DoD), through the Strategic Environmental Research and Development Program (SERDP), is seeking to fund environmental research and development in the Sustainable Infrastructure focus area. The development and application of innovative environmental science and technology supports the long-term sustainability of DoD's installations and ranges, as well as significantly reduces current and future environmental liabilities. The Sustainable Infrastructure focus area concentrates on natural resources (e.g., ecosystem-based management; threatened, endangered, and at-risk species; land management and watershed protection; and maritime sustainability), facilities (e.g., installation/regional sustainability, energy, noise, air and water quality, and facility waste), and cultural [SERDP, page 4](#)

INSIDE THIS ISSUE

- 1 [Legacy Program Update](#)
- 1 [Legacy Project Highlight of the Month](#)
- 1 [In The News](#)
- 2 [Training](#)
- 2 [Naturally Speaking](#)
- 5 [Did You Know?](#)
- 6 [Contact Us](#)

Training

Workshops, Interagency Training Announcements and More



NEW! Natural Resources Compliance: January 13 -16, 2009, Port Hueneme, CA. This course offers instruction in specific natural resource laws, regulations, policies, Executive Orders, DoD Instructions, and other guidance, noting Service-specific requirements. Course addresses stewardship, preservation, and process; fish, game, and wildlife management laws; protection of wetlands, waterways, and other protected ecological areas; forest and land use management laws; and interservice cooperation. Practical exercises and guest speakers are included. This course is approved by the Interservice Environmental Education Review Board (ISEERB). Click [here](#) for course description or visit <https://www.netc.navy.mil/centers/csfe/cecos/>. Additional courses for 2009 are tentatively scheduled for New Boston AFS, NH (May 5-8, 2009) and Elmendorf AFB, AK (July 7-10, 2009).

Naturally Speaking

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



Three words – Global Climate Change (GCC). Can it be any clearer that GCC is the critical challenge confronting our planet? The immediate consequences of GCC to natural resource degradation such as species loss and habitat degradation are visible, substantial and widespread; the long-term consequences are profound. Beyond this, GCC has significant and serious implications for military readiness and national security.

Specifically, GCC has the potential to drastically affect the long-term stability of U.S. national and international interests. It is a significant, possibly most important, contributor to global threats such as poverty, human health, impaired food production, forced migration, and political instability that foster threats such as terrorism. Potential consequences include:

- Traumatic and widespread loss of natural resources.
- Heightened tension over water access, reduced food production, mass migration, and land loss in volatile areas such as Africa, Asia, and the Middle East.
- Displacement of major populations due to climatic events such as Hurricane Katrina.
- Political instability caused by the inability of governments to meet population needs.

So, what can we do? First, we should reduce our individual carbon footprints. Second, we must insist that all our political and business leaders are fully engaged, taking aggressive and far-reaching actions now.

We all are guilty. We have allowed our leaders to bicker and engage in partisan gamesmanship, and worse – incredibly, betting life as we know it on short-term and illusory gains. We must never allow this to happen again.

I ask all of you to commit to action – today and every day from here on. Actions as simple as buying local or organic, walking more and driving less, and choosing energy efficient appliances can, cumulatively, make a difference. We owe this much to ourselves and our own peace of mind, but especially we owe this to all future generations.



Legacy, continued from page 1

declining populations of riparian birds. Funding for this research project was provided by the DoD Legacy Resource Management Program.

The objective of this research project was to assess the value of riparian woodlands to the health and persistence of avian communities in the desert southwest. Specifically, the sought to quantify the extent to which both surface water and the health of riparian vegetation influence the abundance and diversity of riparian birds. Ultimately, the objective was to develop models to allow resource managers on military lands to better predict the effects of future ground water withdrawal and surface water depletion on riparian bird communities along the San Pedro River and elsewhere in the southwestern U.S.

From March to October 2007, project biologists surveyed birds, sampled vegetation, and measured surface water at 16 study sights located in riparian woodlands throughout southeastern Arizona, including 2 study sites situated along the San Pedro River near Fort Huachuca Military Reservation. They also sampled avian food resources (i.e., aerial arthropods) and monitored nests of riparian bird species at a subset of these study sites. Benefit: Results from this study provide data that will allow resource managers on military lands to better predict how abundance and diversity of riparian birds will be affected by reductions in ground and surface water levels.



Yellow-breasted Chat - a common riparian bird in AZ

This project found that the extent of surface water at the study sites was positively associated with total relative abundance of riparian birds and with relative abundance of several bird species including Black Phoebe and White-winged Dove. In addition, avian food resources (i.e., aerial arthropods) averaged 89% greater at “wet” versus “dry” study sites. Finally, results found that species like Vermillion Flycatcher, House Finch, and Common Yellowthroat were negatively associated with the extent of dead or dormant riparian vegetation at study sites. These results provide some of the first quantitative data demonstrating the importance of water to the health of riparian bird communities in the southwestern U.S.

More details of this project can be found on [DENIX](#).



SERDP, continued from page 1

resources. This work also encompasses the technologies required to sustain deployed forces. SERDP intends to fund multiple projects that respond to the following three focused Statements of Need (SON) in Sustainable Infrastructure:

1. Southwest Ecological Systems on Department of Defense Lands: Altered Fire Regimes and Non-Native Invasive Plants
2. Managing and Restoring Southwest Intermittent and Ephemeral Stream Systems on Department of Defense Lands
3. Fugitive Dust Emissions Due to Department of Defense Activities

Proposals responding to the Fiscal Year (FY) 2010 SONs will be selected through a competitive process. PRE-PROPOSALS FROM THE NON-FEDERAL SECTOR ARE DUE BY THURSDAY, JANUARY 8, 2009. PROPOSALS FROM THE FEDERAL SECTOR ARE DUE BY THURSDAY, MARCH 12, 2009. The SONs and detailed instructions for federal and private sector proposers are available on the SERDP web site at www.serdp.org/funding.

SERDP also will be funding environmental research and development through the SERDP Exploratory Development (SEED) Solicitation. The SEED Solicitation is designed to provide a limited amount of funding (not to exceed \$150,000) to investigate new environmental technologies with innovative approaches that entail high technical risk and/or have minimal supporting data that provide risk reduction and/or proof of concept. For FY 2010, Sustainable Infrastructure SEED proposals are being requested in response to the following SON:

1. Innovative Control/Eradication Approaches for the Brown Tree Snake (*Bioga irregularis*)

ALL SEED PROPOSALS ARE DUE BY THURSDAY, MARCH 12, 2009. Detailed instructions for both federal and non-federal proposers are available on the SERDP web site at www.serdp.org/funding.

Listed Plan Species Evaluation:

A Center for Plant Conservation announcement

The Center for Plant Conservation is working on a joint project with Department of Defense, along with our network of participating institutions. We are conducting a survey to determine which [DoD special status species](#) (click on icon to the right for quick access) currently have ex-situ germplasm collections (and which do not), and will be compiling this information in a report.

We need natural resource installation personnel assistance to gather information concerning the ex-situ genomic conservation of DoD special status plant species. We are seeking information about cultivated plant or stored seed collections where there is specific population provenance information available. Since the CPC national office and participating institutions will not be aware of all projects initiated, we need assistance acquiring information about collections (either within your installation or elsewhere). The [CPC participating institutions](#) will be examining their collections (and asking other collaborators and investigators), so you do NOT need to respond if you know only of accessions at CPC institutions.

Please contact Anna Strong (anna.strong@mobot.org) at the Center for Plant Conservation for any information or to submit data. We hope that this information can be used to assist DoD in setting priorities and optimize conservation funds.

*Deadline **February 1, 2009** for receipt of any data.*

Did You Know?

Rin Tin Tin, the American canine movie star was a German Shepherd born in, well, France! – According to S. Coren, the author of "The Intelligence of Dogs", The German Shepherd Dog ranks as the 3rd most intelligent dog breed of all, just behind the Border Collie and Poodle. The proper English name for this breed is German Shepherd Dog but they are usually informally referred to as GSD's, German Shepherds, Alsatian, or Deutsche Schaferhund

Dogs in general play an important role in the life of many, from your eternal companion, to aiding the blind as seeing-eye dogs, a GSD named Buddy, became the first Seeing Eye dog in 1928. Teacher and author Helen Keller had a German Shepherd. Keller achieved worldwide recognition by overcoming blindness and deafness to become a notable writer and teacher.

Traditionally GSD were used for herding, and today they are seen occasionally in acting roles, a GSD named Strongheart became the first canine silent movie film star in 1921. Another preferred training of German Shepherds is of course law enforcement. German Shepherds were among the first dogs trained for police work- beginning around 1900 in Ghent, Belgium. Today the 341st Training Squadron, Lackland Air Force Base, San Antonio, Texas, is responsible for procuring and assigning all dogs for the Military Working Dogs (MWD) Training School program and for shipping them to military installations worldwide following training.

More than 125 Army, Navy, Marine corps and Air Force personnel conduct training courses for dogs and handlers for all branches of the Department of Defense and other federal agencies. Through the years, a number of different breeds have been tested for the MWD program. Currently the German Shepherd, Dutch Shepherd and Belgian Malinois have proven to be the best choice as the standard military working dog. The German Shepherd, Dutch Shepherd and Belgian Malinois breeds have the best overall combination of keen sense of smell, endurance, speed, strength, courage, intelligence and adaptability to almost any climatic condition.



This lovely German Shepherd, Panzer, has seen many days as an extra in the 2005 hit movie War of the Worlds. Like many stars, she enjoys the beach and time to play!



John F. Kennedy Library

In the photo above, President Kennedy's family pose with the First Family dogs at Hyannisport; including: Irish spaniel Shannon, Welsh terrier Charlie, German shepherd Clipper, and the pups of Pushinka, who was a gift to Caroline from Soviet Premier Nikita Khrushchev.

A German Shepherd Dog, the first hero of his kind, to return home from the Vietnam War was named Nemo.

The most famous German Shepherd who became the greatest canine star (in the movies) of his time was Rin Tin Tin, but other German Shepherds out there can claim stardom, or at least be named in trivia lists: Roy Rogers' German Shepherd dog was named Bullet, the Wonder Dog, John Kennedy also had a German Shepherd, Clipper, and Franklin D. Roosevelt also had a German Shepherd named Major.

More Dog Trivia!

Dogs sweat only from the bottoms of their feet ... and the only way they can discharge heat is by panting. The average litter size in the German Shepherd is 8 puppies. Heaviest Living Dog: Kell, a female English Mastiff weighing in at 286 pounds on August 18, 1999. Kell lives with owner Tom Scott in the UK. Smallest Dog: Big Boss, a male Yorkshire Terrier that was just 4.7 inches tall and 5.1 inches long on his first birthday. He belongs to owner Dr. Chai Khanchanakom from Thailand. Largest Litter: 23 puppies. This record was met by three different dogs: an American foxhound in 1944, a St. Bernard in 1975, and a Great Dane in 1987.

Contact Us

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