



UPDATES

Welcome to our quarterly Resource Conservation and Resiliency newsletter that provides updates about new information and products available from the Resource Conservation and Resiliency Program Area.

SERDP & ESTCP 2018 Symposium Highlights

The SERDP and ESTCP Symposium was held in November and focused on the Department of Defense's priority environmental and installation energy issues. The Resource Conservation and Resiliency Program Area offered four technical sessions at the Symposium on topics including installation resilience, wildland fire management, threatened, endangered, and invasive species, and terrestrial Arctic research. Two short courses were conducted that focused on infrastructure resilience planning and wildland fire managements tools. Presentations from the symposium are now available on the [SERDP & ESTCP website](#). Additionally, the Resource Conservation and Resiliency Program Area recognized two Projects of the Year, these projects are highlighted below.

Endangered Butterflies as a Model System for Managing Source-Sink Dynamics on Department of Defense Lands

DoD lands provide remarkably important habitat for numerous threatened, endangered and at-risk species. Many of these species do best on DoD lands because they require disturbance-dependent habitats such as those created by fires and localized floods. DoD resource managers can manage these disturbances with techniques that are difficult or impossible to employ on private lands. Ideally, such management creates population sources that increase metapopulation viability; however, a sophisticated understanding of population dynamics is required for success because too-frequent disturbance runs the risk of creating population sinks. As a result, there has been a long-standing research need to collect the data necessary to assess the source-sink consequences of habitat disturbance management and restoration.

Dr. Elizabeth Crone from Tufts University and her team led a [SERDP funded project](#) that investigated the source-sink dynamics of species being managed on military lands using three species of endangered butterflies. The team measured demography and movement at all phases of the disturbance cycle following management or restoration. They then used these data to parameterize detailed spatially explicit individual-based simulation models linked to real landscapes with dynamic changes in habitat quality due to management. Finally, the team validated their general approach by comparing patterns in the focal species to general, cross-taxa, patterns. [MORE](#)

Conspecific Attraction as a Management Tool for Endangered and At-Risk Species on Military Lands

The movements of wildlife species and the colonization of habitats for federally listed or at-risk species is often unpredictable. This irregularity undermines species management efforts and can interfere with military training. Given the expense and effort taken to manage species on military lands improved management tools are welcome and important.

Dr. Jinelle Sperry from the US Army Engineer Research and Development Center and her team led an [ESTCP funded project](#) that demonstrates the use of conspecific attraction as a cost-effective management tool for endangered and at-risk bird and amphibian species. For conspecific attraction, prerecorded vocalization of the target species are broadcast from a playback system within the focal area. Vocalizations are broadcast throughout the focal species breeding season from the restored habitat, thereby encouraging individuals to settle and breed near the playback system. [MORE](#)

Solicitations

SERDP

The SERDP FY 2020 Solicitation was released October 25, 2018. Researchers from Federal organizations, universities, and private industry can apply for SERDP funding via the appropriate solicitation listed on the website. All submissions must be in response to a Statement of Need (SON) associated with the solicitation. **Pre-proposals are due January 22, 2019 by 2:00 PM ET.**

ESTCP

The ESTCP FY 2020 Solicitation was released January 8, 2019. Researchers from Federal organizations, universities, and private industry can apply for ESTCP funding. All proposals must respond to a Topic Area associated with the solicitation. ESTCP projects are formal demonstrations in which innovative technologies are rigorously evaluated. ESTCP demonstrations are conducted at DoD facilities and sites to document improved efficiency, reduced liability, improved environmental outcomes, and cost savings. **Pre-proposals are due March 7, 2019 by 2:00 PM ET.**

In FY20, ESTCP has issued two topic areas for the Resource Conservation and Resiliency program area through a Broad Agency Announcement (BAA) to the private sector as well as one topic area of general interest:

- DoD Infrastructure Resiliency Arctic Engineering Design Tool
- Advanced Brown Tree Snake Control Tools
- Innovative Technology Transfer Approaches

More information can be found on the [SERDP and ESTCP website](#).

Recently Released Documents Available for Download

- RC-2709 - “Useful Prediction of Climate Extreme Risk for Texas-Oklahoma at 4-6 Years” - [Final Report](#)
- RC-2650 - “Assessing the Impacts of Climate and Land Use/Land Cover Change on Valley Fever Incidence” - [Final Report](#)
- RC-201304 - “Integrated Measurement of Naval Sonar Operations and Precise Cetacean Locations” - [Cost and Performance Report](#)
- RC-201201 - “Operational-Scale Demonstration of Propagation Protocols and Comparative Demographic Monitoring for Reintroducing Five Southeastern Endangered and At-Risk Plants” - [Cost and Performance Report](#)

Upcoming Conferences

March 4-8, 2019 - NMFWA 2019 Annual Meeting and Training Workshop

The National Military Fish and Wildlife Association (NMFWA) will hold its annual training workshop March 4-8, 2019 in Denver, Colorado. This meeting is held in conjunction with the Wildlife Management Institute (WMI) 84th North American Wildlife and Natural Resources Conference.

August 11-16, 2019 - ESA and USSEEE Joint Meeting

The Ecological Society of America and the United States Society for Ecological Economics will hold a joint meeting August 11-16, 2019 in Louisville, Kentucky. The theme for this year’s meeting is “Bridging communities & ecosystems: Inclusion as an ecological imperative”.