

# DoD Partners in Amphibian and Reptile Conservation 2016 Annual Report

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Ridge-nosed Rattlesnake (picture by Larry Jones)

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It has been another extremely productive year for the Department of Defense (DoD) herpetofauna conservation network, colloquially known as DoD Partners in Amphibian and Reptile Conservation (DoD

PARC) group, and we are very proud of our many accomplishments. The many services, products, and deliverables produced this year (see below) would not have been possible without the enthusiasm, teamwork, and passion of our dedicated participants and Representatives (Valerie Arkell, Janet Johnson, Paul Block, Ian Trefry, Julie Robbins, Dave McNaughton). We thank all who contributed to our collective success, and look forward to continuing to support military readiness through effective herpetofauna conservation and management. A summary of our 2016 accomplishments follows. For copies of the products below, please contact Chris Petersen ([chris.petersen@navy.mil](mailto:chris.petersen@navy.mil)) or visit the DoD Natural Resources website at <http://www.dodnaturalresources.net/DoD-PARC.html>.



Long-tailed Salamander (picture by Chris Petersen)



Rainbow Snake (picture by JD Wilson)



Barking Treefrog (picture by Julie Robbins)

### Salamander Chytrid Fungus Factsheet

If it was introduced into the U.S., this fungus could have potentially significant impacts to U.S. salamander species. We developed a salamander chytrid fungus factsheet that can be downloaded at: <http://www.dodnaturalresources.net/PARC-Resources.html>.

### DoD PARC Group Charter

In coordination with OSD, we developed a DoD PARC Charter that describes the mission, vision, organizational framework, participation, communication, resourcing, and goals and objectives for DoD's herpetofauna conservation program. This document was completed in February 2016 and can be downloaded at: <http://www.dodnaturalresources.net/PARC-Resources.html>.

### Outreach

Educating military and civilian personnel about the herpetofauna on the military bases where they work and live is vital to successful species conservation. This spring, we partnered with the Center for Environmental Management of Military Lands (CEMML) to develop educational pamphlets on the venomous snakes in Louisiana, Belize, Guatemala, and El Salvador. We also developed a snake presentation for child development centers located on Naval Base San Diego and Naval Station Mayport, and fact sheets on protected herp species on Navy installations in Europe. For copies of the products listed above, please contact Chris Petersen ([chris.petersen@navy.mil](mailto:chris.petersen@navy.mil)).

**Guide to Venomous Snakes on Military Installations in Louisiana**

Louisiana is home to a wide diversity of snakes, only five of which are venomous. Taking a few simple precautionary measures will greatly decrease the likelihood of an accident; in particular, pay attention to where you place your hands or feet, and try to avoid thickly vegetated areas. If you encounter a snake while in the field, do not try to capture or kill it; most accidents occur while the snake is being molested, and the majority of snakes encountered in the field are



Cottonmouth (picture by Chris Petersen)



Eastern Fence Lizard (picture by Seth Berry)



Green Treefrog (picture by Paul Block)

## Webinars

We have now hosted 25 webinars since 2013! In 2016, as part of the DoD Natural Resources Webinar Series, we conducted webinars on:

- *Decision Support for Conservation Assessment and Planning in a Landscape Context* (February). Patrick Crist
- *Herpetofauna Biodiversity on Air Force Lands* (March). Dr. Rob Lovich (DoD's National DoD PARC Technical Representative)
- *Monitoring Amphibians Using Environmental DNA* (April). Dr. Katherine Strickler (Washington State University)
- *Using HerpMapper* (June). Mike Pingleton (HerpMapper)
- *Eastern Massasauga Rattlesnake Restoration Case Study: If You Build It, Will They Come?* (July). Brandon Ruhe (Mid-Atlantic Center for Herpetology and Conservation [MACHAC])

Some of the recorded webinars can be viewed at:

<http://www.dodnaturalresources.net/PARC-Resources.html>

## Update of Army and Army National Guard Herpetofauna Species Lists



Northern two-lined Salamander (picture by Chris Petersen)

This year we updated herpetofauna species lists for approximately 150 Army and Army National Guard installations. The updated lists identify those species that are confirmed on a particular site as well as those with the potential to occur. A report summarizing the herpetofauna biodiversity on Army lands will be available early next year. To date, we have updated species lists for 303 military installations!



Rob Lovich and a Gila Monster (Picture by James Atkinson)



Newt Crossing (picture by Sarah Street)



Box Turtle (picture by Paul Block)

## Scope Template

We are currently working on a scope of work template for herpetofauna surveys/inventories on military lands. The template will save installation natural resource managers time by not having to write a scope of work from scratch, and will help ensure standardization of contract actions and data collection. The template, which will be available in early 2017, will feature a variety of survey techniques to choose from based on the specific goals of the survey.

## Herpetofauna Training Modules

We are currently developing seven online amphibian and reptile training courses for the Department of the Navy. One of the goals is to provide Navy natural resources personnel a general understanding of herpetofauna biology, ecology, survey techniques, management, and conservation practices. The first presentation (*Diversity of Amphibians and Reptiles in the United States*) is available to all DoD personnel now at the Environmental Compliance, Assessment, Training and Tracking System (ECATTS) website (<https://environmentaltraining.ecatts.com/>).



Ian Trefry counting egg masses at Great Pond Outdoor Adventure Center (Picture by Paul Block)

## Photo Website ([https://](https://dodparcphotolibrary.shutterstock.com/)

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We conducted an inventory of the 1500 pictures on our Photo Website In 2016. This inventory revealed that there are approximately 300 species represented on the website—that's 40 percent of the herpetofauna species in the U.S.! Our goal is to get pictures of *all* the amphibians and reptiles confirmed present on military lands. So, keep taking and submitting photos!



American Alligator (Picture by Paul Block)



Gopher Frog (picture by JD Wilson)

### DoD Legacy and ESTCP Program Support

We reviewed and provided technical expertise on herpetofauna-related proposals to the DoD Legacy Resource Management Program and the Environmental Security Technology Certification Program (ESTCP). Our technical inputs provide information that helps these programs prioritize project funding so DoD can get the largest return on its investments.



Rough Greensnake (picture by Seth Berry)

### DoD Natural Resources Program Support

This year we participated in the monthly DoD Natural Resources Conservation Committee meetings, providing regular updates about our herpetofauna activities. We also contributed four articles to the DoD Natural Resources Program's newsletter Natural Selections . These opportunities increase communication and partnerships among the DoD community; and, promote awareness, involvement, and coordination both within DoD and among national, regional, and local experts to achieve DoD mission and stewardship goals.

### Herpetofauna Library

In partnership with the National Military Fish and Wildlife Association–Herpetology Working Group, we compiled more than 250 herpetofauna reports, surveys, and inventories conducted on DoD lands. These reports are summarized in a searchable spreadsheet.



## HerpMapper



HerpMapper

We are pleased to announce that DoD has become a HerpMapper partner. HerpMapper (<http://www.herpmapper.org/about>) is a cooperative project, designed to gather and share information about reptile and amphibian observations across the planet. As a result of this new partnership, records entered into HerpMapper that occur within the property boundaries of military installations can be seen in real time by those with access. We will use HerpMapper records as a tool to keep our herpetofauna species lists up to date. In addition, photo vouchers entered into HerpMapper from military lands can also be used on our Photo Website. To date, approximately 1700 records have already been collected on military lands.

We encourage you to sign up online (<https://www.herpmapper.org>) and download this very cool mobile mapper to your smartphone (<http://www.herpmapper.org/mobile/mapper>). We are looking forward to seeing the very interesting herpetofauna biodiversity records you add to HerpMapper.

## Looking Ahead

We have two major projects planned for 2017. The first is to combine the updated species lists for the Army, Air Force, Navy and Marine Corps into a single database, then analyze the total herpetofauna biodiversity across the more than 300 DoD installations included.

The second major project we're planning will be to work with the Military Services to update their OCONUS herpetofauna species lists so that senior DoD leadership and installation biologists have current and accurate species information. The final product will be a peer reviewed, comprehensive list of confirmed and potential herpetofauna on OCONUS sites.

Thank you again for all your hard work this year. We look forward to your continued support in 2017!



Northern Watersnake (Picture by Paul Block)