DoD Partners in Amphibian and Reptile Conservation 2015 Annual Report

By Chris E. Petersen, DoD PARC National Representative and Robert E. Lovich, PhD., DoD PARC National Technical Representative



It has been an extremely productive year for the Department of Defense 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 group members and our DoD PARC Representatives (Janet Johnson, Paul Block, Ian Trefry, Julie Robbins, Dave McNaughton and Bryan Hummel). DoD PARC

leadership is thankful to 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 DoD PARC 2015 accomplishments follows. For copies of the products below, please contact Chris Petersen (<u>chris.petersen@navy.mil</u>) or visit the DoD Natural Resources website <u>http://www.dodnaturalresources.net/DoD-PARC.html</u>



<u>Strategic Plan for Amphibian and Reptile</u> <u>Conservation and Management on Department</u> <u>of Defense Lands</u>

DoD PARC worked with senior DoD leadership to finalize the *Strategic Plan for Amphibian and Reptile Conservation and Management on Department of Defense Lands*. This Plan provides a framework for accomplishing DoD-wide conservation objectives related to the protection of amphibians, reptiles, and their habitats while precluding mission conflicts arising from conservation-based regulatory restrictions. The Plan is currently available in digital format, and a limited number of hard copies will be produced for distribution in early 2016.

Integrated Natural Resources Management Plan Guidelines

Group members developed guidelines for updating and enhancing amphibians and reptiles sections of INRMPs. These guidelines are intended to support military readiness by ensuring healthy training, testing, and operational environments through the implementation of herpetofauna management and conservation goals as outlined in installation INRMPs. The guidelines will also promote greater inclusion of herpetofauna in INRMPs and, ultimately, herpetofauna-specific planning and management on military lands.

Herpetofauna Library

In partnership with the National Military Fish and Wildlife Association–Herpetology Working Group, we compiled more than 200 herpetofauna reports, surveys, and inventories conducted on DoD lands. These reports are summarized in a spreadsheet that can be found by searching for DoD Service, installation name, report title or key word. This project compiled existing data and documents into a single source so users can more easily find information.



DoD PARC Group Charter

In coordination with OSD, DoD PARC's leadership developed a Charter that describes our group's mission, vision, organizational structure, membership, communication, resourcing, goals and objectives.

DoD PARC Webinar Series

Below is a list of informational webinars conducted in 2015. As part of the broader DoD Natural Resources series, these webinars provide an opportunity for group members to learn and share ideas on herpetofauna research, management, and conservation on DoD lands.

- January 2015 *Herping in Humvees: Amphibian and Reptile Monitoring at Fort Indiantown Gap.* David McNaughton (Assistant Wildlife Program Manager at Fort Indiantown Gap National Guard Training Center).
- March 2015 *Ecological Strategies Predict Associations Between Aquatic and Genetic Connectivity for Dryland Amphibians.* Julian Olden (University of Washington).
- April 2015 The Great Plains Reptile Monitoring Project: Moving towards landscape-scale monitoring to guide conservation. Danny Martin (Colorado State University).

- May 2015 *Population and Habitat Utilization of the Puerto Rican Boa* (Chilabothrus inornatus) *in US Army Fort Buchanan*. Eneilis S Mulero Oliveras (University of Puerto Rico).
- October 2015 Detector Dog Surveys for Eastern Indigo Snakes (Drymarchon couperi) at three Navy Installations in north Florida. Dirk Stevenson (Orianne Society).
- November 2015 *Using the Endangered Species Act to Protect Rare Amphibians and Reptiles.* Jenny Loda (Center for Biological Diversity).
- December 2015 *Effectiveness of Mid-story and Duff Removal to Restore Endangered Salamander Breeding Habitat.* Thomas Gorman (Virginia Tech).

Publications

To educate others about our group and its mission, DoD PARC produced the following publications this year:

- *Currents Magazine –* Spring 2015
 Cuban Boa Helps to Maintain Ecosystem Balance at Guantánamo Bay
- DoD PARC Factsheet updated factsheet
- EcoHealth Draft manuscript Prevalence and Seasonality of the Amphibian Chytrid Fungus Along Widely Separated Longitudes Across the United States
- Fish and Wildlife News (FAWN) Newsletter September 2015
- *Natural Selections* Winter, Spring, Summer and Fall issues 2015 What's Hoppin' in DoD PARC?



Update of Herpetofauna Species Lists

During 2015, group members updated herpetofauna species lists for 80 Air Force installations in addition to maintaining species lists for approximately 70 Navy and Marine Corps sites. The Air Force lists were peer-reviewed and contained species-specific occurrence data (both confirmed and potential). These data were compiled into a report summarizing the biodiversity of amphibians and reptiles on Air Force lands.

<u>The DoD PARC Photo Website</u> (http://dodparcphotolibrary.shutterfly.com)

DoD PARC members added nearly 350 pictures to the Photo Website this year, bringing the total to over 1,350 amphibian and reptile photographs. Photographs were

used by DoD biologists and environmental planners to enhance INRMPs, reports, presentations and other products. In fact, all the photographs in the *Strategic Plan for*

Amphibian and Reptile Conservation and Management on Department of Defense Lands came from the Photo Website.



Outreach and Education

Using pictures from the DoD PARC Photo Website, group members produced educational snake pamphlets for Naval Air Station Key West, Marine Corps Logistic Base Albany, Fort Stewart, Kansas Training Range, Florence Military Reservation, Naval Support Facility Indian Head, and many more. In addition, group members produced two posters: *Venomous Snakes on United States Air Force Installations* and *Amphibians and Reptiles of Naval Magazine Indian Island*. These products are helping to educate military and civilian personnel about the herpetofauna on the military bases where they work and live.

Review of DoD Legacy Proposals

DoD PARC reviewed and ranked herpetofauna-related preand full proposals for the Legacy Resource Management Program. Evaluation criteria were fully coordinated, and developed by subject matter experts. DoD PARC forwarded the results to OSD and the DoD Proposal Review Committee for consideration.

Snakebite Prevention in the AFRICOM Theater Protocol

DoD PARC assisted with reviewing and updating a snakebite prevention protocol for U.S. Africa Command (USAFRICOM). This document describes protective measures to avoid being bitten by snakes, clinical features of snakebites, and antivenin snakebite treatments. Experts in the fields of medicine and herpetology from Cornell and Stanford universities peer reviewed the document.

Looking Ahead



We have two major projects planned for 2016. The first is to update the herpetofauna species list for about 140 Army installations within the continental U.S. These data will be combined with the updated species lists for the other Military Services to create a comprehensive DoD Herpetofauna Database.

The second large project upcoming in 2016 will be the development of an amphibian

and reptile online training course to provide DoD natural resources personnel a general understanding of herpetofauna biology, ecology, survey techniques, and management and conservation practices. Topics will be presented in chapters, and will include information presented both in text and video. Topics will include amphibian and reptile diseases, snake bite prevention and handling techniques, and use of standard survey techniques such as drift fence installation, radio-telemetry and automated frog call recorders.

Thank you again for all your hard work this year. We look forward to your continued support in 2016!

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