

# DoD Partners in Amphibian and Reptile Conservation 2020 Annual Report



California Striped Racer; Ivan Parr



Arizona Treefrog; Ross Hackbarth



Yellow-bellied Slider (bottom) and River Cooter (top); John Sealy



Ringed Salamander; Jeff Briggler

On behalf of Department of Defense Partners in Amphibian and Reptile Conservation (DoD PARC) network leadership, we wish you a Happy New Year! 2020 was a challenging year for all of us, given the COVID-19 pandemic's impact on nearly every aspect of our personal and professional lives. The DoD PARC Network—like all of you—has had to adapt, modify, and overcome in the face of this adversity, in order to continue to support the mission, our members, and the crucial work we do to manage and conserve amphibians and reptiles on military lands. A summary of our most significant accomplishments for 2020 follows, as well as short biographies of our DoD PARC representatives, who work enthusiastically to assist you. We are hopeful for a happy, healthier new year and wish you the very best in 2021.

# Mission Statement

In support of military readiness, DoD PARC strives to sustain amphibian and reptile populations and habitats through proactive environmental stewardship, conservation, outreach, and partnerships.

# Commander's Guide

Released in August 2020, the *Commander's Guide to the Department of Defense Partners in Amphibian and Reptile Conservation Network* describes (a) why DoD should care about amphibians and reptiles, (b) what DoD resource managers are doing to manage and conserve these animals, and (c) how these activities support and enhance military readiness. The guide also highlighted the successes of our network over the last 10 years, how DoD PARC supports the military mission, and how military commanders can support herpetofaunal management on their installations. The guide can be downloaded at <https://www.denix.osd.mil/dodparc/parc-resources/> or request hard copies from Chris Petersen (chris.petersen@navy.mil) or Rob Lovich (robert.lovich@navy.mil).



## Commander's Guide to the Department of Defense Partners in Amphibian and Reptile Conservation Network

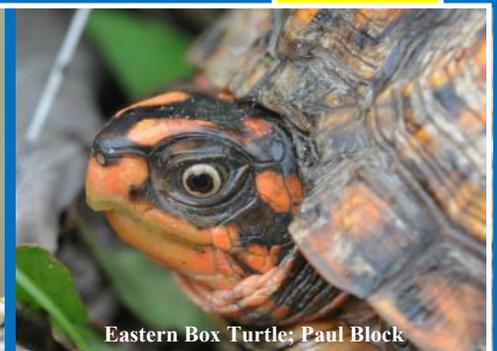
What Every Commander Should Know About Amphibians and Reptiles on Military Lands



Spotted Salamander; Charlie Eichelberger



Common Chameleon; Paul Block



Eastern Box Turtle; Paul Block

# Venomous Snake ID Cards

To help military personnel and natural resources managers identify venomous snakes while in the field, DoD PARC developed venomous snake ID cards for the 12 most common species of venomous snakes on military lands. The 4" x 2" cards are printed on waterproof plastic, and the set is held together with a loose-leaf ring. These double-sided cards contain multiple pictures of each species, information about their colors and patterns, and a map of their range. Over 700 sets of ID cards have been printed and distributed. All ID cards are available for download at [https://www.denix.osd.mil/dodparc/parc-resources/materials-for-installation-personnel/venomous-snake-identification-cards/Venomous%20Snake%20Cards\\_final-1.28.20\\_508.pdf](https://www.denix.osd.mil/dodparc/parc-resources/materials-for-installation-personnel/venomous-snake-identification-cards/Venomous%20Snake%20Cards_final-1.28.20_508.pdf) or hard copies can be requested from Chris Petersen ([chris.petersen@navy.mil](mailto:chris.petersen@navy.mil)) or Rob Lovich ([robert.lovich@navy.mil](mailto:robert.lovich@navy.mil)).



# Podcasts

In July 2020, we released our second podcast on the YouTube channel "DoD PARC Podcast." This edition, titled "*Venomous Snakes on DoD Lands*," discusses which venomous snake species are most common on military lands in the U.S., and which specific installations have the most venomous species. Other topics include, snake safety protocols, how to keep snakes away from military training and housing areas, and what to do if bitten by a venomous snake. Check out the podcast, which has received over 275 views, at <https://www.youtube.com/watch?v=Z6SYdZea7wI&feature=youtu.be>.



Southwestern Speckled Rattlesnake; John Himes



Snake Sign; Chris Petersen



Harlequin Coralsnake; Matt Cage

# Best Management Practices Documents

DoD PARC and the U.S. Fish and Wildlife Service jointly developed best management practices documents for the Northern Red-bellied Cooter (*Pseudemys rubriventris*), Eastern Diamond-backed Rattlesnake (*Crotalus adamanteus*), and Western Pond Turtles (*Actinemys marmorata* and *Actinemys pallida*) in 2020. These at-risk species are being reviewed/considered for potential listing under the Endangered Species Act (ESA), and are confirmed present on dozens of military installations. The management practices described in these documents are intended to serve as guidelines that DoD resource managers can use to plan, prioritize, and implement conservation and management actions. The execution of these practices and subsequent benefits to these species may decrease the likelihood of future listings under the ESA, and in turn, may lessen unwanted decreases in military training capacities. These final documents can be downloaded from the DoD PARC website, <https://www.denix.osd.mil/dodparc/parc-resources/>, along with the previously developed best management practices for the Spotted Turtle (*Clemmys guttata*), Wood Turtle (*Glyptemys insculpta*), and Gopher Frog (*Lithobates capito*).

In 2021, DoD PARC will develop best management practices for the Gopher Tortoise (*Gopherus polyphemus*), Alligator Snapping Turtle (*Macrochelys temminckii*), Blanding's Turtle (*Emydoidea blandingii*), Western Spadefoot (*Spea hammondi*), and Florida Pinesnake (*Pituophis melanoleucus mugitus*).



Eastern-Diamond-backed Rattlesnake; Marty Korenek



Red-bellied Cooter; Paul Block



Jeffrey E. Lovich, U.S. Geological Survey

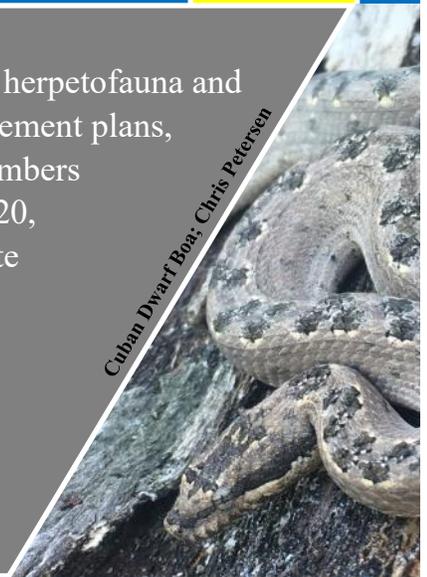
## Photo Website

Our [photographic website](#) serves as a platform to share pictures of herpetofauna and their habitats for use in presentations, natural resource management plans, posters, pamphlets, fact sheets, and more. Network members added several hundred pictures to the website in 2020, bringing the total number of pictures on the website to nearly 3,550. Our goal is to feature pictures of every amphibian and reptile species confirmed present on military lands.

For access to the website, email [paul.block@navy.mil](mailto:paul.block@navy.mil).



Cuban Green Anole; Peter Tolson



Cuban Dwarf Boa; Chris Petersen

## Photo Contest

DoD PARC sponsored our very first snake photo contest on World Snake Day (July 16, 2020) to help keep our members in touch with our network and the species they love. The winning photo of a Western Rattlesnake (*Crotalus oreganus*) was taken by Samuel Johnson on the Orchard Training Area, an Idaho National Guard site. Thanks to everyone who participated in the contest.

### Winning Photo



Western Rattlesnake; Samuel Johnson

## Bioacoustic Recorders

To help DoD natural resource managers document frog and toad species presence on their installations, we loaned bioacoustics loggers (sometimes called “frog loggers”) to five military sites in 2020. Over 500 hours of data were recorded, generally from spring to late summer. DoD PARC analyzed these data (at no cost) and provided the results to the participating installations for incorporation into their respective Integrated Natural Resources Management Plans (INRMPs). If you would like to borrow a frog logger in 2021, please contact Chris Petersen ([chris.petersen@navy.mil](mailto:chris.petersen@navy.mil)).



Wildlife Acoustics SM4 Logger; Chris Petersen

## Annual In-person Strategic Planning Meeting

Out of an abundance of caution due to the COVID-19 pandemic, DoD PARC decided not to host an in-person annual strategic planning meeting in 2020. Instead, our meeting was conducted virtually on August 19, 2020. If all goes well, we are planning to host an in-person meeting at Fort Huachuca, AZ, in the summer of 2021.



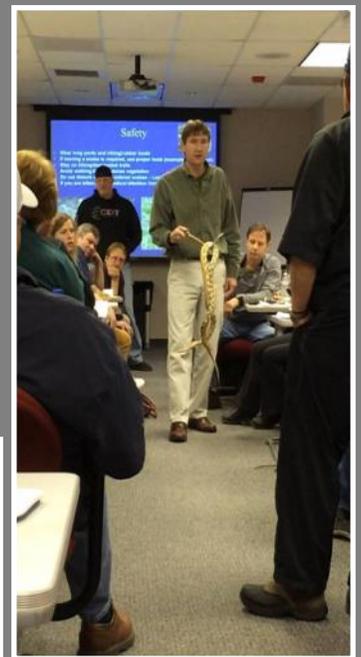
Western Milksnake; Ian Trefry

# Upcoming Projects

**2021 Snake Fungal Disease Survey:** Building on the successes of the 2018 DoD PARC Snake Fungal Disease (SFD) survey and resulting **publication**, DoD PARC is planning to conduct additional sampling for this disease on military sites in 2021. Using the same approach as the first survey, we will be using "citizen science" methodology for the 2021 data collection. Therefore, we will be asking military natural resource managers and other interested parties to volunteer to collect swabs from snakes on both CONUS and OCONUS installations, and send them to our cooperators at the University of Illinois for analyses. All of the supplies needed for collecting field data will be provided at no charge. A training video on how to collect data in the field is available at (<https://www.youtube.com/watch?v=PxuPCMppeIY&feature=youtu.be>). Field samples will be analyzed and the results provided to you at no cost. To date, we have had approximately 50 military sites request sampling kits for the 2021 survey. If you are interested in participating in the study, please contact Chris Petersen ([chris.petersen@navy.mil](mailto:chris.petersen@navy.mil)) and Rob Lovich ([robert.lovich@navy.mil](mailto:robert.lovich@navy.mil)).

**Spotted Turtle Survey:** The Spotted Turtle is one of DoD's priority at-risk species. Despite their large range, they have declined across the eastern U.S. over the past decade. In cooperation with the Smithsonian Institution, DoD PARC will conduct a status assessment of Spotted Turtles on nine military sites in 2021. Using a standardized monitoring protocol, we aim to determine the distribution and abundance of this species on DoD installations, as well as to evaluate habitat management opportunities. Up-to-date knowledge of Spotted Turtles on installations will allow military natural resource personnel to make informed recommendations for improving INRMPs, while simultaneously promoting mission readiness by supporting Spotted Turtle conservation and habitat management.

**Snake Safety Training:** DoD PARC is working out the final details to provide interested parties with the opportunity to take in-person snake safety trainings in 2021. These one-day training classes (tuition required) will cover general snake ecology, snake identification, and snake handling using snake tongs and hooks. Live snakes, both venomous and nonvenomous, will be used for the training. We are planning to host both an east coast and a west coast training event. More information will be released as it becomes available in early 2021 via the DoD PARC listserv.



## Short Biographies of DoD PARC Representatives



**Name:** Chris Petersen  
**DoD PARC Position:** National Representative  
**Job Title:** Senior Natural Resources Specialist  
**DoD Service:** Navy (Naval Facilities Engineering Systems Command Atlantic)  
**Address:** 6506 Hampton Blvd., Norfolk, Virginia 23508  
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**Herpetofauna Expertise:** radio telemetry; pitviper ecology; development of scopes of work/government cost estimates for herpetofauna surveys; inventory and monitoring; educational/outreach materials; acoustic loggers.



**Name:** Rob Lovich  
**DoD PARC Position:** National Technical Representative  
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**Herpetofauna Expertise:** inventory and monitoring design; natural history, evolution, and molecular systematics of herpetofauna; pathogen/disease monitoring.



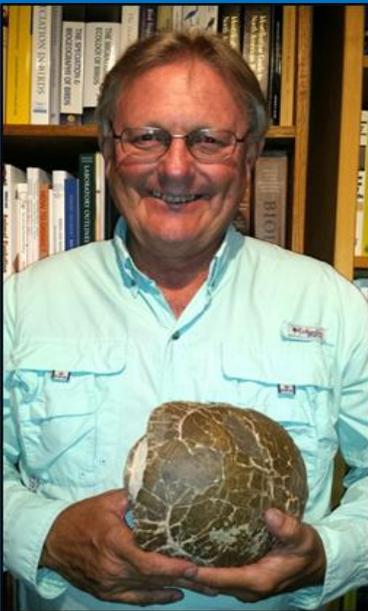
**Name:** Chris Frauenhofer  
**DoD PARC Position:** DoD PARC Representative  
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**Herpetofauna Expertise:** inventory and monitoring, telemetry, rattlesnakes, wetland/riparian habitat and herpetofauna, great basin & mojave desert habitat and herpetofauna.



**Name:** Seth Berry  
**DoD PARC Position:** DoD PARC Representative  
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**Herpetofauna Expertise:** wildlife photography; field surveys and monitoring; development of educational outreach materials; habitat management/creation.



**Name:** Paul Block  
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**Herpetofauna Expertise:** wildlife photography; field surveys and monitoring; scope of work and government cost estimate development for herpetofauna surveys; development of educational outreach materials.



**Name:** Jim Castle  
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**Herpetofauna Expertise:** modeling and research design of herpetofauna surveys; scope of work and government cost estimate development for herpetofauna surveys; field surveys and monitoring; education and outreach; northwest herpetofauna systematics and technical reviews.



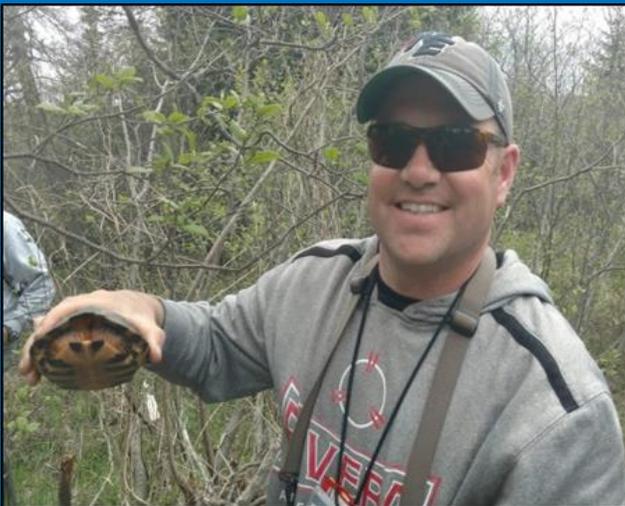
**Name:** John Himes  
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**Herpetofauna Expertise:** life history and ecology; field surveys and monitoring; radio telemetry; education and outreach; habitat restoration and management; taxonomy; permitting and other regulations; study design development and editorial reviews.



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**Name:** Dave McNaughton  
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**Name:** Ian Trefry  
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*Thank you again for all your hard work this year. We look forward to your continued support in 2021!*

