



“Putting the ‘P’ Back in PARC: Partnerships Allow for Real Collaborations”

2020 Annual Meeting

February 27 – March 1

Camp McDowell

Nauvoo, AL

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SE PARC Meetings Code of Conduct

SE PARC is committed to providing a safe, productive and welcoming environment for all meeting participants. All participants including, but not limited to, attendees, speakers, volunteers, exhibitors, PARC staff, service providers and others are expected to abide by this SE PARC Meetings Code of Conduct. In generating this document to guide personal responsibility at our meetings we have relied heavily on the code of conduct used by the Ecological Society of America, based on Favaro et al. 2016.

Expected Behavior

- Treat all participants with respect and consideration, valuing a diversity of views and opinions.
- Be considerate, respectful, and collaborative.
- Communicate openly with respect for others, critiquing ideas rather than individuals.
- Avoid personal attacks directed toward others.
- Be mindful of your surroundings and of your fellow participants. Alert SE PARC Co-Chairs if you notice a dangerous situation or someone in distress.
- Respect the rules, policies, and property of the meeting venue.
- Adhere to State and Federal laws, including wildlife regulations.
- Using decontaminated equipment for outings and using proper decontamination protocols thereafter are strongly encouraged.

Unacceptable Behavior

- Harassment, intimidation or discrimination in any form will not be tolerated.
- Physical or verbal abuse.
- Disruption of talks at oral or poster sessions.
- Examples of unacceptable behavior include, but are not limited to, verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, inappropriate use of nudity and/or sexual images in public spaces or in presentations, threatening or stalking.

Consequences

- Anyone requested to stop unacceptable behavior is expected to comply immediately.
- SE PARC Co-chairs or security may take any action deemed necessary and appropriate, including immediate removal from the meeting without warning or refund.
- SE PARC reserves the right to prohibit attendance at any future meeting.

Reporting Unacceptable Behavior

- If you are the subject of unacceptable behavior or have witnessed any such behavior, please immediately notify a SE PARC Co-Chair.
- Notification should be done by contacting a SE PARC Co-chair in person or you may email your concern to separc@separc.org
- Anyone experiencing or witnessing behavior that constitutes an immediate or serious threat to public safety is advised to contact venue security and/or local police.

Favaro et al. 2016. Your science conference should have a code of conduct. Front. Mar. Sci. 3:103

PREVIEW: MEETING AGENDA, SE PARC 2020

THURSDAY, FEBRUARY 27

- 8:00 am Longleaf ARC project workshop (8 hours; CLOSED)
- 12:00 pm Registration begins (Carpenter Hall; Registration will continue throughout the evening until 6:00pm)
- 5:00 pm Welcome, National Updates
PARC Updates, *Michelle Christman, US Fish & Wildlife Service*
ARC Updates, *JJ Apodaca, ARC/Tangled Bank Conservation*
Strengthening PARC through Diversity, Equity, and Inclusion, *Kirsten Hecht, University of Florida*
- 6:00 pm Poster Session 1 and Social (hors d'oeuvres & beverages provided at 6:30)

Silent Auction Items Sign-In and Photo Contest Setup!

**denotes presentation considered for student/young professional award*

FRIDAY, FEBRUARY 28

- 8:00 am Breakfast (provided by Camp McDowell), Registration continues
- 8:45 am Welcome, SE PARC Co-chairs, *Becca Cozad and Vanessa Terrell*

Morning Session

- 9:00 am Tribute to Joseph C. Mitchell, *Kurt Buhlmann*
- 9:20 am Keynote Address, *Priya Nanjappa*
- 10:20 am BREAK (10 min, snacks provided by SE PARC)

Task Team / Breakout Session 1

- 10:30 am Task Teams & Discussion Groups meet:**
- | | |
|------------------------------|------------------------------|
| Diseases/Pathogens/Parasites | Hellbender Working Group |
| Reintroduction/Translocation | Gopher/Crawfish Frog Complex |
| Education and Outreach | Roads Task Force |
- 12:00 pm Lunch (provided by Camp McDowell)

SESSION 1 – Citizen Science Symposium

- 1:00 pm Urban Turtle Project: Giving citizen scientists opportunities to participate in turtle conservation, *Andrew Coleman, Talladega College*
- 1:15 pm Combining environmental restoration with community science to restore turtle populations, *Willem Roosenburg, Ohio University*

- 1:30 pm Harnessing citizen science to address data deficiency in understudied herpetofauna on private lands: Lessons from the mountain chorus frog, *Walter Smith, The University of Virginia's College at Wise*
- 1:45 pm Using molecular tools to investigate the non-native distribution of Indian geckos in the southeastern US, *Christopher Pellecchia, The University of Southern Mississippi*
- 1:50 pm BREAK (15 min)

SESSION 2 – Speed Talks

- 2:05 pm New data fail to resolve the status of the Bay Springs salamander, *Todd Pierson, Clemson University*
- 2:10 pm Two for one? Phylogenomic and population genetic analyses of the green salamander (*Aneides aeneus*) reveals two lineages in Tennessee, *Matthew Niemiller, University of Alabama - Huntsville*
- 2:15 pm Geological and anthropogenic constraints on the fine-scale distribution of a plethodontid salamander, *Bryce Wade*, University of Tennessee – Knoxville*
- 2:20 pm Adding mechanism to a distribution model changes predictions of climate vulnerability for a priority amphibian, *Jillian Newman, North Carolina Wildlife Resource Commission*
- 2:25 pm Snake entanglement in erosion control blankets: Causes, consequences, and conservation, *Christopher Schalk, Stephen F. Austin State University*
- 2:30 pm High school herpetology: using phenomena-driven inquiry to instill a conservation ethic, *Paul-Erik Bakland, East Hamilton School*
- 2:35 pm A decade of SE PARC graphics highlights the profound connection between art and science, *Mark Mandica, Amphibian Foundation*
- 2:40 pm Questions for speed talk presenters

2:50 pm **General Business Meeting, Election for new Junior Co-chair and other positions**

3:20 pm BREAK (20 min, snacks provided by SE PARC)

SESSION 3 – General Talks

- 3:40 pm Amphibians in a changing world: Assessing the effects of warming and drying on amphibian larvae in an artificial pond experiment, *Elizabeth Shadle*, Virginia Tech*
- 3:55 pm Effect of dusky gopher frog developmental stage on mortality associated with exposure to the protist parasite *Dermomyxoides* sp., *Jaime Smith*, University of Southern Mississippi*
- 4:10 pm Increases in known host species and geographic range in an invasive pentastome parasite are an emerging conservation threat to North American reptiles and amphibians, *Terence Farrell, Stetson University*

- 4:25 pm Ground cover and native ant predation influence survival of metamorphic amphibian species of concern, *Angela Burrow**, *University of Georgia*
- 4:40 pm Evolutionary history of the green salamander complex and the conservation status of a new micro endemic species, *JJ Apodaca*, *ARC/Tangled Bank Conservation*

5:15 pm Mentor Program Meet-up

6:00 pm Dinner (provided by Camp McDowell)

7:00 pm Poster Session 2 and Social

SATURDAY, FEBRUARY 29

- 8:00 am Breakfast (provided by Camp McDowell), Registration continues
- 8:55 am Welcome, SE PARC Co-chairs, *Becca Cozad and Vanessa Terrell*
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SESSION 4 – Private Lands Symposium

- 9:00 am Partnering with the Natural Resources Conservation Service to restore and conserve wildlife habitat on private agricultural lands, *Katherine Diersen*, *Defenders of Wildlife*
- 9:15 am Hellbender conservation within private lands in Tennessee, North Carolina, and Virginia - Lessons and challenges, *Jeronimo da Silva*, *Conservation Management Institute*
- 9:30 am Challenges of management on land trust of north Alabama properties, *Andrew Cantrell*, *Alabama A&M University*
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SESSION 5 – Speed Talks

- 9:45 am Assessing the influence of stress and behavior on susceptibility to and recover from snake fungal disease in the timber rattlesnake, *John Hewlett*, *Murray State University*
- 9:50 am Testing the Febrile response of snakes inoculated with *Ophidiomyces ophiodiicola*, the causative agent of snake fungal disease, *Cody Godwin**, *Tennessee Technological University*
- 9:55 am Understanding the implications of Perkinsea infection in Cuban treefrogs, *Matt Atkinson**, *University of Central Florida*
- 10:00 am Characterization of the bacterial cutaneous microbiome of eastern hellbenders before and after translocation, *Emily Nolan**, *Tennessee State University*
- 10:05 am Assessment of turtle and leech parasite-host assemblage variation in middle TN wetlands across a disturbance gradient, *Laura Horton*, *Tennessee State University*
- 10:10 am Differences among six southeastern US aquatic snake species in their metabolic responses to increased temperatures, *David Haskins**, *University of Georgia*
- 10:15 am Questions for speed talk presenters

10:20 am BREAK (10 min, snacks provided by SE PARC)

Task Team / Breakout Session 2

10:30 am Task Teams & Discussion Groups meet:

Diseases/Pathogens/Parasites	Hellbender Working Group
Reintroduction/Translocation	Gopher/Crawfish Frog Complex
Education and Outreach	Roads Task Force
Species Delimitation and Systematics	

12:00 pm Lunch (provided by Camp McDowell)

SESSION 6 – Population Augmentation Symposium

1:00 pm Omaha's Henry Doorly Zoo and Aquarium In-Situ Amphibian Conservation Program and Current SE US Projects, *Jacob Hutton, Omaha's Henry Doorly Zoo and Aquarium*

1:15 pm American Turtles Safe: Preserving American turtles and building a path from confiscation to conservation, *Dave Collins, Tennessee Aquarium*

1:30 pm Characterizing stress in head-started gopher tortoises reared for an extended duration, *Amelia Russell*, University of Georgia*

1:45 pm Assessing short-term efficacy of translocation as a conservation strategy for wild eastern hellbenders, *Brad Nissen*, Tennessee State University*

SESSION 7 – Speed Talks

2:00 pm Piedmont pinesnakes: uncovering extant populations with insight into habitat selection, *Bryan Hudson, Clemson University*

2:05 pm Vertebrate use of gopher tortoise burrows and stump holes in the longleaf pine ecosystem, *Chris Murphy*, University of Georgia*

2:10 pm Investigating changes in population size of Virginia bog turtles, *Michael Holden*, Virginia Tech*

2:15 pm Hydrological alterations as a potential driver of freshwater turtle community assemblages in Mississippi, *Lucas Haralson*, University of Southern Mississippi*

2:20 pm Movement and behavior of translocated adult alligator snapping turtles in Northwest FL, *Rebecca Cozad, Nokuse Plantation*

2:25 pm In-situ detection of hellbenders occupying artificial shelters using submersible PIT tag scanning technology, *John Connock*, Murray State University*

2:30 pm Questions for speed talk presenters

2:40 pm BREAK (15 min, snacks provided by SE PARC)

SESSION 8 - General Talks

- 2:55 pm Practical Perspectives on Partnerships, *Kelly Jones, Virginia Tech*
- 3:10 pm Collaborative Conservation Planning in the Northeastern US: Regional Conservation Needs Grant Program, *John Kloepper, Virginia Department of Game and Inland Fisheries*
- 3:25 pm Trophic and community structure of snake assemblages in shortleaf pine forests with different management regimes, *Connor Adams*, Stephen F. Austin State University*
- 3:40 pm The conservation of the eastern diamondback rattlesnake in southwest Florida, *Matthew Metcalf*, Florida Gulf Coast University*
- 3:55 pm Exploring multilevel habitat selection by flattened musk turtles to inform conservation efforts for the SE's most imperiled turtle species, *Joe Jenkins*, Auburn University*
- 4:10 pm BREAK (20 min)

WORKSHOPS: *Two options (1.5 hrs)*

- 4:30 pm **Turning Sound into Discovery: Using Wildlife Audio Recorders as a Valuable Research Tool**, *Ali Donargo*

Sound analysis is increasingly becoming a valuable tool for biologists, environmental scientists and managers to survey and monitor wildlife populations. It is currently used to aid in resource management, habitat health assessment, regulatory compliance goals, animal behavior studies and even documenting the effects of climate change. Recording sound with a bioacoustics recorder is a reliable way to meet these project objectives. Bioacoustics is a non-invasive, cost-effective and an unbiased method for studying animal presence. Biologists all over the world have made the Song Meter platform the standard for bioacoustics recording with over 50,000 recorders deployed in 90 countries. This hands-on workshop will teach participants the features and set up of the Song Meter SM4 and Song Meter Mini recorders to monitor for birds, frogs, and other wildlife. Several case studies will also be presented and discussed. Time permitting, we will also review the free and paid versions of our Kaleidoscope software for efficient analysis of acoustic data.

Avenza Mapping, *John Maerz and Craig Marshall*

GeoPDFs are geospatially referenced pdfs that allow the user use other GPS enabled programs and devices. GeoPDFs are particularly useful for field studies because they can be stored and used on any GPS capable smartphone or tablet without access to cellular service. Users can purchase or create multiple geoPDFs of maps or satellite images of field sites and import or create layers to facilitate transect sampling, radio-telemetry, or measuring areas or features.

This is a two-part workshop. The first part will give an introduction to the use of geoPDFs using Avenza for iOS or Android. This will include a demonstration of how you can create layers in other applications such as Google Earth Pro and import those layers into Avenza. For those interested, the second part will guide participants through creating geoPDFs in ArcGIS and QGIS. QGIS is a free open source GIS application that works on Mac OS X, Windows, or Linux systems. By the end of the workshop, participants will be able to create geoPDFs, import geoPDFs into Avenza, import additional layers onto to their maps in Avenza, and create and export layers from Avenza.

For part 1, participants will need a smartphone with Avenza installed. Avenza has a free version that will work for the workshop. Information on the Avenza Pro version and academic discounts will be presented. Participants may also want to have a laptop with Google Earth Pro installed. For part 2, participants will need a laptop with an external power source and QGIS or ArcGIS installed. Additional materials will be provided at the workshop.

6:00 pm Dinner (provided by Camp McDowell)

7:00 pm Steering Committee and Officers meeting (CLOSED)
Social and Silent Auction, Photo Contest

SUNDAY, March 1:

8:00 am Breakfast (provided by Camp McDowell)

9:00 am Field trips depart (actual trip locations and times TBD)