



# Warnell Graduate Student Symposium



## Program Booklet

February 12<sup>th</sup> – February 14<sup>th</sup> 2020



## **Program at a Glance**

### **Wednesday, February 12<sup>th</sup>**

Poster Exhibition (Wednesday 1:00pm – Friday 1:00pm, Building 4 Atrium)  
Poster Session & Reception (5:00pm – 7:00pm, Building 4 Atrium)

### **Thursday, February 13<sup>th</sup>**

Bake Sale & Silent Auction (8:00am – 3:00pm, Building 2 Lobby)  
Oral Presentations (8:30am – 2:15pm, Keadle Conference Room)  
Keynote Presentation – Dr. Lincoln Larson (3:30pm – 4:30pm, Room 1-304)

### **Friday, February 14<sup>th</sup>**

Bake Sale & Silent Auction (8:00am – 3:00pm, Building 2 Lobby)  
Oral Presentations (8:30am – 3:05pm, Keadle Conference Room)  
Awards Ceremony and Finale (5:00pm – 9:00pm, Flinchum's Phoenix)

## **2020 Symposium Committees:**

### **Awards and Judging:**

Chair: Holly Munro  
Omid Karami  
Corrie Navis

### **Poster Session:**

Chair: Holly Munro  
Omid Karami  
Srijana Baral

### **Finale:**

Chair: Anil Koirala  
Omid Karami  
Luke Wilson  
Monica Harmon

### **Silent Auction:**

Chair: Lauren Carroll  
Heather Gaya  
Ben Thesing

### **Bake Sale:**

Chair: Heather Gaya

### **Program and Abstracts:**

Chair: Ben Thesing  
Danielle Bradke  
David Lee Haskins

### **Seminar and Symposium Speaker:**

Chair: Heather Levy

## **2019 – 2020 Warnell Graduate Student Association Officers:**

**President:** Heather Gaya  
**Vice President:** Annie Paulukonis  
**Secretary:** Melissa Paduani  
**Treasurer:** Ben Thesing

# **Warnell Graduate Student Symposium**

## **Keynote Speaker**

Lincoln Larson, PhD

Assistant Professor of Human Dimensions

North Carolina State University

February 13<sup>th</sup>, 2020 at 3:30pm in Warnell School of Forestry and Natural Resources room 1-304

**“Understanding and enhancing public support for wildlife conservation”**



Lincoln is an Assistant Professor of Human Dimensions in the Department of Parks, Recreation and Tourism Management within the College of Natural Resources at NC State University. He joined the faculty at NC State in January 2017 after 2 years as a faculty member in the PRTM Department at Clemson University, and he continues to serve the Clemson community as a scholar associated with the Clemson Institute for Parks. Before that, Lincoln worked as a research associate in the Human Dimensions Research Unit of the Department of Natural Resources at Cornell University, where he orchestrated and contributed to a variety of projects focused on human dimensions of natural resource management. Lincoln has a B.S. in Biology from Duke University and an M.S. and Ph.D. in Forest Resources (with a natural resources recreation and tourism emphasis) from the Warnell School of Forestry & Natural Resources at the University of Georgia.



**UNIVERSITY OF  
GEORGIA**

Warnell School of Forestry  
& Natural Resources

## Wednesday, February 12<sup>th</sup>

### Poster Session and Reception

Building 4 Atrium

5:00 – 7:00pm

*Light refreshments will be provided.*

- 1 Justin Beall      An ecotourist by whose standards? Developing and testing the ecotourist identification scale
- 2 Ing-Gin Chen      Subcellular localization and functional characterization of an unusual phylloquinone biosynthetic pathway in holoparasitic broomrapes
- 3 Ryan Grunert      Assessment of larvicidal control methods on cyclopoid copepods for the global Guinea Worm Eradication Program
- 4 Colton Meinecke      Investigating emerging needle disease in commercially managed loblolly pine
- 5 Holly Munro      Using satellite-derived environmental variables to predict southern pine beetle numbers
- 6 Melissa Paduani      The Ripple Effect Film Project: Youth Making Waves in Athens-Clarke County
- 7 Kentrell Richardson      Small mammals in the Maritime Live Oak forest



## Thursday, February 13<sup>th</sup>

### Bake Sale and Silent Auction

Building 2 Lobby  
8:00am – 3:00pm

### Oral Presentations

Keadle Conference Room  
8:30am – 2:15pm

#### Forestry 1

Moderator: Colton Meinecke (8:30 - 9:15), Laura Ramirez (9:15 - 10:00)

- |      |                 |   |
|------|-----------------|---|
| 8:30 | Rocio Gutierrez | Writing about and demonstrating “Sustainability” and “Sustainable Forest Management” in forest plans: A survey analysis         |
| 8:45 | Hosne Ara Akter | Economics of intercropping loblolly pine and oil-seed crops for manufacturing bio-jet fuel in the southern United States        |
| 9:00 | Shingo Obata    | An estimation of growing stock volumes of forest stands in Georgia using all available time series Landsat imagery and FIA data |
| 9:15 | Mauricio Zapata | Modeling basal area growth after thinning – evaluating an alternative approach  |
| 9:30 | Sameen Raut     | An imaging approach to accurately quantify compression wood and wood to bark volume ratios in planted longleaf pines            |
| 9:45 | BREAK           |   |

#### Wildlife Management 1

Moderator: Allison Sheeks (10:30 - 11:15), David Haskins (11:15 - 12:15)

- |       |                   |  |
|-------|-------------------|--|
| 10:30 | Cody Tisdale      | Lead contamination differences between lead and copper coated lead shot  |
| 10:45 | Sarah Webster red | Microclimate influences on selection of agricultural habitats by wolves ( <i>Canis rufus</i> ) and coyotes ( <i>Canis latrans</i> ) during pup rearing |

### Wildlife Management 1 (continued)

Moderator: Allison Sheeks (10:30 - 11:15), David Haskins (11:15 - 12:15)

- |       |                  |   |
|-------|------------------|---|
| 11:00 | Annie Paulukonis | Assessing conservation prioritization schemes via species vulnerability to predicted habitat changes in Georgia's Coastal Plain |
| 11:15 | Adam Edge        | Survival and cause-specific mortality of white-tailed deer fawns in the Southern Appalachian region of Georgia                  |
| 11:30 | Elizabeth Tuttle | Beneath the surface: A field technique for quantifying hyporheic flow path lengths and timescales in Piedmont streams           |
| 11:45 | Cheyenne Yates   | Space-use of white-tailed deer in the North Georgia mountains   |
| 12:00 | Jordan Dyal      | Development of an aerial survey sightability model for white-tailed deer ( <i>Odocoileus virginianus</i> ) in Florida           |

### Human Dimensions of Wildlife

Moderator: Sagar Godar Chhetri (1:00 - 1:45), Jim Chapin (1:45 - 2:15)

- |      |                     |  |
|------|---------------------|--|
| 1:00 | Sagar Godar Chhetri | Forest land enrolled in the state preferential tax incentives program in Georgia: A case study from Oconee County  |
| 1:15 | Noah Goyke          | Exploring differences between farmers and non-farmers African American forest landowners in Georgia, United States |
| 1:30 | Justin Beall        | What predicts ecotourism: Environmental values or symbolic conspicuous consumption?                                |
| 1:45 | Sarah Horsley       | Impacts of iconic species toward communities, tourism, and conservation  |
| 2:00 | Jacalyn Rosenberger | Using human dimensions research to guide deer management recommendations on public land in north Georgia           |

### **Keynote Presentation**

Room 1-304

3:30 – 4:30pm

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|--------------------|--|
| Dr. Lincoln Larson | Understanding and enhancing public support for wildlife conservation |
|--------------------|--|



## Friday, February 14<sup>th</sup>

### Bake Sale and Silent Auction

Building 2 Lobby  
8:00am – 3:00pm

### Oral Presentations

Keadle Conference Room  
8:30am – 3:05pm

#### Speed Talks (Proposals)

Moderator: Angela Burrow

- |      |                   |   |
|------|-------------------|---|
| 8:30 | Ream Thomas       | Energy dose thresholds for causing tree stem tissue mortality for certain south eastern functional groups |
| 8:35 | Krishna Sharma    | Migratory butterfly habitat use of barrier islands in Georgia, USA  |
| 8:40 | Jennifer McDaniel | Integrating tissue-specific mortality thresholds to predict fire-caused tree mortality                    |
| 8:45 | Crystal Bishop    | Effects of post-hurricane management practices on root feeding beetles and their fungal symbionts         |
| 8:50 | Jordan Youngmann  | DNA metabarcoding of coyote ( <i>Canis latrans</i> ) scat to assess diet in South Carolina, USA           |
| 8:55 | Heather Gaya      | Modeling species interactions with spatial capture recapture models                                       |

#### Wildlife Management 2

Moderator: Annie Paulukonis (9:15 - 10:00), Ben Thesing (10:00 - 11:00)

- |       |                   |   |
|-------|-------------------|---|
| 9:15  | Heather Levy      | Red-cockaded Woodpecker cavities as potential ecological sinks for nesting avian kleptoparasites                                |
| 9:30  | David Lee Haskins | Spatial distribution and bioaccumulation of mercury in brown watersnakes ( <i>Nerodia taxispilota</i> ) from the Savannah River |
| 9:45  | Amelia L. Russell | Evaluating stress in head-started gopher tortoises ( <i>Gopherus polyphemus</i> )   |
| 10:00 | Will Lewis        | Long-term demographic changes of Black-throated Blue Warblers ( <i>Setophaga caerulescens</i> ) from across the breeding range  |

## Wildlife Management 2 (continued)

- 10:15 Lindsay M Clontz Using State-space models to explain behavioral state resource selection for wild pigs in the Southeast, USA
- 10:30 Sarah Chinn Parental investment strategies in a highly polytocous species: Maternal attributes and resource availability modulate litter size and sex ratio
- 10:45 Chris Leaphart Effects of prenatal methylmercury exposure on waterfowl hatchling phenotypic plasticity and survival

## Fisheries

Moderator: Danielle Bradke

- 11:15 Michael Baker Comparing recruitment estimation methods for age-1 Atlantic Sturgeon in Altamaha River, GA from 2008-2019
- 11:30 Gina Alvarez Using video surveys to identify habitat preferences of the gag grouper (*Mycteroperca microlepus*) in the eastern Gulf of Mexico
- 11:45 Bryan Bozeman Realism versus Utility: Evaluating the assumptions of a drift-foraging energetics model for stream fishes
- 12:00 Brendan Dula How did the threatened Gulf Sturgeon population in the Apalachicola River change in response to Hurricane Michael?
- 12:15 Cortney Bunch Side scan sonar as an effective tool for estimating Atlantic Sturgeon spawning run size

## Forestry 2

Moderator: Zachary Russell (12:45 - 1:30), Noah Goyke (1:30 - 2:30)

- 12:45 Ellie Fowler Does canopy complexity influence physiological function and contribute to ecosystem resilience of old-growth longleaf pine (*Pinus palustris*)?
- 1:00 Monica Harmon Longleaf pine seedling physiology before and during a natural drought
- 1:15 Jeff Hamilton Timing Matters: Detecting the causal agent of laurel wilt disease in minutes instead of days with loop-mediated isothermal amplification (LAMP)
- 1:30 BREAK
- 1:45 Victoria Cassidy Systemic Insecticide Suppression for the Nantucket Pine Tip Moth in Young Loblolly Pines



## Forestry 2 (continued)

- 2:00 Scott Oswald Improving predicted forest responses to global change: Analyzing the role of carbon storage via optimal function and life history
- 2:15 Zhine Wang Plant phosphorus uptake in a P-limited soil environment

## Speed Talks (Ongoing or completed research)

Moderator: Micah Miles

- 2:45 Zack Parker Characterizing the phenolic defense responses of loblolly pines (*Pinus taeda*) to root-infecting blue-stain fungi
- 2:50 Colton Meinecke Development of a rapid, field-capable molecular detection assay for pitch canker
- 2:55 Laura Ramirez Quintero Modeling dominant height incorporating long-term responses to silvicultural treatments
- 3:00 Zachary Wesner Preferences of captive white-tailed deer for species of oak acorns found in Georgia

## **Awards Ceremony and Finale**

Flinchum's Phoenix

5:00 – 9:00pm

## **Bake Sale and Silent Auction**

Thursday, February 13<sup>th</sup> and Friday, February 14<sup>th</sup>  
8:00am – 3:00pm in Building 2 Lobby

Come buy some tasty treats to fuel your day and bid on awesome items donated by fellow Warnellians and Athens companies!

## **Awards Ceremony and Finale**

Friday, February 14<sup>th</sup>  
5:00 – 9:00pm at Flinchum's Phoenix

Celebrate the end of another successful symposium with dinner and great company. Awards for student posters and presentations will be announced, so come out and show your support!

