**Gabrielle N. Ripa**

gabrielle.n.ripa@gmail.com

**EDUCATION**

**Virginia Tech,** School of Plant and Environmental Sciences, Blacksburg, VA

*Major*: Plant Pathology, Physiology, and Weed Science, PhD

**Mississippi State University**, College of Forest Resources, Starkville, MS **Cumulative GPA: 4.0**

*Major*: Wildlife, Fisheries, and Aquaculture, MS Graduation: December 2022

*Thesis*: Vegetation and Nutritional Changes Over 20-Years of White-tailed Deer Exclusion

**Auburn University**, School of Forestry and Wildlife Sciences, Auburn, AL **Cumulative GPA: 3.89**

*Major:* Wildlife Ecology and Management, BS Graduation: May 2020

**WORK EXPERIENCE**

**Graduate Research Assistant**, Starkville, MS July 1, 2020 – December 2022

* **Research Objectives**: Determining the effect of white-tailed deer (*Odocoileus virginianus*) on vegetation structure and composition 0, 5, and ~20 years after exclusion, and determining white-tailed deer impacts on their own food resources through nutritional carrying capacity in the form of crude protein
* Developed research proposal with principal investigator (Dr. Raymond B. Iglay)
* Experience working with multiple spatial and temporal scales
* Research conducted on land owned by the U.S. Forest Service and managed by the Mississippi Department of Wildlife, Fisheries, and Parks, thus requiring interface with agencies to coordinate fieldwork, obtain historical management data, and share results
* Vegetation data collected using Nudds boards, convex spherical densiometer, line transects, belt transects, basal area, and biomass surveys
* Familiar with camera surveys and analysis techniques using unmarked individuals
* Experience leading field crew and working through adverse field conditions, including heat, summer storms, and biting insects
* Utilizing Program R to analyze plant communities and determine the effects of deer on the variables of canopy coverage, visual obstruction, basal area, plant growth form abundance, biomass, and nutritional carrying capacity
* Synthesizing results to provide management recommendations to wildlife managers and to satisfy interests of the state agency responsible for study site management

**Undergraduate Research Fellow**, Auburn, AL May 2019 – May 2020

* **Research Objectives**: Investigated the effect of the presence of Chinese privet (*Ligustrum sinense*) on herpetofaunal community composition and individual occurrence through microhabitat variables of temperature, soil moisture, and leaf litter on plots without privet, plots with privet, and restoration plots (treated with fire)
* Developed independent research project idea with a mentor professor (Dr. Christopher Anderson), working in conjunction with a doctoral student (James Stiles)
* Inventoried herpetofaunal community and monitored response to restoration on privately-owned and managed land
* Vegetation data collection using transects and moosehorn densitometers
* Herpetofauna data collection using timed-area searches, coverboards, and auditory detections
* Comparing the differences in temperature and soil moisture where herpetofauna were found and the leaf litter between plot types as well as determining potential differences in community assemblages between treatments using statistical analysis of data in Program R

**Research Technician (paid)**, Auburn, AL August 2018 – May 2019

* Research technician for James Stiles’ and James Cash’s graduate research project on the efficacy of fire in controlling Chinese privet invasion
* Collected vegetation data on plots and measured privet regenerating stems to determine invasive species effect on habitat structure and vegetation composition, as well as effects on native herpetofaunal communities
* Data entry

**Research Technician (volunteer)**, Auburn, AL February 2019 – May 2019

* Voluntarily assisted with data collection on captive brown anoles (*Anolis sagrei)* as part of herpetology course to determine the effect water availability to the mother and incubation temperature have on the offspring hatch rate and weight
* Assisted with feeding, watering, incubating, and egg-weighing

**Research Technician (volunteer)**, Auburn, AL August 2018 – December 2018

* Utilized museum specimens of several salamander species to determine potential effects of climate change on body size through measurement of different body length and width aspects
* Project led by doctoral student Randy Klabacka

**FORCES Intern (unpaid)**, Salamanca, NY May 2018 – June 2018

*FORCES (Friends of Recreation, Conservation, and Environmental Stewardship) at Allegany State Park*

* Ran and developed environmental education programs for school children (K-12) visiting the park
* Trail maintenance, species identification (plant and animal)

**Animal Care Intern (unpaid)**, Escondido, CA May 2017 **–** July 2017

*EcoVivarium*

* General maintenance of herpetofauna sanctuary, education through group presentations, animal handling skills
* Performed tasks with minimal supervision and supervised younger volunteers

**Other Relevant experience**

**Writing Club**, Mississippi State University, Starkville, MS January 2021-Present

* Graduate student- and postdoctoral associate-run club with weekly meetings to review peer writing and to practice manuscript structure and content
* Participation in two 48-hour publication challenges to utilize skills learned throughout the weekly meetings to write a publication-ready manuscript as a team over a weekend

**Wildlife Summer Practicum**, Auburn University, Auburn, AL Summer 2019

* Completed bird count surveys, small mammal surveys, and herpetofauna surveys
* Gained experience with different techniques of herpetofauna sampling: timed-area searches, pitfall traps, funnel traps, aquatic traps, and drift fence arrays
* Utilized Sherman traps and gained introductory experience with radio-telemetry
* Experience aging deer jawbones, tracking mammals, sampling deer for Chronic Wasting Disease (CWD), and participation in a deer reproductive survey
* Developed scientific writing skills

**Herpetology Class and Lab**, Auburn University, Auburn, AL Spring 2019

* Learned biology, physiology, phylogeny, and ecology of herpetofauna
* Capable of identifying over 100 species of herpetofauna native to Alabama but also including species in the United States and abroad
* Adept at identifying the calls of 12 different frogs native to Alabama and the Southeastern U.S.
* Experience seining ponds for turtles and larval amphibians

**Wildlife Management in Southern Africa**, Mbuluzi Game Reserve, Swaziland August 3-17, 2018

*Study Abroad Trip*

* Conducted game camera surveys of African ungulates using GPS for camera setup at remote locations
* Learned game management practices and species identification from local experts
* Trip led by Dr. Stephen Ditchkoff (Auburn University) and Dr. Bret Collier (Louisiana State University)

**Other work experience**

**Brick Oven Pizza Company**, Opelika, AL August 2017 – January 2018, February 2019 **–** February 2020

*Server*

**Niffer’s Place**, Opelika, AL January 2018 – May 2018

*Server*

**Which Wich**, San Diego, CA June 2015 **–** May 2016

*Crew Member*

**Awards and Honors**

**Auburn University**

* Graduation Student Marshal Spring 2020. Based on academic leadership, I was chosen to lead the Auburn University School of Forestry and Wildlife Sciences graduating students at the commencement ceremony.
* Auburn University President’s Award Spring 2020. Awarded to one graduating student in each Auburn University school. The award is chosen based on GPA, leadership, character, and potential professional success.
* University Honors Scholar. Accepted to the Auburn University Honors College as an incoming freshman, required 29 ACT and 3.85 minimum GPA; required to maintain a cumulative 3.4 GPA and obtain 30 hours of honors level courses; graduate level courses for honors credit
* Undergraduate Research Fellow Summer 2019 – Spring 2020. One of 95 Auburn University undergraduates granted a stipend to complete individual research project. Completed research with Dr. Christopher Anderson in Auburn University’s School of Forestry and Wildlife Sciences.
* Forestry, Environment, And Wildlife Leadership (FEWL) Academy Spring 2019 – Fall 2019. Inaugural class of students in the School of Forestry and Wildlife Sciences learning leadership skills from speakers in the field; created individual leadership project leading a nature hike for college students; met with state and federal agencies in the field of forestry and wildlife sciences.
* Dean’s ListFall 2017 – Spring 2020. I have maintained a 4.0 GPA since fall semester sophomore year at Auburn University.
* Academic Presidential Scholarship. Highest level of academic non-resident scholarship awarded to incoming freshmen(33-36 ACT and minimum 3.5 GPA).

**Professional Presentations**

* Ripa G, Demarais S, Granger J, Hamrick R, Iglay R. “20-Year effects of white-tailed deer on vegetation composition and structure and nutritional carrying capacity in Mississippi.” The Wildlife Society Annual Conference, Spokane, Washington, November 2022.
* Ripa G, Demarais S, Granger J, Hamrick R, Iglay R. “Impacts of white-tailed deer exclusion on plant communities after 20-years.” Southeast Deer Study Group, Virtual, February 2022.
* Guest lecture on herbivore impacts on plant communities for Wildlife Plant ID (WFA 4223/6223), Mississippi State University, November 2021.
* Ripa G, Demarais S, Granger J, Hamrick R, Iglay R. “Hungry hungry herbivores: 20-year impacts of white-tailed deer exclusion.” The Wildlife Society Annual Conference, Virtual, November 2021.
* Guest lecture on epigenetics for Wildlife Nutrition and Physiology (WFA 4323/6323), Mississippi State University, March 2021.
* Ripa G, Stiles J, Anderson C. “Determining the effect of Chinese privet (*Ligustrum sinense*) invasion on the occurrence of ground-dwelling herpetofauna species.” Southeast Partners in Amphibian and Reptile Conservation, Nauvoo, Alabama, February 2020.
* Ripa G, Stiles J, Anderson C. “Determining the effect of Chinese privet (*Ligustrum sinense*) invasion on the occurrence of ground-dwelling herpetofauna species.” Southeast Meeting of the Society for Ecological Restoration, Columbus, Georgia, October 2019.
* Cook R, Klabacka R, Tiatragul S, Ripa G, Wilson K, Oaks J. “Longitudinal examination of lungless salamander species (family *Plethodontidae*) morphology in Alabama.” Auburn University College of Science and Mathematics Undergraduate Research Fair, Auburn, Alabama, November 2018.

**Publications**

**Accepted/Published**

* **Ripa, G. N.**,S. Demarais, J. J. Granger, R. G. Hamrick, and R. B. Iglay. 2023. 20-year effects of white-tailed deer (*Odocoileus virginianus*) herbivory on vegetation composition and structure. Forest Ecology and Management 528:120644.
* Jones, L R.., C. A. Hunts, L. A. Dolan, N. K. Murphy, **G. N. Ripa**, E. A. Schultz, V. S. Shastry, C. A. Sklarczyk, B. S. Thornton, and M. R. Boudreau. 2023*.* Effects of seed size and regurgitation by two species of toucans on the germination of the tropical tree *Eugenia uniflora*. Journal of Tropical Ecology 39:e5.
* **Ripa, G. N.**, S. Demarais, J. J. Granger, R. G. Hamrick, and R. B. Iglay. *Accepted*. White-tailed deer (*Odocoileus virginianus*) nutritional carrying capacity over two decades after exclusion. Forest Ecology and Management.

**In preparation/review/revision**

* Boudreau, M. R., J. D. Lancaster, D. F. Adjaye, J. E Dentinger, L. A. Dolan, **G. N. Ripa**, C. Ramirez-Reyes, C. A. Sklarczyk, B. S. Thornton, H. M. Todaro, R. M. Kaminski, and J. B. Davis. *In preparation*. Coming up short? Do mallard winter home ranges contain sufficient energy?
* **Ripa, G. N.**, J. A. Stiles, and C. J. Anderson. *In preparation*. The effects of Chinese privet (*Ligustrum sinense*) on herpetofaunal communities in southern bottomland hardwoods.

**Special Skills**

**Hunter Safety Certification**

**NRA Basics of Shotgun Shooting Certification**

* Training through the Mississippi State University Wildlife Services National Training Academy

**Proficient in R**

* Five graduate-level courses in statistics using R (4) and SAS (1)

**Proficient with GPS**

* Utilized for study abroad trip, wildlife summer practicum, undergraduate research fellowship, and graduate research
* Experience with both handheld units and creating maps and layers of points to be used in Avenza Maps

**Basic GIS Knowledge**

* One upper-level course on GIS for natural resources

**UTV Training**

* Received formal UTV training while working at Allegany State Park through the State of New York

**Intermediate Spanish Proficiency**

**TEST SCORES**

GRE Verbal Reasoning: 160 (86th Percentile)

GRE Quantitative Reasoning: 153 (49th Percentile)

GRE Analytical Writing: 5.0 (92nd Percentile)