

Jennifer Buchanan
Department of Biological Sciences
Emporia State University
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Education

M.S. (expected May 2020) Biology–Concentration in Ecology and Biodiversity

Emporia State University

Emporia, KS

Thesis: Diet of the Mudpuppy (*Necturus maculosus*) in Kansas

Advisor: Dr. Alexis Powell

B.S. (2017) Biology–Concentration in Ecology and Evolution

University of South Florida–St. Petersburg

St. Petersburg, FL

Relevant Courses

- Applications of ArcGIS
- Intro to R
- Wetland Environments
- Limnology
- Herpetology
- Plant Taxonomy
- Invertebrate Zoology
- Entomology
- Wildlife Populations and Conservation
- Disease Ecology

Grants and Awards

Newbold Graduate Scholarship, Emporia State University Graduate School: 2020	(\$300)
Smalley Graduate Scholarship, Emporia State University Dept. of Biological Sciences: 2020	(\$1,100)
Thesis Support Award, Emporia State University Graduate School: 2019	(\$500)
Robert F. Clarke Memorial Scholarship, Emporia State University Dept. of Biological Sciences: 2019	(\$550)
Scholars Circle Funding, Emporia State University Graduate School: 2018	(\$250)
Graduate Student Research Scholarship, Emporia State University Graduate School: 2018	(\$500)
New Student Scholarship, Emporia State University Graduate School: 2018	(\$500)

Research Experience

Graduate Research Assistant 1/2018 to 05/2020

Part-time: 20 Hours/Week

Emporia State University–Emporia, KS

Advisor: Dr. Alexis Powell–Assistant Professor, Department of Biological Sciences

- Mudpuppy (*Necturus maculosus*—state species of greatest conservation need) and Northern Map turtle (*Graptemys geographica*—state threatened species) distribution study in eastern Kansas
- Setting hoop nets for turtles from May–September and minnow traps for mudpuppies from November–March in eastern Kansas lakes and rivers
- Mudpuppy diet analysis by stomach flushing protocol
- Mark-recapture study of mudpuppies in Kansas lakes
- Identified Kansas fishes, turtles, amphibians, and aquatic invertebrates
- Obtained and recorded water quality and habitat parameters for sites (277)

- Conducted visual surveys (with photo documentation) of freshwater turtles
- Database entry of specimens, habitat, and water quality for each site
- Inventory and electronic database entry of Schmidt Museum of Natural History herpetological collection
- Created a conservation management plan for two ESU natural areas
- Radio Telemetry

Intern with Florida State Parks 1/2016 to 5/2016

Park-time: 8 Hours/Week

District 4 Biology Dept. – Osprey, FL

Mentor: Karen Rogers-Environmental Specialist II: Florida State Parks

- Located Gopher Frog (*Lithobates capito*) breeding wetlands at Oscar Scherer State Park
- Systematically dipnetted and inventoried 22 wetlands in the park
- Identification of Florida tadpoles and calls.
- Created database of inventory at each wetland, no previous inventory records for the park
- Bird survey during nesting season and exotic plant removal, Brazilian Pepper (*Schinus terebinthifolius*), at Egmont Key State Park
- Fenced off Royal Tern (*Thalasseus maximus*) nesting sites at Cayo Costa State Park
- Used Trimble GPS to map exotic/invasive plant species for removal

Intern 2/2014 to 8/2014

Part-time: 2 Hours/Week

Boyd Hill Nature Preserve–St. Petersburg, FL

Mentor: Andrea Andersen-Preserve Ranger/Intern Coordinator

- Surveys of count and GPS locations of Gopher Tortoise (*Gopherus polyphemus*) burrows at the preserve
- Suwannee Cooter (*Pseudemys suwanniensis*) visual surveys along the Alafia River in southwest Florida
- Birds of Prey Aviary (permanently injured birds)—Cleaned habitats, feeding, leashing on glove for visitor interaction and education
- Assisted with summer camp for ages 5 and up
- Database entry
- Invasive exotic plant removal and prescribed burn prep

Work Experience

SEO Content Topic Creator/Production/Appointment Setter

03/2017 to 12/2017 The HOTH Saint Petersburg, FL

Part-time: 20 Hours/Week

Operations Manager: George Papadeas (727) 201-0062

Duties: Creating content topics with relevant keywords and engaging titles. Completing production orders from the backend. Setting up appointments for customers with their account managers.

OPS Park Ranger

03/2015 to 02/2017 Oscar Scherer State Park Osprey, FL

Part-time: 20 Hours/Week

Assistant Park Manager: Dan Nelson (941) 483-5956

Duties: Ranger station tasks such as greeting visitors, collecting park entrance fees, checking in campers, doing daily reports, cash count, and deposit, and training volunteers.

Professional Pet Stylist and Trainer

07/2012 to 03/2015. PetSmart Tampa, FL

Part-time: 20 Hours/Week

Salon Manager: Maria Mannarino (813) 926-7488

Duties: Provide grooming services and hygienic advice. Teach training classes according to the curriculum provided and assist pet parents with their training needs.

Volunteer Experience

- Greater Prairie-Chicken (*Tympanuchus cupido*) lek observations
- Prescribed burns of tallgrass prairie in eastern Kansas
- Monarch (*Danaus plexippus*) tagging and butterfly counts at Tallgrass Prairie National Preserve
- Outreach to preschool discussing turtles

Research Presentations

- **2020- Kansas Natural Resources Conference.** Oral presentation. Mudpuppy (*Necturus maculosus*) feeding ecology in Kansas lakes and rivers; Buchanan, J.L., Powell, A., Sievert, L.
- **2019-Kansas Herpetological Society Conference.** Poster presentation. Variation in the diet of the Mudpuppy (*Necturus maculosus*); Buchanan, J.L., Powell, A., Sievert, L.
- **2019-Kansas Herpetological Society Conference.** Oral presentation. Feeding habits of the Mudpuppy (*Necturus maculosus*) in Kansas; Buchanan, J.L., Powell, A., Sievert, L.
- **2019-Great Plains Limnology Conference.** Oral presentation. Stomach content analysis of the Mudpuppy (*Necturus maculosus*); Buchanan, J.L., Powell, A., Sievert, L.
- **2019-Joint Meeting of Ichthyologists and Herpetologists.** Oral presentation. Diet of the Mudpuppy (*Necturus maculosus*) in Lentic versus Lotic Habitats; Buchanan, J.L., Powell, A., Sievert, L.
- **2019-ESU Research and Creativity Day.** Poster Presentation. Diet variation of the Mudpuppy (*Necturus maculosus*); Buchanan, J.L., Powell, A., Sievert, L.
- **2019-Kansas Academy of Sciences Conference.** Oral presentation. Diet of the Mudpuppy (*Necturus maculosus*) in Kansas; Buchanan, J.L., Powell, A., Sievert, L.
- **2019-Kansas Natural Resources Conference.** Oral presentation. Diet of the Mudpuppy (*Necturus maculosus*) in Kansas lakes and rivers; Buchanan, J.L., Powell, A., Sievert, L.
- **2018-Kansas Herpetological Society Conference.** Oral presentation. Spatial and sexual variation in diet of the Mudpuppy (*Necturus maculosus*); Buchanan, J.L., Powell, A., Sievert, L.
- **2018-ESU Research and Creativity Day.** Poster presentation. Diet analysis of the Mudpuppy (*Necturus maculosus*); Buchanan, J.L., Powell, A., Sievert, L.
- **2018-Kansas Academy of Sciences Conference.** Poster presentation. Diet analysis of the Mudpuppy (*Necturus maculosus*); Buchanan, J.L., Powell, A., Sievert, L.

Special Training

National Wildfire Coordinating Group Certificates

- S-190-Intro to Wildland Fire Behavior
- S-130-Firefighter Training
- L-180-Human Factors on the Fireline

Adult and Pediatric First Aid/CPR/AED

Professional Services

- Junior co-chair of Midwest Partners in Amphibian and Reptile Conservation (MW PARC)
- Student Development Working Group Awards Committee-The Wildlife Society

Professional Affiliations

- Vice-President (2018–2019) The Wildlife Society-Emporia State University Student Chapter
- Organization of Biology Graduate Students-Emporia State University
- Secretary (2019–2020) Biology Club-Emporia State University
- Students for Environmental Sustainability-Emporia State University
- National Science Teachers Association-Emporia State University
- Kansas Herpetological Society
- American Society of Ichthyologists and Herpetologists
- Kansas Academy of Science
- The Wildlife Society

References

Alexis Powell, Ph.D., Assistant Professor
Emporia State University- Dept. of Biological Sciences
(620) 341-5609, aapowell@emporia.edu

David R. Edds, Ph.D., Professor/Graduate Coordinator (ret. 2019)
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