Cameron Cheri

Address: 1235 E. Elm Street, Springfield, MO 65802 Cell Phone: (870) 688-1850 E-mail Address: <u>cameron.r.cheri@gmail.com</u> Country of Citizenship: United States Veteran's Preference: I do not claim Veteran's Preference

Education:

Missouri State University, in Springfield

Graduation date: May 2020 *Degree:* Master's of Science, Biology *GPA:* 3.9

University of Arkansas, in Fayetteville

Major: Biological Sciences Graduation date: August 2015 Degree: Bachelor's of Science, Biology

Work Experience:

Ecologist Heartland Inventory and Monitoring Unit, National Park Service From 02/2024 to present 901 S. National Ave. Springfield, MO 65897 Supervisors: Hope Dodd Hope_Dodd@nps.gov Hours per week: 40 hr Full time

Duties and accomplishments:

- Organize, manage, and update taxonomy of the aquatic invertebrate database and reference collections of the Heartland I&M Unit.
- Identify aquatic invertebrate samples to genus and fish collections to species for rivers, streams and springs within the Ozarks and Central Plains regions.
- Expertise on midwestern and eastern aquatic invertebrate taxa and a specialist for larval odonates, gordian worms, and freshwater mites.
- Lead and train field crews for fish and benthic invertebrate sampling. Plan fieldwork logistics with park managers.
- Teach new student workers how to process benthic aquatic invertebrate samples and serve as the QA/QC officer of all samples processed by student workers.
- Collect benthic aquatic invertebrates with Slack-Surber samplers.
- Collect flow data with Marsh-McBirney and HACH flow meters.
- Collect water chemistry by deploying unattended YSI data sondes and temperature loggers.

- Survey and identify aquatic vegetation from springs in Ozark National Scenic Riverways.
- Conduct fish surveys by using seines, electrofishing backpacks, tow-barges, and driving outboard motorboats at various large river and small stream parks. Additionally, assess and identify fish collected in field and record both species and habitat information on field datasheets.
- Enter organismal and water quality data into Access databases and NPStoret.
 - Assist with report writing and calculating statistical analyses for report writing.
 - Created R-scripts to automatically calculate statistical analyses on large invertebrate, fish, vegetation, habitat, and discharge datasets. Additionally, created scripts to generate figures for data reports.
- Assist in maintaining specimens for the HTLN fish reference collection and have previously preserved aquatic plants for botany collections.
- Assisted with re-writing of aquatic invertebrate protocol SOPs to clarify sample processing methods in the lab and clarify specimen identification certification process.
- Collect GPS datapoints in the field using GNSS devices and Trimble software.
- Review management plans and research proposals for National Parks within the Midwest region.
- Reformatted paper field datasheets into fillable excel templates for rapid data collection with touchscreen devices during fieldwork and automatic importation into Access databases.
- Order and inventory field and lab equipment with a government-issued purchasing card.
- Assisted with the hiring of SIP interns, research specialists and student workers.
- Present research findings at scientific conferences, academic seminars, and employee meetings.

2. Research Specialist

Biology Department, Missouri State University, in partnership with Heartland Inventory and Monitoring Unit, National Park Service From 07/2020 to 02/2024 901 S. National Ave. Springfield, MO 65897 Supervisors: Alicia Mathis AliciaMathis@missouristate.edu Hours per week: 40 hr Full time

Duties and accomplishments:

- Organize, manage, and update taxonomy for the aquatic invertebrate database and reference collections of the Heartland I&M Unit.
- Identify aquatic invertebrate samples to genus and fish collections to species for rivers, streams and springs within the Ozarks and Central Plains regions.
- Expertise on midwestern and eastern aquatic invertebrate taxa and a specialist for larval odonates, gordian worms, and freshwater mites.
- Teach new student workers how to process benthic aquatic invertebrate samples and serve as the QA/QC officer of all samples processed by student workers.
- Collect benthic aquatic invertebrates with Slack-Surber samplers.
- Collect flow data with Marsh-McBirney and HACH flow meters.
- Collect water chemistry by deploying unattended YSI data sondes and temperature loggers.
- Survey and identify aquatic vegetation from springs in Ozark National Scenic Riverways.

- Conduct fish surveys by using seines, electrofishing backpacks, tow-barges, and driving motorboats at various large and small stream parks. Additionally, assess and identify fish collected in field and record both species and habitat information on field datasheets.
- Enter organismal and water quality data into Access databases and NPStoret.
- Assist with report writing and calculating statistical analyses for report writing.
 - Created R-scripts to automatically calculate statistical analyses on large invertebrate, habitat, and discharge datasets.
- Assist in maintaining specimens for the HTLN fish reference collection and have previously preserved aquatic plants for botany collections.
- Assisted with re-writing of aquatic invertebrate protocol SOPs to clarify sample processing methods in the lab and clarify specimen identification certification process.
- Collect GPS datapoints in the field using GNSS devices and Trimble software.

3. Aquatic Ecology Student Worker

Biology Department, Missouri State University, in partnership with Heartland Inventory and Monitoring Unit, National Park Service From 05/2018 to 8/2018 and 05/2019 to 08/2019 and 01/2020 to 06/2020 901 S. National Ave. Springfield, MO 65897 Supervisors: Alicia Mathis AliciaMathis@missouristate.edu Hours per week: 20-40 hr Part time

Duties and accomplishments:

- Sorted benthic aquatic invertebrate samples and identified samples from Ozark and Central Plains regions.
- Performed QA/QC of benthic invertebrate samples processed by undergraduate student workers.
- Collected benthic invertebrates with Slack-Surber samplers, flow data with Marsh-McBirney flow meters.
- Surveyed and identified aquatic vegetation from Ozark National Scenic Riverways and Buffalo National River.
- Assisted fish surveys using electrofishing backpacks and electrofishing boats at Buffalo National River and Ozark Scenic Riverways. Additionally measured fish length and recorded presence of deformities and diseases.

4. Graduate Teaching Assistant Missouri State University From 01/2018 to 12/2019 Missouri State University Springfield, MO 65897 Supervisors: Tina Hopper, Deb Finn TinaHopper@MissouriState.edu, DFinn@MissouriState.edu Hours per week: 20 hr Full time

Duties and accomplishments:

• Taught general biology lab courses in fall and spring semesters. Students were taught basic principles in statistics, ecology, taxonomy and physiology.

- Organized student grades and prepared teaching materials for labs in different courses.
- Escorted students in passenger vans for field trips in a variety of courses.
- Assisted faculty by occasionally teaching lecture materials for different classes.
- Participated in Taxonomy fairs at the 2018 and 2019 Society for Freshwater Science conferences, helping researchers identify unknown dragonfly specimens from various regions of the US.
- Used statistical software package R to perform statistical analyses for both thesis related and National Park Service related writing to be submitted for publication in 2020.
- Wrote a master's thesis: Dragonflies and Damselflies (Insecta: Odonata) as Indicators for Riparian Condition in Ozark Spring Streams.

5. Independent Contractor

Buffalo National River From 04/2017 to 12/2017 402 North Walnut Harrison, AR 72601 Supervisors: Shawn Hodges (870) 365-2778, Faron Usrey (417) 690-2325 shawn_hodges@nps.gov, fusrey@cofo.edu Hours per week: 40 hr Full time

Duties and accomplishments:

- Continued a dragonfly species survey to determine the species present in the park by collecting larvae and adults. I have identified 62 species, most of which are county or state records.
- Operated an air quality monitoring station, collecting air samples, recording data and mailing off collected samples.
- Created native insect displays for park interpreters and assisted insect outreach programs.
- Surveyed adult aquatic insects using MV lamp and black light trapping methods.
- Assisted NPS employees with the collection of benthic invertebrates from streams with Slack-Surber samplers.
- Collected water chemistry data with YSI Multiparameter meters and discharge with Marsh-McBirney flow meters.
- Some fieldwork involved overnight backcountry canoeing to access multiple water quality monitoring sites and survey insects in wilderness areas of the park.

6. Student Conservation Association Intern Buffalo National River From 01/2017 to 04/2017 402 North Walnut Harrison, AR 72601 Supervisor: Faron Usrey (417) 690-2325 faron.usrey@northark.edu Hours per week: 40 hr Full time

Duties and accomplishments:

• Performed water quality testing in an ADEQ certified lab, where I used membrane filtration techniques to isolate coliform bacteria from water samples, measured turbidity, prepared *E. coli* samples for incubation, and recorded bacterial counts and other necessary data.

- Took flow measurements with Marsh-McBirney flow meters at water quality monitoring sites in the field and collected surface water samples using sterile techniques.
- Prepared and used YSI multi-parameter meters to measure water chemistry parameters like dissolved oxygen, pH, conductivity, etc.
- Organized and developed curriculum for a dragonfly Bio-blitz at the park. I taught students dragonfly biology and sampling protocol during the event.
- Initiated a dragonfly species survey to determine the species present in the park by collecting larvae and adults from various aquatic habitats.
- Surveyed fish populations in the park with electrofishing backpacks and electrofishing boats.
- Led other interns in the park during insect collection surveys, teaching them proper collection techniques and assigning field tasks.

7. Lab Technician

University of Arkansas Cralley-Warren Laboratory Date of Employment: 01/2015 to 01/2016 1140-1 W. Cassatt St. Fayetteville, AR 72604 Supervisor: Caitlin Race (219) 381-1887 (cell) caitlin.i.race@gmail.com Hours per week: 20 hr/semester, 40 hr/summer Hourly worker

Duties and accomplishments:

- Photographed, measured, catalogued and processed insects from sticky cards and pitfall traps.
- Pinned insects of interest and recorded quantitative data from field experiments.
- Recorded and proofread field and lab data in Excel spreadsheets.
- Maintained saved data (spreadsheets, photographs, etc.) in lab computers and occasionally reported quantitative data in tabular form to supervisor.
- Field work involved spraying fields with spray booms, dispensing and collecting insect traps (pitfalls, blue veins, and sticky cards), and distributing and retrieving insects of interest.
- Conducted seed counts with collected fruit and recorded the presence of control insects and seed damaged by control insects.
- Inventoried and maintained laboratory equipment/materials.

8. Lab Assistant

University of Arkansas Insect Rearing Building From 01/2012 to 08/2015 North of 1140-1 W. Cassatt St. Fayetteville, AR 72604 Supervisors: Andrea Radwell (deceased), Ashley Dowling (479) 200-9748 (cell) adowling@uark.edu

Duties and accomplishments:

- Sorted aquatic mite genera from interior highland stream collections, using zoological keys and aid from supervisors for identification of rare specimens.
- Collected specimens in the field, from large rivers and lakes to small drainages.
- Recorded diversity among samples and determined morphotypes from sorted genera.
- Composed a species description for an aquatic mite endemic to the Ouachita Mountain range.
- Awarded grant that funded participation in a three-week Alaskan freshwater mite survey.

- Sampled waterways throughout the Kenai Peninsula for freshwater mites with the intention of finding a particular family of interest.
- Recorded geographic positional data from a GPS unit for data basing.
- Sampled aquatic habitats along Denali National Park's tourist roads, educating the public about the ecological importance of freshwater mites and assisting other ecologists with the collection of beetles and aquatic insects.
- Identified and processed mites by myself and with other graduate students in a lab at Kenai Peninsula College.

9. *Bio Blitz Volunteer* National Park Service: multiple locations From 08/2005 to 04/2017

Duties and accomplishments:

- Organized Bio Blitz at Buffalo National River for an ongoing dragonfly survey in the park, teaching dragonfly biology and collection techniques to undergraduate volunteers, 2017.
- Assisted the collection of caddisfly adults and larvae for researchers at Buffalo National River and helped educate attendees of their and other aquatic organisms' importance to the watershed, 2016.
- Collected aquatic mites, demonstrated proper collection techniques to volunteers and educated public attendees about their ecological importance at George Washington Carver National Monument, 2013; Buffalo National River, 2014; and Denali National Park, 2014.
- Assisted ecologists with the collection of aquatic beetles at the Buffalo National River, 2008.
- Trapped and collected Lepidoptera for researchers in Smoky Mountains National Park, 2005.

Coursework:

- Biology
 - Stream Ecology, Aquatic Entomology, Plant Taxonomy, Invertebrate Zoology, Statistical Methods for Biologists, Computational Ecology, Historical Foundations of Ecology, Population Ecology, Comparative Botany, Global Change Biology, General Ecology, Introduction to Entomology, Plant Physiology, Plant Pathology, Cell Biology, Genetics, Evolution, General Biology, Biostatistics
- Chemistry
 - Biochemistry, Organic Chemistry I & II, General Chemistry I & II
- Other Math and Science
 - Physics I & II, Calculus I, Pre-Calculus, Algebra

Publications and Technical Reports:

- Dodd, H.R., Cribbs, J.T., Bowles, D.E., Cheri, C.R., and Williams, J.M., 2023. Aquatic Community Monitoring at Effigy Mounds National Monument, 2008-2017. Natural Resource Report NPS/HTLN/NRR—2023/2562.National Park Service, Fort Collins, Colorado.
- **Cheri, C.R.**, Finn, D.S. Odonata as Indicators? Dragonflies and Damselflies Respond to Riparian Conditions along Ozark Spring Streams. Hydrobiology 2023, 2, 260–276.

- Cheri, C.R., Kissoon, L.T., and Bowles, D.E., 2021. Aquatic and wetland flora of Fowler Lake, Buffalo National River, Arkansas, U.S.A. Rhodora, 123(994):133-148.
- Kissoon, L.T., **Cheri, C.R.**, and Bowles, D.E., 2021. Landoltia punctata (Araceae), A New Distributional Record for the Ozarks. The Great Lakes Botanist, 59:229-233.
- **Cheri, C.R.**, 2020. Dragonflies and Damselflies (Insecta: Odonata) as Indicators for Riparian Condition in Ozark Spring Streams. MSU Graduate Theses. 3483.
- Bowles, D.E., Cheri, C.R., Usrey, F.D., and Williams, J.M., 2020. Caddisflies (Trichoptera) of the Buffalo National River, Arkansas. Insecta Mundi, 0770: 1-17.
- Cheri, C.R. and Bowles, D.E., 2019. Erythranthe geyeri (Torr.) G.L. Nesom (roundleaf monkeyflower) rediscovered in Missouri. Missouriensis, 37: 39-44
- Bowles, D.E. and **Cheri, C.R.**, 2019. Aquatic vegetation of springs at Buffalo National River, Arkansas. Castanea, 84(2):224-237.
- **Cheri, C.R.**, Fisher, J.R. and Dowling, A.P., 2016. The masked torrent mite, Torrenticola larvata n. sp. (Acari: Hydrachnidiae: Torrenticolidae): a water mite endemic to the Ouachita Mountains of North America. Acarologia, 56(2): 245-256.

Professional and Public Presentations:

Cheri, C.R., Dodd, H.R., 2024. "Long-term Monitoring Reveals Temporal Changes and Environmental Impacts on Benthic Macroinvertebrate Communities at Buffalo National River, Arkansas." Society for Freshwater Sciences Meeting. Philadelphia, Pennsylvania. Poster presentation.

Cheri, C.R., Williams, J.M., Dodd, H.R., Cribbs, J.T., and Bowles, D.E., 2022. "Long-term Monitoring Reveals Temporal and Environmental Impacts on Macrophyte Communities in Spring Streams." Joint Aquatic Sciences Meeting. Grand Rapids, Michigan. Poster presentation.

Cheri, C.R., 2019 "Odonate communities in Ozark springs respond strongly across a steep riparian gradient." Great Plains Limnological Society. Ames, Iowa. Oral presentation.

Cheri, C.R., 2019 "Riparian Effects on Odonate Assemblages in Ozark Spring Streams." Society for Freshwater Science. Salt Lake City, Utah. Oral presentation.

Cheri, C.R., 2018 "An Odonate Survey of the Buffalo National River." Great Plains Limnological Society. Lawrence, Kansas. Poster presentation.

Cheri, C.R., 2017 "Dragonflies and Damselflies of the Buffalo National River." Buffalo National River Dragonfly BioBlitz. Ponca, Arkansas. Oral Presentation.

Certifications and Trainings:

- Holder of vehicle operators license in the state of Missouri
- DOI Motorboat Operational Certification (MOCC)
- USFWS Electrofishing Certification
- GSA Defensive Driving Certification
- NPS Operational Leadership Training
- Software: Microsoft Excel, Access, Powerpoint, Word; R stats; ArcGIS

<u>Affiliations</u>:

- Society for Freshwater Science
- American Fisheries Society
- Ozarks Biological Graduate Society
- Dragonfly Society of the Americas

Awards:

- National Park Service Midwest Region Volunteer of the Year (2008)
- Buffalo National River Volunteer of the Year (2007)

<u>References</u>:

Hope Dodd
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 National Park Service
 Heartland Inventory and Monitoring Unit
 Republic, MO
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 Hope_dodd@nps.gov

• Debra Finn

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• David Bowles

Director at Ozarks Biological Fayetteville, AR (417) 459-6665 Dbowles524@gmail.com