

EDUCATION

THE OHIO STATE UNIVERSITY

2016–Present

- Ph.D. Evolution, Ecology, and Organismal Biology
- Co-advisors: Dr. Meg Daly and Dr. John Freudenstein
- **Dissertation:** Devil in the details: systematic revision of the Devil Crayfish, *Lacunicambarus diogenes*, species complex.

CENTRAL MICHIGAN UNIVERSITY

2014–2016

- M.S. Biology
- Advisor: Dr. Kevin Pangle
- **Thesis:** Advances in the Invasion Ecology of Rusty Crayfish, *Orconectes rusticus*, in the Great Lakes Basin.

UNIVERSITY OF UTAH

2008–2014

- B.S. Parks, Recreation, and Tourism
- Emphasis: Commercial Recreation

PUBLICATIONS

Loughman, Z.J., Myers, G.M., **Glon, M.G.** & Adams, S.A. *Regina rigida sinicola* (Gulf Glossy Crayfish Snake) Diet and Habitat. In review at *Herpetological Review*.

Palillo, M.B., Palillo, J.A., Bidot, W., White, M., **Glon, M.G.**, Pintor, L.M. & Malbrue, R. Housing, husbandry, and clinical techniques for crayfish (*Procambarus clarkii*) used in biomedical research. In review at *The Journal of the American Association for Laboratory Animal Science*.

Galinat, G., **Glon, M.G.**, Dickerson, M. First report of Golden Crayfish (*Faxonius luteus*) in South Dakota. In press at *Bioinvasions Records*.

Adams, S.B., Bland, M.R., **Glon, M.G.** & Myers, G.A. (2020) *Ophisaurus ventralis* (Eastern Glass Lizard) habitat use. *Herpetological Review*, 51(3): 602.

Glon, M.G., Hughes, L.S., Glon, H.E., Capuzzi, K.M., Loughman, Z.J. & Thoma, R.F. (2020) First Record of the Blue Crawfish, *Cambarus monongalensis* Ortmann 1905 (Decapoda: Cambaridae), from Ohio, USA. *The Ohio Journal of Science*, 120(2): 57–60.

Glon, M.G., Adams, S.B., Loughman, Z.J., Myers, G.A., Taylor, C.A. & Schuster, G.A. (2020) Two new species of burrowing crayfish in the genus *Lacunicambarus* (Decapoda: Cambaridae) from Alabama and Mississippi. *Zootaxa*, 4802(3): 401–439.

Reisinger, L.S., **Glon, M.G.** & Pintor, L.M. (2019) Divergence in foraging and predator avoidance behavior across the geographic range of native and non-native species of crayfish. *Hydrobiologia*, 847(3): 803–816.

- Jones, C.D., **Glon, M.G.**, Cedar, K., Paiero, S.M., Pratt, P.D. & Preney, T.J. (2019) First record of Paintedhand Mudbug (*Lacunicambarus polychromatus*) in Ontario and Canada and the significance of iNaturalist in making new discoveries. *The Canadian Field-Naturalist*, 133(2): 160–166.
- Glon, M.G.**, Williams, B.W. & Loughman, Z.J. (2019) *Lacunicambarus dalyae*: a new species of burrowing crayfish (Decapoda: Cambaridae) from the southeastern United States. *Zootaxa*, 4683(3): 361–380.
- Glon, M.G.**, Thoma, R.F., Daly, M. & Freudenstein, J.V. (2019) *Lacunicambarus chimera*: a new species of burrowing crayfish (Decapoda: Cambaridae) from Illinois, Indiana, Kentucky, and Tennessee. *Zootaxa*, 4544(4): 451–478.
- Foltz II, D.A., Sadecky, N.M., Myers, G., Fetzner Jr., J.W., Welsh, S.A., Stocker, G.W., **Glon, M.G.** & Thoma, R.F. (2018) *Cambarus loughmani*, a new species of crayfish (Decapoda: Cambaridae) endemic to the pre-glacial Teays River Valley in West Virginia, USA. *Journal of Natural History*, 45-46: 2875–2897.
- Glon, M.G.**, Thoma, R.F., Taylor, C.A., Daly, M. & Freudenstein, J.V. (2018) Molecular phylogenetic analysis of the Devil Crayfish Group, with elevation of *Lacunicambarus* Hobbs, 1969 to generic rank and a redescription of the devil crayfish, *Lacunicambarus diogenes* comb. nov. (Decapoda: Astacoidea). *Journal of Crustacean Biology*, 38(5): 600–613.
- Glon, M.G.**, Reisinger, L.S. & Pintor, L.M. (2018) Biogeographic differences between native and non-native populations of crayfish alter coexistence and trophic interactions in mesocosms. *Biological Invasions*, 20(12): 3475–3490.
- Glon, M.G.**, Mularo, A.J., Loughman, Z.J. & Lieb, D.A. (2018) Rediscovery of *Cambarus diogenes* (Devil Crayfish) in Pennsylvania, USA. *Northeastern Naturalist*, 25(3): 355–361.
- Glon, M.G.** & Thoma, R.F. (2017) An observation of the use of devil crayfish (*Cambarus* cf. *diogenes*) burrows as brooding habitat by eastern cicada killer wasps (*Sphecius speciosus*). *Freshwater Crayfish*, 23(1): 55–57.
- Glon, M.G.**, Larson, E.R., Reisinger, L.S. & Pangle, K.L. (2017). Invasive dreissenid mussels benefit invasive crayfish but not native crayfish in the Laurentian Great Lakes. *Journal of Great Lakes Research*, 43(2): 289–297.
- Glon, M.G.**, Larson, E.R. & Pangle, K.L. (2016). Comparison of ¹³C and ¹⁵N discrimination factors and turnover rates between congeneric crayfish *Orconectes rusticus* and *O. virilis* (Decapoda, Cambaridae). *Hydrobiologia*, 768: 51–61.
- Glon, M.G.**, Larson, E.R. & Pangle, K.L. (2016). Connecting laboratory behavior to field function through stable isotope analysis. *PeerJ*, 4: e1918.

GRANTS, AWARDS, AND SCHOLARSHIPS

The Honor Society Chapter of Phi Kappa Phi (The Ohio State University Chapter 155) Dr. Louise B.C. Vetter Award (**\$1500**) 2020

- Selected from pool of The Ohio State University Presidential Fellows, recognizes excellence in research.

International Association of Astacology Student Travel Award (**\$500**) 2020

- Awarded for travel to 23rd Symposium of the International Association of Astacology.

- The Ohio State University Council of Graduate Students Career Development Grant (**\$350**) 2020
- Awarded for travel to international conference to present my research and make professional connections with other researchers.
- The Ohio State University Presidential Fellowship 2019
- Most prestigious award given by the Graduate School, selected through a university-wide competition led by a faculty committee. Recipients of this award embody the highest standards of scholarship in the full range of Ohio State's graduate programs. Provides fellows with one year of full-time financial support to complete their dissertations unimpeded by other duties.
- USDA United States Forest Service grant (**\$2,700**) 2019
- Awarded for project titled “Investigation of possible undescribed sister species to the Rusty Gravedigger, *Lacunicambarus miltus* (Fitzpatrick, 1978), in southern Mississippi and Alabama, USA.”
- The Ohio State University Department of Evolution, Ecology, and Organismal Biology Raymond C. Osburn Memorial Graduate Scholarship Award (**\$1,600**) 2019
- Awarded in recognition of outstanding publications and overall excellence in research.
- The Ohio State University Department of Evolution, Ecology, and Organismal Biology Outstanding GTA Award (**\$500**) 2019
- 22nd International Symposium on Freshwater Crayfish 2019
- Outstanding Student Presentation Award for my oral presentation.
 - First place in photography contest.
- Smithsonian Institution Graduate Student Fellowship (**\$7,500**) 2018
- Awarded 10 weeks of funding to conduct systematics research at the Smithsonian Institution National Museum of Natural History in Washington, D.C. under supervision of Smithsonian Institution curator of Crustacea Dr. Rafael Lemaitre and Smithsonian Institution Research Associate Dr. Keith Crandall.
- The Crustacean Society Fellowship in Graduate Studies (**\$1,000**) 2018
- Awarded to cover costs of field work in the Great Plains of North America.
- Pennsylvania Natural Heritage Program (**\$2,500**) 2017
- Awarded for trip to Eastern Pennsylvania to sample sites where the Devil Crayfish, *Lacunicambarus diogenes*, has historically been documented to inform a state conservation status assessment of this species.
- Ohio Agricultural Research and Development Center 2016 Internationalship Program Award 2016
- \$22,000 stipend plus tuition and fee waiver for one year.
- Raymond E. Hampton Excellence in Biology Research Award (**\$1,000**) 2015
- Awarded to fund creation, printing and distribution of “Crayfishes of Michigan” poster to raise awareness of biodiversity and invasive species in Michigan.
- Central Michigan University Biology Graduate Student Association Grant for Outstanding Service and Academic Achievement (**\$100**) 2015
- Central Michigan University Provost Award 2014
- Full graduate research assistantship for 2014–2016.

PRESENTATIONS

- Glon, M.G.** Devil in the details: systematic revision of the crayfish genus *Lacunicambarus*. Ohio Biodiversity Conservation Partnership Research Review invited presentation. November 13, 2019.
- Glon, M.G.** All you ever wanted to learn about crayfish, with a special emphasis on the systematics of the genus *Lacunicambarus*. Columbus Natural History Society invited presentation. September 16, 2019.
- Reisinger, L.S., Collins, E., **Glon, M.G.** & Mahon, A.R. Infection of invasive rusty crayfish with native parasites in the Great Lakes Region. Ecological Society of America Annual Meeting 2019. August 11-16, 2019.
- Reisinger, L.S., **Glon, M.G.** & Pintor, L.M. Biogeographic differences in the tradeoff between foraging and predator avoidance across native and non-native populations of two crayfish. Ecological Society of America Annual Meeting 2018. August 5-10, 2018.
- Glon, M.G.**, Thoma, R.F., Taylor, C.A. & Daly, M., Freudenstein, J.V. Molecular phylogenetic analysis of the Devil Crayfish Group, with elevation of *Lacunicambarus* Hobbs, 1969 to generic rank and a redescription of the devil crayfish, *Lacunicambarus diogenes* comb. nov. (Decapoda: Astacoidea). 22nd International Symposium on Freshwater Crayfish. July 9-13, 2018.
- Foltz II, D.A., Sadecky, N.M., Myers, G., Fetzner Jr., J.W., Welsh, S.A., Stocker, G.W., **Glon, M.G.** & Thoma, R.F. *Cambarus loughmani*, a New Species of Crayfish (Decapoda: Cambaridae) Endemic to the Pre-glacial Teays River Valley in West Virginia, USA. 22nd International Symposium on Freshwater Crayfish. July 9-13, 2018.
- Reisinger, L.S., **Glon, M.G.** & Pintor, L.M. Biogeographic Differences in the Tradeoff Between Foraging and Predator Avoidance Across Native and Non-native Populations of Two Crayfish. 22nd International Symposium on Freshwater Crayfish. July 9-13, 2018.
- Glon, M.G.**, Thoma, R.F., Taylor, C.A., Daly, M. & Freudenstein, J.V. Molecular phylogenetic analysis of the Devil Crayfish Group, with elevation of *Lacunicambarus* Hobbs, 1969 to generic rank and a redescription of the devil crayfish, *Lacunicambarus diogenes* comb. nov. (Decapoda: Astacoidea). Society of Systematic Biologists Conference 2018. June 1-4, 2018.
- Reisinger, L.S., Collins, E.E., **Glon, M.G.** & Mahon, A.R. Infection of invasive rusty crayfish with native parasites in the Great Lakes Region. Society for Freshwater Science Annual Meeting 2018 “Navigating Boundaries in Freshwater Science”. May 20-24, 2018.
- Glon, M.G.** Devil in the Details: Systematic revision of the Devil Crayfish group. The Columbus Science Pub “Science on the Cutting Edge” invited presentation. May 3, 2018.
- Reisinger, L.S., **Glon, M.G.** & Pintor, L.M. Divergence in life history traits during range shifts: examples from crayfish introductions. 147th Annual Meeting of the American Fisheries Society. August 20-24, 2017.
- Glon, M.G.** Cutting the telson thread: perspective of a novice astacologist. Society for Freshwater Science Annual Meeting 2017 “Designing our Freshwater Futures”. June 4-8, 2017.
- Kane, H.J., **Glon, M.G.**, Pangle, K.L. & McNaught, A.S. Distribution and abundance patterns of benthic invasive species in nearshore Lake Michigan habitats. IAGLR 59th Annual Conference on Great Lakes Research. June 6-10, 2016.

Glon, M.G., Larson, E.R., Reisinger, L.S. & Pangle, K.L. Comparison of the effects of Dreissenid mussels on native virile crayfish and invasive rusty crayfish in Lake Michigan. Central Michigan University Institute of Great Lakes Research 4th Annual Student Research Symposium. February 26, 2016.

Kane, H.J., **Glon, M.G.**, Pangle, K.L. & McNaught, A.S. Distribution and abundance patterns of benthic invasive species in nearshore Lake Michigan habitats. Central Michigan University Institute of Great Lakes Research 4th Annual Student Research Symposium. February 26, 2016.

Glon, M.G. Advances in the invasion ecology of rusty crayfish, *Orconectes rusticus*, in the Great Lakes Basin. Central Michigan University Department of Biology Seminar Series. February 12, 2016.

Glon, M.G., Larson, E.R., Reisinger, L.S. & Pangle, K.L. Comparison of the effects of Dreissenid mussels on native virile crayfish and invasive rusty crayfish in Lake Michigan. 76th Midwest Fish and Wildlife Conference. January 24-27, 2016.

Kane, H.J., **Glon, M.G.**, Pangle, K.L. & McNaught, A.S. Factors associated with the distribution and abundance of *Hemimysis anomala* in Lake Michigan. 76th Midwest Fish and Wildlife Conference. January 24-27, 2016.

Glon, M.G., Larson, E.R. & Pangle, K.L. Comparison of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ discrimination factors and turnover rates between congeneric crayfish *Orconectes rusticus* and *O. virilis*. Society for Freshwater Science Annual Meeting 2015 “Our Freshwater Futures”. May 17-21, 2015.

Glon, M.G., Larson, E.R. & Pangle, K.L. Estimating $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ discrimination factors and turnover rates of the crayfish *Orconectes rusticus* and *O. virilis*. Central Michigan University Great Lakes Science in Action Symposium. April 2, 2015.

Glon, M.G., Larson, E.R. & Pangle, K.L. Estimating $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ discrimination factors and turnover rates of the crayfish *Orconectes rusticus* and *O. virilis*. Central Michigan University Institute of Great Lakes Research 3rd Annual Student Research Symposium. February 27, 2015.

PROFESSIONAL CONTRACTS

Midwest Biodiversity Institute, Hilliard, Ohio

Summer 2017

- Conducted crayfish surveys throughout the state of Ohio to assess crayfish biodiversity and provide data for Ohio Department of Natural Resources field guide on Ohio crayfishes.

Friends of the North Carolina Museum of Natural Sciences/West Liberty University

Summer 2017

- Conducted surveys in the Southeastern United States in collaboration with researchers at the North Carolina Museum of Natural Sciences and West Liberty University. Included surveys for several imperiled species including the Federally Endangered Big Sandy Crayfish (*Cambarus callainus*).

TEACHING EXPERIENCE

Ecology (EEOB 3410), The Ohio State University

Fall 2019

- Teaching assistant duties included converting labs exercises to R statistical software, guest lecturing on biogeography and leading labs.

Conservation Biology (EEOB 4410), The Ohio State University

Spring 2018 & 2019

- Teaching assistant duties included giving lectures, leading recitations and class discussions, and grading assignments and exams.

Evolution (EEOB 3310), The Ohio State University

Fall 2017

- Teaching assistant duties included leading recitations and laboratory exercises and grading assignments and exams.

Form, Function, and Diversity (Biology 1114), The Ohio State University

Spring 2017

- Teaching assistant duties included leading recitations and laboratory exercises, creating quizzes, and grading assignments.

Animal Behavior (Biology 518), Central Michigan University

Spring & Summer 2015, Spring 2016

- Assisted with undergraduate animal behavior laboratory which included lecturing and demonstrating laboratory exercises to students.

PROFESSIONAL ACTIVITIES

Chair, The Noble Crayfish Student Award committee: International Association of Astacology *2016–Present*

Outreach coordinator: International Association of Astacology *2018–2020*

Referee: *Aquatic Ecology, Zootaxa, Freshwater Biology, Freshwater Crayfish, Global Ecology and Conservation, Journal of Crustacean Biology, Hydrobiologia, Aquatic Invasions, Plos One, Zoological Studies*

Member: International Association of Astacology, The Crustacean Society, Society of Systematic Biologists, Society for Integrative and Comparative Biology, Society for Freshwater Science, The Honor Society of Phi Kappa Phi

OUTREACH AND VOLUNTEERING

Six Mile Dam Removal Mussel Rescue

October 2020

- Volunteered on team including members from Ohio Department of Natural Resources, U.S. Fish and Wildlife Service, and Stantec consulting firm to relocate stranded mussels following removal of the Six Mile Dam in eastern Ohio. Species rescued included the Federally Endangered Sheepnose Mussel and Federally Threatened Rabbitsfoot Mussel, amongst many others.

Flying Squirrel Surveys

Spring 2020

- Volunteered with research team from University of Rio Grande to conduct survey of Southern Flying Squirrels in southeastern Ohio, contributing to long term dataset and ongoing research projects.

CoSi Museum

Fall 2019

- Volunteered at CoSi Discovery Night. I helped run an interactive table that taught attendees about deep ocean research.

Next-Generation Evolutionary Biology Research Experience for Undergraduates Program

Summer 2018

- Served as a mentor for a summer Research Experience for Undergraduates (REU) student. Responsibilities included helping my mentee to acquire research skills in project design and data analysis and to gain understanding of our research system. This experience culminated in a poster session where my student presented our summer research. My mentee subsequently presented at the Ohio Louis Stokes Alliance for Minority Participation Conference, where they were given a presentation award.

- Illinois-Indiana Sea Grant Invasive Crayfish Collaborative *Spring 2018–Present*
- Member of collaborative created to prioritize research and outreach needs, identify crayfish of particular concern, develop framework for evaluating management techniques, and create communication tools for interested parties.
- iNaturalist *Spring 2017–Present*
- Regular contributor to iNaturalist citizen science website with over 1,200 specimen identifications.
- OSU STEAM Factory Spring Student Showcase *Spring 2017*
- Participated in “Franklinton Friday” event with science and art exhibits. Specifically helped plan and implement a “Phylogenetic Tree House” booth where other students and I demonstrated techniques from our work and had active discussions with visitors.
- Educational visits to preschool *Spring 2017*
- Visited local preschools to talk to children about science, which included show-and-tell activities with live crayfish.
- The Ohio State University Graduate Evolution & Ecology Students Bio-Blitz *Spring 2017*
- Led a biodiversity hike with the goal of finding as many different organisms as possible, which we recorded using iNaturalist.
- The Ohio State University undergraduate research student poster forum *Fall 2016*
- Volunteered as a reviewer for undergraduate research posters
- Museum of Biological Diversity *2016–Present*
- Volunteered on numerous occasions in outreach events hosted by The Ohio State University Museum of Biological Diversity. This has included giving presentations and planning, leading, and supporting others in a crayfish-conservation interactive exhibit.
- Student mentoring *Summer 2015*
- Mentored undergraduate students participating in the Research Experience for Undergraduates (REU) program on Beaver Island, Michigan. Responsibilities included helping students plan and carry out scientific experiments and advising them on graduate school.
- Crayfish of Michigan educational poster *Spring 2015–Fall 2017*
- Created an educational poster depicting all species of crayfish in Michigan. I received a grant to print 700 copies of the poster, which I have distributed to schools, state agencies, and citizens. I have since worked with Michigan Sea Grant on a revised version of this same poster (<https://www.miseagrant.com/ProductDetails.asp?ProductCode=MICHU-16-405>).
- CMU Biobuds *Fall 2014–Spring 2016*
- Taught science lessons to children in public elementary schools in Mt. Pleasant, MI.

MEDIA COVERAGE

Two New Species of Crayfish Discovered in Alabama and Mississippi. *US Forest Service Southern Research Station CompassLive*, July 9th, 2020.

- <https://www.srs.fs.usda.gov/compass/2020/07/09/two-new-species-of-crayfish-discovered-in-alabama-and->

[mississippi/?fbclid=IwAR39LRYVTDd4ACLSfaW2QjTuuYWqZgXLB0PArmyyRZhs9ZyIeRzWYfR
Sg](https://www.srs.fs.usda.gov/news/688)

Researchers Discover Two New Crayfish Species in Alabama and Mississippi. *US Forest Service Press Release*, June 25th, 2020.

- <https://www.srs.fs.usda.gov/news/688>

Researchers discover Blue Crayfish, Ohio's newest crustaceous species. *Ashland Source*, June 3rd, 2020.

- https://www.ashlandsource.com/life/researchers-discover-blue-crayfish-ohio-s-newest-crustaceous-species/article_0a09d01c-a3a7-11ea-9eac-0bf846ece5c6.html

Plenty is in a name when describing a species. *The Columbus Dispatch*, December 15th, 2019.

- <https://www.dispatch.com/homes/20191215/nature--plenty-is-in-name-when-describing-species>

Jewel Mudbug: New Species of Burrowing Crayfish Identified. *North Carolina Museum of Natural Sciences News*, October 17, 2019.

- <https://naturalsciences.org/calendar/news/jewel-mudbug-new-species-of-burrowing-crayfish-identified/>

Crayfish species known as mudbugs excel at tunneling. *The Columbus Dispatch*, August 18, 2019.

- <https://www.dispatch.com/entertainmentlife/20190818/nature--crayfish-species-known-as-mudbugs-excel-at-tunneling>

A Non-Native Crayfish in Southwest Ohio. *Buckeye Yard & Garden Online*, July 25, 2017.

- <http://bygl.osu.edu/index.php/node/838>

Invasive Species Gang up on Crayfish. *Record Eagle*, June 22, 2017.

- http://www.record-eagle.com/news/local_news/invasive-species-gang-up-on-crayfish/article_a889fa2e-d212-5786-aea7-2d4751048181.html

Invasive Species Killing Native Crayfish. *Urban Milwaukee*, May 16, 2017.

- <http://urbanmilwaukee.com/2017/05/16/echo-invasive-species-killing-native-crayfish/>

Invasive Species Gang up on Native Crayfish. *Great Lakes Echo*, May 2, 2017.

- <http://greatlakesecho.org/2017/05/02/invasive-species-gang-up-on-native-crayfish/>

From Mussels to Crayfish and Gobies: Have the Great Lakes Experienced an “Invasional Meltdown?”. *National Geographic*, August 10, 2015.

- <http://voices.nationalgeographic.com/2015/08/10/from-mussels-to-crayfish-and-gobies-have-the-great-lakes-experienced-an-invasional-meltdown/>

REFERENCES (available by request)

Dr. Meg Daly, Professor and Associate Dean, The Ohio State University

Dr. John Freudenstein, Professor and Department Chair, The Ohio State University

Dr. Zac Loughman, Assistant Professor, West Liberty University

Dr. Kevin Pangle, Assistant Professor, Central Michigan University