

EMILY MARIE DEAN

Department of Fisheries and Wildlife
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EDUCATION

Doctor of Philosophy (currently enrolled). Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. Enrolled Fall 2016, expected to defend Spring 2022, 3.94 G.P.A.

Master of Science. Department of Biology, Grand Valley State University, Allendale, Michigan, 2016, 4.00 G.P.A.

Bachelor of Science. Department of Biology, Grand Valley State University, Allendale, Michigan, 2014, 3.94 G.P.A. Major: Biology, Minor: Chemistry

RESEARCH EXPERIENCE

Research Assistant. Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. June 2019 to May 2020

- Project: Assessing habitat suitability for target fish species above and below barriers on Great Lakes tributaries; Great Lakes Fishery Commission.
- Collected habitat data in over 70 streams across Michigan and Wisconsin. Currently conducting data analyses to identify suitable habitat for migratory fish species in priority watersheds. This project is in support of a broader effort to evaluate economic and ecological tradeoffs of dam removals in Great Lakes tributaries

Research Assistant. Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. June 2016 to August 2017

- Project: U.S. Geological Survey, Aquatic GAP Analysis Program. Aquatic GAP Analysis Program: Enhancing data and approaches for conserving the Nation's inland aquatic ecosystems
- Created and developed a database product: "NOAMAD: The North American Freshwater Migratory Fish Database" a catalogue of the migratory life history patterns of freshwater fish species in North America for the United States Geological Survey. I am currently developing a manuscript about the database for publication.

Research Technician. Department of Biology, Grand Valley State University, Allendale, Michigan. June 2013 to August 2014

- Collected length and weight data of juvenile steelhead in the lower Muskegon River for a project that evaluated natural steelhead recruitment in the Muskegon River, Michigan.

Research Technician. Department of Biology, Grand Valley State University, Allendale,

Michigan. June 2013 to August 2013

- Sorted aquatic macroinvertebrates from samples collected in the Au Sable River. Samples were used to assess the effects of the Au Sable fish hatchery on downstream biota and their habitats

TEACHING EXPERIENCE

Teaching Assistant. Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan. Fall 2017, Spring 2018, Fall 2018, Spring 2019

- Geology Human Environment Lab (ISP 203L)
- Integrative Sciences Biology Lab (ISB 208L)
- Organismal Biology Lab (BS 172)

Teaching Assistant. Department of Biology, Grand Valley State University, Allendale, Michigan. Fall 2014, Spring 2015, Fall 2015, Spring 2016

- Biology for the 21st Century (BIO 104)
- Introduction to General Biology (BIO 120)

AWARDS, GRANTS, AND SCHOLARSHIPS

Fly Fishers International Scholarship, \$2,000. Fly Fishers International, 2019

Fisheries and Wildlife Graduate Student Organization Travel Grant, \$300. The Department of Fisheries and Wildlife GSO Travel Grant Committee at Michigan State University, 2019

Dr. Howard A. Tanner Fisheries Excellence Fellowship, \$2,500. From the Department of Fisheries and Wildlife at Michigan State University, 2018.

Honorable Mention for Best Prospective Oral Presentation titled “Current knowledge and research needs to improve conservation of freshwater migratory fishes throughout North America.” From the Department of Fisheries and Wildlife 13th Annual Graduate Student Organization Research Symposium, 2018

James Schramm Scholarship for Graduate Study in Fisheries, \$1,000. From the Great Lakes Council of Fly Fishers International, 2018

Great Lakes Leadership Academy Emerging Leaders Certificate of Completion. From the Great Lakes Leadership Academy Emerging Leaders Program, 2017

Dr. Fred Poston Scholarship, \$1,750.00. From the Great Lakes Leadership Academy, 2017

Graduate Dean’s Citation for Academic Excellence. From the Grand Valley State University Graduate School, 2016

Presidential Research Grant for Master’s thesis titled “Do Adfluvial Fishes Supplement Energy to a Freshwater Coastal System?” \$1,875.00. From the Grand Valley State University Graduate School, 2015

Phi Kappa Phi Honor. From the Honor Society of Phi Kappa Phi.

Grand Finish Grant, \$1,200.00. From the Grand Valley State University Office of Financial Aid, 2013

Stein Biology Scholarship, \$1,200.00. From the Grand Valley State University Department of Biology, 2013

Award for Excellence, \$4,200.00. From the Grand Valley State University Office of Financial Aid, 2010-2014

PUBLICATIONS

Peer-reviewed book chapter

- (1) Whelan, G.W., W. M. Daniel, **E. M. Dean**, A. R. Cooper, and D. M. Infante. 2018. Who is Doing What to Trout: Insights from the National Fish Habitat Assessment. Proceedings of the Wild Trout XII Symposium, West Yellowstone, MT.

In preparation

- (3) **Dean**, E. M., A. R. Cooper, and D. Infante. The North American Freshwater Migratory Fish Database (NOAMAD): Characterizing the migratory patterns of freshwater fishes of Canada, the United States, and Mexico. *In preparation*.
- (2) Tingley, R. W., **E. M. Dean**, D. M. Infante, and A. R. Cooper. Evaluating stream habitat in Michigan: Implications for conserving Arctic Grayling (*Thymallus Arcticus*). *In preparation*.
- (1) **Dean**, **E. M.**, and M. R. Luttenton. The effect of seasonal fish migration on energy budgets in two coastal Michigan streams. *In preparation*.

PUBLICATIONS FOR NON-ACADEMIC AUDIENCES

- Dean**, **E. M.** 2019. Flyline Fall 2019 Newsletter. Great Lakes Council of Fly Fishers International. Available at: <https://www.ffiglc.org/wp-content/uploads/2019/10/Flyline-Fall-2019.pdf>.
- Dean**, **E. M.** 2018. Flyline Spring 2019 Newsletter. Great Lakes Council of Fly Fishers International. Available at: https://www.ffiglc.org/wp-content/uploads/2019/03/Flyline-Spring-2019_mostuptodate.pdf.
- Dean**, **E. M.** and D. M. Infante. 2018. The North American Freshwater Migratory Fish Database: A database to inform habitat conservation efforts of freshwater fish species in the United States, Canada, and Mexico. Research Briefing, The Habitat Section of the American Fisheries Society. Available at: <https://habitat.fisheries.org/the-north-american-freshwater-migratory-fish-database-a-database-to-inform-habitat-conservation-efforts-of-freshwater-fish-species-in-the-united-states-canada-and-mexico/>.
- Dean**, **E. M.** 2018. Flyline Fall 2018 Newsletter. Great Lakes Council of Fly Fishers International. Available at: <https://www.ffiglc.org/the-flyline/>.
- Dean**, **E. M.** 2018. Department of Fisheries and Wildlife Graduate Student Organization Annual Newsletter. Michigan State University, East Lansing, MI.

PRESENTATIONS

- (8) **Dean**, **E. M.**, A. R. Cooper, and D. Infante. 2019. The North American Freshwater Migratory Fish Database (NOAMAD): Characterizing the migratory patterns of freshwater fishes of Canada, the United States, and Mexico. 149th Annual Meeting of the American Fisheries Society, Reno, Nevada.
- (7) **Dean**, **E. M.**, A. R. Cooper, and D. Infante. 2018. Freshwater fish species migration life histories: information to aid in the conservation of stream fishes. Poster - 148th Annual Meeting of the American Fisheries Society, Atlantic City, New Jersey.

- (6) Whelan, G., **E. M. Dean**, K. Herreman, and D. Infante. 2018. Drilling deep for stream species diversity: some fishy insights from the National Fish Habitat Assessment. 148th Annual Meeting of the American Fisheries Society, Atlantic City, New Jersey.
- (5) **Dean, E. M.**, and D. M. Infante. 2018. Current knowledge and research needs to improve conservation of freshwater migratory fishes throughout North America. Department of Fisheries and Wildlife 13th Annual Graduate Student Organization Research Symposium, East Lansing, Michigan
- (4) Whelan, G.W., W. M. Daniel, **E. M. Dean**, A. R. Cooper, and D. M. Infante. 2017. Who is Doing What to Trout: Insights from the National Fish Habitat Assessment. Wild Trout Symposium XII, West Yellowstone, Montana.
- (3) **Dean, E. M.**, and M. R. Luttenton. 2016. Seasonal fish migration supplements the energy budget of a coastal Lake Michigan stream. Midwest Fisheries and Wildlife Conference, Grand Rapids, Michigan.
- (2) **Dean, E. M.**, and M. R. Luttenton. 2016. The effect of seasonal fish migration on energy budgets in two coastal Michigan streams. Society for Freshwater Science 2016 Meeting, Sacramento, California.
- (1) **Dean, E. M.**, and M. R. Luttenton. 2015. A re-evaluation of aquatic caloric densities using bomb calorimetry. Poster presentation at the Society for Freshwater Science 2015 Meeting, Milwaukee, Wisconsin.

MSU SERVICE

Department of Fisheries and Wildlife

- Graduate Student Representative, Water Science sub-committee of the Department of Fisheries and Wildlife Strategic Planning Committee, 2020
- Graduate Student Representative, Quantitative Fisheries Center Search Committee, 2019, 2020
- Copy Editor, Fisheries and Wildlife Spotlight Magazine, 2019
- Panelist, Fisheries and Wildlife Graduate Student Panel for FW 894 incoming new graduates, 2019
- President, Fisheries and Wildlife Graduate Student Organization, 2018, 2019
- Graduate Employee Union steward, Fisheries and Wildlife Graduate Student Organization, 2018, 2019
- Vice President, Fisheries and Wildlife Graduate Student Organization, 2017, 2018
- Research Symposium Committee Member, Fisheries and Wildlife Graduate Student Organization, 2017

EXTERNAL SERVICE

- Alumni Ambassador, Grand Valley State University Department of Biology Graduate Program, 2019
- Board of Directors, Great Lakes Council of Fly Fishers International, 2018, 2019
- Conservation Committee, Great Lakes Council of Fly Fishers International, 2018, 2019
- Newsletter editor, Great Lakes Council of Fly Fishers International, 2018, 2019

- President, Grand Valley State University Biology Graduate Student Organization, 2015, 2016

PROFESSIONAL AFFILIATIONS

- American Fisheries Society, 2015 (active)
 - Poster presentation at the 148th AFS Annual Meeting, Atlantic City, New Jersey.
 - Oral presentation at the 149th AFS Annual Meeting and Joint Conference with the Wildlife Society, Reno, Nevada.
 - Symposium abstract proposal submitted for the 150th AFS Annual Meeting, Columbus, Ohio.
- American Fisheries Society Michigan Chapter, 2015 (active)
 - Attended the AFS Michigan Chapter 2018 meeting, Port Huron, Michigan.
 - Abstract accepted for oral presentation at the AFS Michigan Chapter 2020 meeting, Mount Pleasant, Michigan.
- American Fisheries Society Student Subsection of the Education Section, 2019 (active)
- Great Lakes Council of the Fly Fishers International, 2018 (active)
- Fly Fisher International, 2018 (active)

ADDITIONAL TRAINING

Ready for Media Presentation Training with Executive, Celebrity, and Sports Stars Media Trainer Anne Ready and Michigan State University Lecture and Former U.S. Undersecretary for Agricultural and Natural Resources (Bush Administration) Mark Rey

REFERENCES

Dr. Dana Infante
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