DANA M. INFANTE

Department of Fisheries and Wildlife
AgBioResearch
College of Agriculture and Natural Resources
Michigan State University
https://www.msu.edu/~infanted/index.html

PROFESSIONAL POSITIONS – MICHIGAN STATE UNIVERSITY

Assistant Director. AgBioResearch, College of Agriculture and Natural Resources. 2019 to present**.**
Associate Chair of Research. Department of Fisheries and Wildlife. 2018 to 2019.
Associate Professor. Department of Fisheries and Wildlife. 2013 to present, Partnership for Ecosystem Research and Management (PERM) Faculty Member, Michigan Department of Natural Resources, Fisheries Division*.
Assistant Professor. Department of Fisheries and Wildlife. 2007 to 2013, Partnership for Ecosystem Research and Management (PERM) Faculty Member, Michigan Department of Natural Resources, Fisheries Division*.

EDUCATION

Doctor of Philosophy. 2005. Resource Ecology and Management, School of Natural Resources and Environment, University of Michigan, Ann Arbor, Michigan
Master of Science. 2001. Resource Ecology and Management, School of Natural Resources and Environment, University of Michigan. University of Michigan, Ann Arbor, Michigan
Bachelor of Science. 1994. Scientific Writing, College of Literature, Science, and Arts, University of Michigan, Ann Arbor, Michigan

AWARDS

Leadership Development Program, College of Agriculture and Natural Resources, 2019-2020. Applied and selected to participate.
Lead21 Class 13 Leadership Training Program, 2017-2018. Invited to participate by Michigan State University College of Agriculture and Natural Resources; selected to participate from a national applicant pool.
Nominated for but not selected for the **2017 Graduate School Outstanding Faculty Mentor Award**. From Michigan State University.
2013 Outstanding Supervisor Award. From Family Resource Center of Michigan State University.
2012 Group Achievement Award for National Fish Habitat Assessment Work. From the American Institute of Fishery Research Biologists.
Eli Lilly Teaching Fellowship, 2010-2011. Invited to participate by Department of Fisheries and Wildlife; selected from a university-wide applicant pool. From Michigan State University.
Scientific Achievement in Support of Fish Habitat Conservation, 2011. From National Fish Habitat Action Plan Board (board membership from natural resource management agencies and conservation organizations).

* http://www.fw.msu.edu/partners_outreach/partnership_for_ecosystem_research_and_management_perm

INVITED INTERNATIONAL ENGAGEMENT

This section highlights invited, international efforts; items appear in other sections of this CV.

Presentations

(8) **Infante, D. M**. *Invited*. 2019. Assessing the contribution of protected landscapes for conserving river fishes across the USA. International Society for River Science, September 8-13, 2019, Vienna, Austria.

(7) **Infante, D. M**. *Invited*. 2019. FishTail: Assessing condition of stream fish habitat throughout the Mississippi River Basin, USA. International Society for River Science, September 8-13, 2019, Vienna, Austria.

(6) **Infante, D. M**. *Invited*. 2018. Assessing river fish habitats throughout the United States: Outcomes and opportunities for conserving fishes from current and future threats. 4th Mississippi-Yangtze River Basins Symposium, October 15-20, 2018, Chongqing, China.

(5) **Infante, D. M.** *Invited*. 2018 Conserving stream fishes throughout large regions: Using multiple species distribution models to enhance decision-making. Seminar for the Institute of Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences, June 6, 2018, Vienna, Austria.

(4) **Infante, D. M.** *Invited*. 2015. Landscape influences on stream fish assemblages: Focus on a national assessment of fish habitats for the National Fish Habitat Partnership. Seminar for the Institute of Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences, May 13, 2015, Vienna, Austria.

(3) **Infante, D. M.** *Invited*. 2015. Assessing condition of freshwater habitats using a landscape approach: Improving opportunities for conserving inland fisheries over large regions. Global Conference on Inland Fisheries, January 26-28, 2015, FAO Headquarters, Rome, Italy.

(2) **Infante, D. M.** *Invited*. 2012. Impacts of current anthropogenic land uses on river fish across the conterminous United States: Implications for conservation and management. 6th World Fisheries Congress, May 7-11, 2012, Edinburgh, Scotland.

(1) **Infante, D. M**. *Invited*. 2011. Managing river systems with a landscape approach: Improving the odds for conserving Arctic grayling. Arctic Grayling Symposium & Workshop 2011: Our Conservation Challenges and Opportunities, June 7-9, 2011, Grand Prairie, Alberta, Canada.

Course Instruction

Characterizing landscape influences on stream fish assemblages: Implications for large-scale assessment of stream habitats, 2 credit, seminar. Taught Spring of 2015 as a Guest Professor, University of Natural Resources and Life Sciences, Vienna, Austria.

Mentorship

Melanie Haslauer, doctoral student, University of Natural Resources and Life Sciences, Vienna, Austria, PhD committee member 2018-present.

Marlene Ublacker, Institute for Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences, Vienna, Austria, MS committee member 2017-2019.

Rafaela Schinegger, Fulbright Scholar (Austria), postdoctoral mentor in 2015.

External dissertation examiner

Edward Krynak, Western University, Ontario, Canada. Defended Fall 2018.

Gabriel Brejao, University of Campinas, Sao Paulo, Brazil. Defended Spring 2018.

Jaquelini De Oliveira Zeni, Sao Paulo State University, Sao Paulo, Brazil. Defended Spring 2017.

Symposium co-organizer

Ecological and social landscape-scale drivers of freshwater biodiversity: Novel findings and future challenges. Annual Meeting of the International Society for River Science, September 8-13, 2019, Vienna, Austria.

RECENT PEER-REVIEWED JOURNAL ARTICLES

Graduate students for whom I am primary advisor are underlined.
Post-doctoral research associates from whom I am primary advisor are italicized.
Research technicians^ whom I supervise are noted by ^.

Carlson A., W. W. Taylor, and **D. M. Infante**. Accepted. Modeling effects of climate change on Michigan brown trout and rainbow trout: Precipitation and groundwater as key predictors. Ecology of Freshwater Fish.

Tsang, Y. P., R. W. Tingley, J. Hsiao, and **D. M. Infante**. 2019. Identifying high value areas for conservation: Accounting for connections among terrestrial, freshwater, and marine habitats in a tropical island system. Journal for Nature Conservation 50:125711. DOI: 10.1016/j.jnc.2019.125711

Pracheil, B. M., R. McManamay, E. S. Parish, S. L. Curd, B. T. Smith, C. R. DeRolph, A. M. Witt, S. Ames, M. B. Day, W. Graf, **D. M. Infante**, D. McCoskey, K. Rugani, C. Vezina, T. Welch, A. West. 2019. A checklist of river function indicators for hydropower ecological assessment. Science of the Total Environment 687:1245-1260. DOI: 10.1016/j.scitotenv.2019.06.049

Carlson, A., W. W. Taylor, and **D. M. Infante**. 2019. Developing precipitation- and groundwater-corrected stream temperature models to improve management of brook charr amid climate change. Hydrobiologia 840:379-398. DOI: 10.1007/s10750-019-03989-1

Carlson, A. K., W. W. Taylor, M. T. Kinnison, S. Mažeika, P. Sullivan, M. J. Weber, R. T. Melstrom, P. A. Venturelli, M. R. Wuellner, R. M. Newman, K. J. Hartman, G. B. Zydlewski, D. R. DeVries, S. M. Gray, **D. M. Infante**, M. A. Pegg, and R. M. Harrell. 2019. Threats to freshwater fisheries in the United States: Perspectives of state fisheries administrators and Agricultural Experiment Station directors. Fisheries 44:276-287. DOI: 10.1002/fsh.10238

Clilverd, H. M., Y. P. Tsang, **D. M. Infante**, A. J. Lynch, A. M. Strauch. 2019. Long-term streamflow trends in Hawai'i and implications for native stream fauna. Hydrological Processes. Hydrological Processes 33:1-21. DOI: 10.1002/hyp.13356

Colvin, S. A. R., S. M. P. Sullivan, P. D. Shirey, R. W. Colvin, K. O. Winemiller R. M. Hughes, K. D. Fausch, **D. M. Infante**, J. Olden, K. R. Bestgen, R. J. Danehy, L. Eby. 2019. Headwater streams and wetlands are critical for sustaining fish, fisheries, and ecosystem services. Fisheries 44:73-91. DOI: 10.1002/fsh.10229

Cooper, A. R.^, *Y. P. Tsang*, **D. M. Infante**, *W. M. Daniel*, A. J. McKerrow, and D. Wieferich. 2019. Protected areas lacking for many common fluvial fishes of the conterminous USA. Diversity and Distributions 2019:1-15. DOI: 10.1111/ddi.12937

Ross, J. A., **D. M. Infante**, D. J. Martin, and M. Rey. 2019. Effects of riparian timber harvest on southeast Alaska stream habitat after 30-40 years: Insights for management. North American Journal of Fisheries Management 39:328-342. DOI: 10.1002/nafm.10270

Daniel, W. M., A. R. Cooper^, P. J. Badra, and **D. M. Infante**. 2018. Predicting habitat suitability for eleven imperiled fluvial freshwater mussels. Hydrobiologia 809:265-283. DOI: 10.1007%2Fs10750-017-3473-z

Stevenson, R. J., T. Tang, and **D. M. Infante**. 2018. Advancing evaluation of bioassessment methods: A reply to Liu and Cao. Science of the Total Environment 645:895-500. DOI: 10.1016/j.scitotenv.2018.07.129

Tingley, R. W., **D. M. Infante**, R. A. MacKenzie, A. R. Cooper^, and *Y. P. Tsang*. 2018. Identifying natural catchment landscape influences on tropical stream organisms: Classifying stream reaches of the Hawaiian Islands. Hydrobiologia 826:67-83. DOI: 10.1007/s10750-018-3726-5

Carlson, A., K. Hartikainen, **D. M. Infante**, T. D. Beard, A. J. Lynch., and W. W. Taylor. 2017. Comparing stream-specific to generalized temperature models to guide coldwater salmonid management in a changing climate. Reviews in Fish Biology and Fisheries 27:443-462. DOI: 10.1007/s11160-017-9467-0

Cooper, A. R., **D. M. Infante**, L. Wang, K. Wehrly, and T. Brenden. 2017. Assessment of dam effects on streams and fish assemblages of the conterminous USA. Science of the Total Environment 586:879-889. DOI: 10.1016/j.scitotenv.2017.02.067

EDITED BOOKS

Hughes, R., M., **D. M. Infante**, L. Wang, K. Chen, and B. Terra, editors. 2019. Advances in Understanding Landscape Influences on Freshwater Habitats and Biological Assemblages. American Fisheries Society, Issue 90, Bethesda, Maryland.

RECENT PUBLISHED WEB MAPPERS, CODE, AND DATASETS

Post-doctoral research associates and graduate students for whom I was primary advisor and research technicians for whom I was primary supervisor when the research was conducted are underlined.

Web mappers

Fishtail: A Decision Support Mapper for Conserving Stream Fish Habitats of the Northeast Climate Science Center Region
Collaborators: C. Paukert, **D. M. Infante**, J. Stewart (lead developer), J. Whittier, W. Daniel, N. Sievert, K. Herreman
Publication Date: 2017, Website: https://ccviewer.wim.usgs.gov/Fishtail/#

FishVis: A Regional Decision Support Tool for Identifying Vulnerabilities of Riverine Habitat and Fishes to Climate Change in the Great Lakes Region
Collaborators: J. Stewart (lead developer), A. Covert, N. J. Estes, S. M. Westenbroek, D. Krueger, D. J. Wieferich, M. T. Slattery, J. D. Lyons, J. E. Mckenna Jr., **D. M. Infante**, Jennifer L. Bruce
Publication Date: 2016, Website: https://ccviewer.wim.usgs.gov/FishVis/

NorEast: Stream Temperature Data Inventory
Collaborators: J. Stewart (lead developer), A. Polebitski, D. M. Infante, R. Palmer, D. Armstrong, J. McKenna, Y. P. Tsang
Publication Date: Beta Version, Website: https://ccviewer.wim.usgs.gov/noreast/

Code

StreamThermal: A Software Package for Calculating Thermal Metrics from Stream Temperature Data
Collaborators: Y. P. Tsang, **D. M. Infante**, J. Stewart, L. Wang, R. Tingley, D. Thornbrugh, A. Cooper, W. Daniel
Publication Date: 2016, Website: https://afspubs.onlinelibrary.wiley.com/doi/full/10.1080/03632415.2016.1210517

An Approach for Aggregating Upstream Catchment Information to Support Research and Management of Fluvial Systems across Large Landscapes
Collaborators: **Y. P. Tsang**, D. Wieferich, K. Fung, **D. M. Infante**, and A. Cooper
Publication Date: 2014, Website: https://springerplus.springeropen.com/articles/10.1186/2193-1801-3-589

Datasets

Locations of mines and mining activity in the contiguous United States 2013. Collaborators: K. Herreman, W. M. Daniel, D. J. Wieferich, and **D. M. Infante**. Publication Date: 2019, DOI: 10.5066/P9FPEAGC

Hawaii waterfalls linked to the National Hydrography Datasets
Collaborators: B. Martin, Y. P. Tsang, R. W. Tingley III, D. J. Wieferich, H. Clilverd, **D. M. Infante**.
Publication Date: 2019, DOI: 10.5066/P9EA3GCD

National Fish Habitat Partnership (NFHP) 2015 cumulative habitat condition indices and limiting disturbances for the conterminous United States linked to NHDPlus V1 V2.0
Collaborators: W. Daniel, **D. M. Infante**, K. Herreman, A. Cooper, J. Ross
Publication Date: 2017, DOI: 10.5066/F73R0R1P

National Fish Habitat Partnership (NFHP) 2015 anthropogenic disturbance data for the conterminous United States linked to the NHDPlus V1
Collaborators: K. Herreman, A. Cooper, **D. M. Infante**, W. Daniel
Publication Date: 2017, DOI: 10.5066/F7000086

Dam metrics representing stream fragmentation and flow alteration for the conterminous United States linked to the NHDPlus V1
Collaborators: A. Cooper and **D. M. Infante**
Publication Date: 2017, DOI: 10.5066/F7FN14C5

RECENT GRANTS

Includes grants awarded or under review

Michigan Department of Natural Resources Fisheries Division. 2019-2020. Support for revision of the State Wildlife Action Plan. **$79,570** (**Dana M. Infante, PI)**.

Great Lakes Fishery Commission. 2019. Assessing habitat suitability for target fish species above and below barriers on Great Lakes tributaries**. $59,152** (**Dana M. Infante, PI)**.

Michigan State University, College of Agriculture and Natural Resources. 2018. Professional Development Microgrant for attending the 4th Mississippi-Yangtze River Basins Symposium in Chongqing, China. **$3000** (**Dana M. Infante, PI**).

Michigan Department of Natural Resources Fisheries Division. 2018-2019. Support for revision of the State Wildlife Action Plan. **$84,623** (**Dana M. Infante, PI)**.

Michigan Department of Natural Resources Fisheries Division. 2017-2018. Effects of flow reduction on thermal dynamics of streams: improving an important link in Michigan's Water Withdrawal Assessment Tool (WWAT). **$157,666**. (Dan Hayes, PI and **Dana M. Infante, co-PI**).

Aggregating cumulative water withdrawal information for any point in a drainage. **$44,521** (**Dana M. Infante, PI**)

Michigan Department of Natural Resources Fisheries Division. 2017-2018. Support for revision of the State Wildlife Action Plan. **$82,158** (**Dana M. Infante, PI**).

U.S. Geological Survey, Aquatic GAP Analysis Program. 2017-2020. Aquatic GAP Analysis Program: Enhancing data and approaches for conserving the Nation's inland aquatic ecosystems. **$500,000** (**Dana M. Infante, PI**).

U.S. Fish and Wildlife Service, Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperative. Characterizing the current condition of stream fish habitats throughout the US portion of the Mississippi River Basin based on responses of target fish species to a diverse set of current landscape-scale disturbances. **$31,998** (**Dana M. Infante, PI**).

Michigan Department of Natural Resources, Fisheries Division. 2017-2022. Great Lakes and inland GIS support and development for Michigan (State Wildlife Action Plan) SWAP implementation. **$242,284** (**Dana M. Infante, PI**).

Michigan Department of Natural Resources Fisheries Division. 2016-2017. Support for revision of the State Wildlife Action Plan. **$79,504** (**Dana M. Infante, PI**).

U.S. Fish and Wildlife Service, National Fish Habitat Action Plan. 2013-2018. A national assessment of the status of fish habitat. **$156,000 year 4** (**Dana M. Infante, PI** and William W. Taylor, co-PI).

U.S. Geological Survey, Aquatic GAP Analysis Program. 2016-2017. Aquatic GAP Analysis Program: Enhancing data and approaches of the Nation's inland and coastal aquatic ecosystems. **$105,071** (**Dana M. Infante, PI**).

RECENT INVITED PRESENTATIONS

Presenting author first. Post-doctoral research associates and graduate students for whom I was primary advisor and research technicians for whom I was primary supervisor when the research was conducted are underlined. (**) indicates that work has a significant outreach component.

Infante, D. M. *Invited*. 2019. Assessing the contribution of protected landscapes for conserving river fishes across the USA. International Society for River Science, September 8-13, 2019, Vienna, Austria.

Infante, D. M. *Invited*. 2019. FishTail: Assessing condition of stream fish habitat throughout the Mississippi River Basin, USA. International Society for River Science, September 8-13, 2019, Vienna, Austria.

Chen, Y., **D. M. Infante**, and C. Paukert. *Invited*. 2019. Challenges in restoring aquatic biodiversity in the Yangtze River basin under multiple human landscape stressors. International Society for River Science, September 8-13, 2019, Vienna, Austria.

Schinegger, R., M. Ublacker, W. M. Daniel, K. Herreman, S. Schmutz, and **D. M. Infante**. *Invited*. 2019. A cross-continental evaluation of the response patterns of fish assemblages to landscape-scale human stressors in

European and United States' major freshwater habitats. International Society for River Science, September 8-13, 2019, Vienna, Austria.

Wuebbles, D., A. Sharma, and **D. M. Infante. *Invited*. 2019. Assessment of the impacts of climate change on the Great Lakes: 2019. Briefing for the U.S. Senate Climate Taskforce, July 9, 2019, Washington D.C.

Wuebbles, D., A. Sharma, and **D. M. Infante. *Invited*. 2019. Assessment of the impacts of climate change on the Great Lakes: 2019. Briefing for Congressional Staff, July 9, 2019, Washington D.C.

****Infante, D. M**. *Invited*. 2018. Assessing river fish habitats throughout the United States: Outcomes and opportunities for conserving fishes from current and future threats. 4th Mississippi-Yangtze River Basins Symposium, October 15-20, 2018, Chongqing, China.

Clilverd, H., Y. P. Tsang, A. Lynch, and **D. M. Infante**. *Invited*. 2018. Assessing the impact of declining streamflow on the distribution of native fishes across the Hawaiian Islands. 148th Annual Meeting of the American Fisheries Society, August 19-23, 2018, Atlantic City, New Jersey.

Daniel, W. M., P. Fuller, and **D. M. Infante**. 2018. *Invited*. Are game fishes outside their native range more tolerant of landscape disturbance? 148th Annual Meeting of the American Fisheries Society, August 19-23, 2018, Atlantic City, New Jersey.

Daniel, W. M., **D. M. Infante**, K. Herreman, A. R. Cooper, and R. M. Hughes. *Invited*. 2018. Characterizing coal and mineral mines as a regional source of stress to stream fish assemblages. 148th Annual Meeting of the American Fisheries Society, August 19-23, 2018, Atlantic City, New Jersey.

Schinegger, R., M. Ublacker, W. M. Daniel, K. Herreman, and **D. M. Infante**. *Invited*. 2018. The impacts of human stressors on riverine fish communities – a cross-continental analysis of European and United States freshwater ecoregions. 148th Annual Meeting of the American Fisheries Society, August 19-23, 2018, Atlantic City, New Jersey.

Whelan, G., E. Dean, W. M. Daniel, K. Herreman, and **D. M. Infante. *Invited*. 2018. Drilling deep for stream species diversity: Some fishy insights from the National Fish Habitat Assessment148th Annual Meeting of the American Fisheries Society, August 19-23, 2018, Atlantic City, New Jersey.

Zeni, J., G. Brejao, D. Hoeinghaus, L. Casatti, L. Montag, L. Driver, and **D. M. Infante**. *Invited*. 2018. Dynamic landscapes and stream fish ecology in the Neotropics: Lessons from and for temperate systems. 148th Annual Meeting of the American Fisheries Society, August 19-23, 2018, Atlantic City, New Jersey.

COURSE INSTRUCTION

(*) indicates semester of development
(**) indicates semester of teaching while a Lilly Teaching Fellow

Primary instructor

(4) **Characterizing landscape influences on stream fish assemblages: Implications for large-scale assessment of stream habitats,** 2 credit, seminar: Application of the landscape approach for assessing and conserving stream fish habitats
Taught Spring of 2015* as a Guest Professor, Institute of Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences, Vienna, Austria.

(3) **Foundations and Frontiers of Stream Ecology, FW 893**, 1 credit, seminar
Description: Study of current and emerging theories in the field of stream ecology and their application for river management and conservation.
Taught Spring 2010*.

(2) **Hydrology for Watershed Management, FW 454**, 3 credits, lecture
Description: Principles of hydrology and their application for management of aquatic and terrestrial systems.
Taught Spring 2009*, 2011**, 2013, 2015, 2017, 2019.

(1) **Aquatic Ecosystem Management, FW 414**, 3 credits, lecture
Description: Study of how aquatic ecosystems are managed to meet ecological and socioeconomic objectives using an ecosystem management approach.
Taught Fall 2007, 2008, 2009, 2012, 2015, 2016, 2017.

STUDENT ADVISING

Student awards included

Lab currently includes 3 MS students, 1 PhD student, 1 Post-doctoral researcher, and 4 research technicians

Primary advisor, doctoral students

(3) **Emily Dean**. Effects of stream network fragmentation on migratory fishes. September 2016 to expected defense Spring 2021.
Awards include: Emerging Leaders Program, Great Lakes Leadership Academy 2017; Fred Poston Scholarship, 2017; James Schramm Scholarship for Graduate Study in Fisheries from the Great Lakes Council Fly Fishers International, 2018; Dr. Howard A. Tanner Fisheries Excellence Fellowship, $2500, 2018-2019, Department of Fisheries and Wildlife; Fisheries and Wildlife Graduate Student Organization Travel Grant, $300, Spring 2019

(2) **Ralph W. Tingley III**. Assessing impacts of climate change on tropical stream ecosystems over multiple spatial scales. September 2010; defended Spring 2017.
Awards include: National Climate Change and Wildlife Science Center Science to Action Fellowship, United States Geological Survey, $10,000, 2015; Fisheries and Wildlife Department Special Recognition Fellowship, 2014; Best Student Presentation in a Fish Habitat Section, 145th Annual Meeting of the American Fisheries Society, $100, August 2015

(1) **Darren J. Thornbrugh.** Regional influence of landscape features and processes on fluvial fish assemblages of the United States. Began September 2009; defended Fall 2014.
Awards include: Summer Recruitment Fellowship, 2009, College of Agriculture and Natural Resources; Bridge Fellowship, 2009-2010, College of Agriculture and Natural Resources; Ball Fellowship, $5000, 2010-2011, Department of Fisheries and Wildlife; Red Cedar Fly Fishers Scholarship, $1000, June 2011; Dr. Howard A. Tanner Fisheries Excellence Fellowship, $2500, 2012-2013, Department of Fisheries and Wildlife; Dissertation Completion Fellowship, College of Agriculture and Natural Resources, $3000, 2014

Primary advisor, MS students

(8) **Samantha Betances**. Assessing influences of changing climate on Michigan stream fish habitat. Began September 2017, expected defense Spring 2020.
Awards: Academic Achievement Graduate Assistantship (AAGA), Fall 2017-Spring 2018, Michigan State University; Janice Lee Fenske Excellence in Fisheries Management Fellowship 2018-2019; John Robertson – Theodore Roosevelt Conservation and Environmental Leadership Fellowship, 2018, $2500; Emerging Leaders Program, Great Lakes Leadership Academy 2019; Robert C. Ball and Betty A. Ball Fisheries and Wildlife Fellowship 2019, $5000

(7) **Linda Ortiz Gonzalez**. Influence of agricultural best management practices on Michigan streams. Began September 2014; expected defense Spring 2020.
Awards: Michigan Lake and Stream Leaders Institute, 2015; Michigan State University Graduate School Tuition Fellowship, 2014-2018

(6) **Erin Tracy.** Bridging gaps in information: Strategies for improving natural resource management in a changing climate. Began September 2016; defended Summer 2019.
Awards: John Robertson – Theodore Roosevelt Conservation and Environmental Leadership Fellowship, 2016-2017, $2500; Janice Lee Fenske Excellence in Fisheries Management Fellowship 2017-2018; Emerging Leaders Program, Great Lakes Leadership Academy 2018; Fisheries and Wildlife Graduate Student Organization Travel Grant, $300, Spring 2019; Ball Fellowship, $2500, 2019-2020, Department of Fisheries and Wildlife

(5) **Janet Hsiao**. Linkages between inland aquatic ecosystems and coastal habitats. Began September 2014; defended Fall 2017.
Awards: Fisheries and Wildlife Graduate Student Organization Travel Grant, $150, Spring 2015; Department of Fisheries and Wildlife Graduate Fellowship, $375, Spring 2016; Ball Fellowship, $5000,

2016-2017, Department of Fisheries and Wildlife; Emerging Leaders Program, Great Lakes Leadership Academy, 2016; Fred Poston Scholarship, $1000, 2016

(4) **Jacqueline L. Fenner**. Developing spatial decision-support tools for Hawaiian ecosystem managers. Began September 2010; left program voluntarily in Spring 2012 following change in career focus.
Awards: Academic Achievement Graduate Assistantship (AAGA), Summer 2010-Spring 2011, Michigan State University; Theodore (Teddy) Roosevelt Conservation and Environmental Leadership Fellowship, Spring 2011; Emerging Leaders Program, Great Lakes Leadership Academy, 2011

(3) **Jared A. Ross.** Effects of riparian timber harvest on anadromous fish habitat in southeast Alaska streams Began September 2010; defended Fall 2013.
Awards: Research grant from Schrems West Michigan Chapter of Trout Unlimited, $2000, March 2011

(2) **Arthur R. Cooper**. Fragmentation by dams: Assessing river connectivity in the conterminous U.S. with focus on the impacts of dams on fish assemblages in Michigan, Wisconsin, and Minnesota. Began September 2008; defended Fall 2013.
Awards: Ball Fellowship, $5000, 2008-2009, Department of Fisheries and Wildlife

(1) **Ralph W. Tingley III**. A landscape-scale analysis of factors limiting distributions and abundances of Arctic Grayling (*Thymallus arcticus*) in Michigan rivers. Began September 2007; defended Spring 2010.
Awards: Ball Fellowship, $5000, 2007-2008, Department of Fisheries and Wildlife; Paul H. Young Chapter of Trout Unlimited, $1000 research grant, April 2008; Travel grant, $125, Michigan Chapter of the American Fisheries Society, March 2008; Travel grant, $125, Department of Fisheries and Wildlife to attend the North American Benthological Society Meeting, May 2009; Research grant from Schrems West Michigan Chapter of Trout Unlimited, $2000, March 2009; Red Cedar Fly Fishers Scholarship, $1000, June 2009; Summer Retention Fellowship, 2009, College of Agriculture and Natural Resources

Primary advisor, post-doctoral research associates

(7) **Hao Yu**. Project: Aquatic GAP Analysis Program: Enhancing data and approaches for conserving the Nation's inland aquatic ecosystems. To begin in August 2019.

(6) **William Fetzer.** Jointly advised by Dr. Brian Roth. Projects: June 2013 to March 2016.

(5) **Wesley Daniel**. Project: A national assessment of the status of fish habitat. May 2012 to May 2017.

(4) **Yin-Phan Tsang**. Projects: Managing the Nation's fish habitat at multiple spatial scales in a rapidly changing climate, Aquatic GAP Program: Developing data and approaches to support conservation of aquatic ecosystems across the Nation, A stream temperature inventory network and decision support metadata mapper - Evaluating the resources to understanding climate change effects on streams in New England and the Great Lakes States, and Developing a decision support process to aid in conservation of aquatic habitats throughout the Main Hawaiian Islands. August 2010 to July 2015.
Award: 2011 Women Evolving the Biological Sciences Symposia Participant, November 6-9, Durham, North Carolina

(3) **Damon Krueger**. Projects: Managing the Nation's fish habitat at multiple spatial scales in a rapidly changing climate and Aquatic GAP Analysis Program: Developing landscape-scale understanding, approaches, and data for managing aquatic biodiversity. March 2010 to April 2014.

(2) **Peter Esselman**. Project: An initial national assessment of the status of fish habitats. February 2009 to February 2011.

(1) **Dayong Wu**. Projects: "An initial national assessment of the status of fish habitats" and "Aquatic GAP analysis program: A search for new paradigms to guide future research." February 2007 to December 2008.

Fulbright mentorship

(1) **Rafaela Schinegger,** Fulbright Scholar (Austria), 2015.

Visiting international students

(1) **Marlene Ublacker**, Spring 2017, visiting graduate student from the University of Natural Resources and Life Science, Vienna, Austria.
(2) **Wolfgang Obruca**, Spring 2014, visiting graduate student from the University of Natural Resources and Life Sciences, Vienna, Austria.

Committee member, **doctoral students**

(9) **Shane Flinn**, Kelly Robinson, primary advisor.
(8) **Melanie Haslauer**, Stefan Schmutz, primary advisor. Institute of Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences, Vienna, Austria.
(7) **Joseph Stachelek**, Pat Soranno, primary advisor.
(6) **Katelyn King**, Kendra Cheruvelil, primary advisor.
(5) **Laura Twardochleb**, Phoebe Zarnetske, primary advisor. How will global warming and predator-prey interactions affect populations of freshwater invertebrates?
(4) **Johnathan Hegna**, Kim Scribner, primary advisor. Juvenile lake sturgeon downstream passage behavior and survival at two hydroelectric dams.
(3) **Andrew Carlson**, William W. Taylor, primary advisor. Forecasting stream salmonid growth and survival in a changing climate with implications for resilience-based management. Defended Spring 2019.
(2) **Betsy Riley**, William W. Taylor, primary advisor. Natural resources, community engagement, and policy: Using interdisciplinary methodologies to study complex policy solutions. Defended Spring 2019.
(1) **Amy Schueller**, Daniel Hayes, primary advisor. Evaluation of lake sturgeon rehabilitation strategies using an individual-based model of demographics and genetics. Defended Summer 2009.

Committee member, MS students

(9) **Connor Buckley**, Kelly Robinson, primary advisor.
(8) **Marlene Ublacker**, Rafaela Schinegger, primary advisor, Institute for Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences, Vienna, Austria. Human stressors and their impacts on freshwater fish communities – a cross-continental comparison of European and United States Freshwater Ecoregions.
(7) **Marissa (Hammond) Decosta**, William W. Taylor, primary advisor. Assessing the change in Lake Whitefish (*Coregonus clupeaformis*) maturity schedules from 1976-2013 in the upper Great Lakes. Defended Spring 2015.
(6) **Kelsey Schlee**, William W. Taylor, primary advisor. The impact of climate change on brook trout (*Salvelinus fontinalis*) thermal habitat in the United States. Defended Fall 2014.
(5) **Kiira Siitari**, William W. Taylor, primary advisor. A landscape perspective on the distribution and harvest of North American river otters in Michigan in relation to prey availability. Defended Summer 2012.
(4) **Kerryann Waco**, William W. Taylor, primary advisor. Relationship of groundwater extraction to brook trout populations in Twin and Chippewa Creeks, Cedar Township, Osceola County, Michigan. Defended Summer 2009.
(3) **Steven Sutton**, William W. Taylor, primary advisor. Effectiveness of the Michigan Natural Rivers Program. Defended Spring 2009.
(2) **Mustafa Mazher,** Joan Rose, primary advisor. Transport and survival of *Escherichia coli* within soil aggregates. Defended Spring 2009.
(1) **Kristine Boley-Morse**, William W. Taylor, primary advisor. A classification of stream types and regional reference curves for Michigan. Defended Spring 2009.

External dissertation examiner

(3) **Edward Krynak**, Western University, Ontario, Canada. Defended Fall 2018.
(2) **Gabriel Brejao**, University of Campinas, Sao Paulo, Brazil. Defended Spring 2018.
(1) **Jaquelini De Oliveira Zeni**, Sao Paulo State University, Sao Paulo, Brazil. Defended Spring 2017.

MSU SERVICE

University

- Water Science Curriculum Committee, 2018 to present
- College of Veterinary Medicine Dean Search Committee, 2018
- University Distinguished Fellowship Review Committee, 2018, 2019, 2020
- University Jurisdictional Appeal Panel, August 2017
- Multi-Institutional Land Grant Partnership Initiative, 2014 to present
- University Academic Appeals Board, 2008-2010
- Proposal Reviewer, Center for Water Science, 2007-2008
- Panel Discussion, "Life as a New Faculty Member," Zoology 801, October 2007

College

- College Advisory Committee Alternate, College of Agriculture and Natural Resources, 2017
- ESPP Interdisciplinary Team Building Initiative Proposal Reviewer, June 2017
- College of Agriculture and Natural Resources Microgrant Proposal Reviews, June 2017
- Proposal reviewer, Michigan AgBioResearch, 2007-present

Department of Fisheries and Wildlife

- ad hoc Strategic Planning Team, team member, Water Sciences Research Committee, chair, 2019
- ad hoc Space Committee, chair, 2019
- Relationship Violence and Sexual Misconduct Point of Contact, 2018-present
- Search Committee, Assistant Professor, Fixed Term, Great Lakes Acoustic Telemetry Observation System (GLATOS) Director, committee member and affirmative action advocate, 2018
- Search Committee, Assistant/Associate Professor, Tenure Track, Global Inland Fisheries Ecology and Governance position, committee member and affirmative action advocate, 2015 to 2018
- National Climate Change and Wildlife Science Center Science to Action Fellowship Committee, committee member, 2014-present
- Department Advisory Committee, committee member and chair, 2014 to 2017
- Graduate Committee, committee member, 2012-2013
- Janice Lee Fenske Excellence in Fisheries Management Fellowship Committee, committee chair, 2006-present
- Curriculum Committee, committee member, 2008-2010
- Student Presentation Judge, Graduate Student Research Symposiums, 2007, 2008, and 2009
- ad hoc Committee on Student Awards, 2008
- Department faculty meeting minute taker, 2007

RECENT EXTERNAL SERVICE

- Nominated and selected to serve as a member of the Independent Scientific Advisory Board, Northwest Power and Conservation Council, Columbia River Basin Indian Tribes and National Marine Fisheries Service, 2019-2022.
- Invited panelist, Discussion of impacts of climate change on the Great Lakes: biology, hydrology, and coastlines. 2019 Science-Policy Confluence Conference: Understanding and Addressing Climate Change Impacts on the Great Lakes, March 28-29. 2019, Chicago, Illinois.
- Invited panelist, Discussion on STEM, Engagement, and Policy Careers, Michigan Sea Grant Community-Engaged Research Institute, July 12, 2017, Bath, Michigan.
- Environmental Metrics for Hydropower Science Advisory Board Member, in support of Oak Ridge National Laboratories and the U.S. Department of Energy, 2017 to present.