

Holly A. Hereau
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Education University of Michigan Ann Arbor, MI
Department of Education
MA Education

Michigan State University East Lansing, MI
Plant Science Fellowship
MS candidate Department of Entomology
Emphasis in Ecology Evolutionary Biology and Behavior

Grand Valley State University Allendale, MI
BS Biology, Cum Laude, May 2000

Teaching Experience *Macomb Community College* Clinton Township, MI
Adjunct Professor, Biology Department August 2011 - present
Develop and deliver lectures in Biology 1000 (General Biology I), Biology 1310 (Environmental Science) and Biology 1400 (Fundamentals of Nutrition) classes in face to face, virtual and blended learning environments. Facilitate labs in Biology 1000 and 1310. Design and grade quizzes, exams and writing assignments that align with departmental course objectives.

Thurston High School Redford, MI
Biology Teacher and Science Department Chair September 2005 - present
Collaborate with other Biology teachers to create and implement Honors Biology, AP Biology, AP Environmental Science course maps for the Science Department that align with Next Generation Science Standards. Execute lessons and units in AP Biology, AP Environmental Science and Honors and General Biology (past classes taught include Forensic Science, Chemistry and Honors Chemistry). Facilitate independent student research in biological topics. Lead department meetings, coordinate lab space and materials as well as assist instructors as needed within the science department. Instruct Algebra I, Algebra II and Geometry classes in summer school.

Michigan State University East Lansing, MI
Teaching Assistant August 2002 – April 2004
Designed lesson plans, lectured, assisted students with lab work and graded tests, quizzes and research papers for Integrated Studies in Biology Lab (ISB 208L). Participated in weekly seminars that discussed current pedagogy. Graded tests, quizzes and insect collections for General Entomology lab (ENT 404). Assisted students with insect identification and other lab activities.

Related Experience *University of Michigan* Ann Arbor, MI
MAC program Mentor for Intern teachers 2007-present
Mentor interns/student teachers during a full-year placement. Evaluate growth quarterly and provide feedback, suggestions, ask questions, answer questions and give direction. Model effective planning and collaboration.

Educational Testing Services Kansas City, MO
AP Biology Reader 2012-present
Score free response section of the AP Biology exam. Trained to follow rubric accurately and consistently to ensure each student is assessed fairly. Collaborate with other AP Biology teachers and college professors of Biology throughout the country during several professional development opportunities.

Educational Testing Services
Chief/Group Scoring Leader/rater

Kansas City, MO
2015-present

Currently scoring pre-service teachers' PRAXIS exams. Previous scoring projects included the Texas STAAR and the writing portion of the redesigned SAT. Provide raters and scoring leaders with feedback, support, and advice while they score candidates' test responses. Mentor and monitor scoring leaders and raters, communicate with Test Development and Performance Assessment Scoring Services, score responses that require special handling, identify responses that may serve as potential samples for training materials and provide rater training or help with other program projects as needed.

Pearson

Portfolio Rater for edTPA

2017-present

Review portfolios of intern teachers to determine the extent their evidence of practice aligns with the criteria set forth by the edTPA Secondary Science rubric.

Research Experience

Michigan State University

Advising Professor: Mark Scriber

Studied mate preference in Tiger swallowtail butterflies (*Papilio canadensis*). Male Tiger swallowtails prefer to mate with yellow morph heterospecific (*Papilio glaucus*) females, but not dark morph *P. glaucus* females in two-choice tests in a Michigan hybrid zone. Specific mate recognition cues used by males of the species are apparently different. Examined potential explanations and the behavioral, ecological and evolutionary implications for this interspecific difference. (May 2001-2004)

Grand Valley State University

Advising Professor: James Dunn

Sampled several relict prairies in Newaygo and Mecosta counties in summers of 2000 and 2001. Counted and identified all Homoptera collected via sweep nets to examine species diversity and abundance within and between prairies. Data collected contributed to study of fragmented habitats, and updated Michigan state records for these insects. (June 2000-May 2002)

Grand Valley State University

Advising Professor: Michael P. Lombardo

Presented a review looking at the intraspecific transmission of beneficial microbes between individuals across animal groups ranging from termites to humans, and how the transmission of beneficial microbes may be a factor in the evolution of social behavior. (1998-1999)

Publications

Dunn, James P, Matt Johnson, Holly Hereau and Casie Summerfield. 2003. Rare or elusive: Distribution and site quality of a Michigan threatened specie the hilltop spittlebug, *Lepyronia gibbosa* (Homoptera: Cercopidae). *17th Annual Meeting of the Society for Conservation Biology, Duluth MN.* (Abstract Volume).

Dunn, James P, Holly Hereau and Casie Summerfield. 2002. Threatened Homoptera of Michigan's Prairies: Rare or Elusive? *Michigan Academician*, Vol. 34: 30-31

Hereau, H. and J.M. Scriber. 2003. Interspecific copulation of a dark morph *Papilio glaucus* female and a male *P. polyxenes* (Papilionidae): observation and significance. *Journal of the Lepidopterists' Society* 57(1): 71-74.

Hereau, H. and J.M. Scriber. 2002. T158. Heterospecific preferences of male *Papilio canadensis* are extended only to yellow, not dark morph *Papilio glaucus* females in field tethering studies. *Fourth International Conference on the Biology of Butterflies*. Leiden, Netherlands, March 2002 (Abstract Volume).

Scriber, J.M., M. Deering, J. Donovan, H. Hereau, G. Ording and A. Stump. 2002. Species at the edge: island refuges, altitudinal alterations, interspecific hybridization, and climate-driven range extensions of North American Butterflies. *Proc. 10th Insects in Captivity Conf., SASI, Tucson, AZ.* 10: 178-185.

Scriber, J.M., H. Hereau and G. Ording. 2002. T163. Recent global warming enhances interspecific hybridization of swallowtail butterflies: Seasonal thermal unit accumulations alter species range edges and predict trait step clines. *Sixth International Congress Systematics and Evolutionary Biology, Patras GREECE.* (Abstract Volume, 27).

Posters and Presentations Student Drivers - Driving Question Boards empower students to figure out what they really need to know and how they will get there. Presentation at the Michigan Science Teacher Association 65th Annual Conference. Lansing, MI. March 4th 2018.

Next Generation Storylines: Science and Literacy Practices. Presentation at the Wayne RESA Science Leaders Meeting. December 12th 2017.

Heterospecific preferences of male *Papilio canadensis* are extended only to yellow, not dark morph *Papilio glaucus* females in field tethering studies. Poster presentation at the 4th International Conference on the Biology of Butterflies. Leeuwenhorst, Netherlands. March 2002.

Additional Experience

NGSX Facilitators Pathway (2018)
Wayne RESA - 3D Science Assessment Writing workshop (2017)
Northwestern University - NextGen Learn While Teaching Project (2017)
NGSX Moore Evolution Enactment Virtual Study Group (2017)
Northwestern University - NextGen Storyline Pilot "Why don't antibiotics work like they used to?" (2017)
NOAA Planet Stewards Education Project (PSEP) Stewardship Community (2017-2018)
Friends of the Rouge - Rouge Education Project (2017-2018)
Michigan State University - Introduction to Lakes Course (2018)
Michigan State University Michigan Natural Features Inventory - Healthy Watersheds workshop (2017)
MEA Carbon TIME Network - Cohort 2 (2017-2019)
ETS - Using Mathematical Thinking in Science Project (2017-2021)
NOAA/Inland Seas/Earth Force - Great Lakes Watershed Field Course (2017-2018)
AP Environmental Science with WE Service Pilot Cohort (2017-2018)
Friends of Lucas Education Research - AP Environmental Science PBL Group (2017-2018)
Wayne RESA - Next Generation Science Exemplar (NGSX) Cohort IV (2016)
Cornell Lab of Ornithology Bird Academy - Feeder Bird Identification and Behavior (2017)
Cornell Lab of Ornithology - Project FeederWatch (2017)
Michigan Science Professional Learning Network Cohort (2015)
University of Michigan - Committee to develop Intern Competency Evaluation (2013-2014)
University of Michigan - Engineering Education Learning Experiences project (2014-2016)
Ohio State University - HS Expert Review Panel for the Secondary Biology Concept Inventory (2015)
University of Pittsburgh – BLOOM - NGSS and Modeling in Biology project (2013-2014)
University of Michigan - NGSS Ecology and Climate Change Curriculum Pilot (2013-2014)
National School Reform Faculty - Critical Friends Groups Facilitator (2012-2016)
Wayne RESA - Formative Assessment Facilitator Training (2011-2012)
University of Michigan - FUTURE program classroom (2009-2011)
Oakland/Wayne County Schools - Galileo Leadership Consortium (2009-2011)
Oakland Schools - Reading Apprenticeship Training (2007-2008)

Coaching

Thurston High School Varsity Cheer Coach (2008-present)
Thurston High School Varsity Softball Coach (2005-2012)
Redford Rugby Club Youth Coordinator and Coach (2006-2010)

Activities

National Honor Society Lee M. Thurston Chapter Adviser (2009-present)
SAGA (Sexuality and Gender Acceptance) Lee M Thurston Faculty Sponsor (2010-present)
Science Olympiad Region 8 Tournament Event Supervisor (2006, 2016-2017)
Midwest Territorial Rugby Union Women's DI and DII Commissioner (2009-2013)
Detroit Rugby Football Club Development of Youth Rugby Programs (August 2003-2013)
Detroit Rugby Football Club Vice President of Operations (August 2003-2013)
Motor City Endurance Triathlon Club (2011-2017)
Community Living Concepts and Alternative Services Inc. Board of Directors (2015-present)

Awards/ Recognition

Dan Wolz Clean Water Education Grant 2018
Cornell Lab of Ornithology Garden Grant 2017
Meemic Classroom Improvement Mini Grant 2017
NSTA Amgen Fellow 2007-2008
MSU Plant Science Recruiting Fellowship 2001-2003
GVSU Top Five Outstanding Biology Graduates Class of 1998

GVSU Beta Beta Beta biology honor society - inducted 1998
Phi Kappa Phi National Honor Society - inducted 1998
Louis Armstrong Award - Outstanding Jazz Musician GVSU Studio Jazz Orchestra 1998
GVSU Biology Department Outstanding Biology Major (GPA 3.7+) 1994-2000
Alice G. Tenbrink Scholarship GVSU 94-98
Jazz Chamber Orchestra Scholarship GVSU 95-98
GVSU Faculty Scholarship 94-98
GVSU Award of Excellence 94-98

Professional/ National Science Teachers Association
Environmental National Biology Teachers Association
Organization Michigan Science Teachers Association
Memberships Michigan Alliance for Environmental and Outdoor Education
Metropolitan Detroit Science Teachers Association
Friends of the Rogue
Michigan Water Environment Association
Michigan Nature Association
The Nature Conservancy
Cornell Lab of Ornithology
National Audubon Society
Sierra Club