

CURRICULUM VITAE

Paul P. Tinerella, PhD
Curator & Instructor

Department of Entomology
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ACADEMIC DEGREES

- PhD, Entomology, 2006.** North Dakota State University. **PhD Dissertation:**
Phylogenetic ingroup relationships of the water boatmen (Insecta: Heteroptera: Corixoidea) and systematics of Australasian pygmy water boatmen (Corixoidea: Micronectidae) 611 pp. Advisor: Dr. David A. Rider
- MS, Entomology, 2000.** North Dakota State University. **M.S. Thesis:** The ground beetles (Insecta: Coleoptera: Carabidae) of tallgrass prairie remnants in western Minnesota 183 pp. Advisor: Dr. David A. Rider
- BS, Zoology, 1997.** St. Cloud State University, St. Cloud, MN. **Undergraduate Thesis:** Radiometric age determination and identification of wood samples from the St. Croix Moraine, East Central Minnesota. Thesis Advisor: Dr. Garry G. Anderson

PROFESSIONAL EXPERIENCE

- 2010-Present: Curator of Entomology, [University of Minnesota Insect Collection](#), Department of Entomology, University of Minnesota, St. Paul, MN
- 2010-Present: Instructor, Honors Program; Environmental Sciences; [Environmental Science, Policy, & Management Program](#), U of MN, Minneapolis, MN
- 2010-Present: Graduate Faculty, Department of Entomology, University of Minnesota, St. Paul, MN
- 2010-Present: Adjunct Assistant Professor, [Department of Entomology](#), University of Minnesota, St. Paul, MN
- 2008-2010: Adjunct Assistant Professor: Department of Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign
- 2007-2010: Systematic Entomologist & Entomology Collections Manager: Illinois Natural History Survey, University of Illinois at Urbana-Champaign
- 2008-Present: Taxonomic Working Group Leader and Advisory Scientist: aquatic true bugs (Heteroptera) and beetles (Coleoptera). U.S. National Park Service.
- 2006-2007: Post-Doctoral Research Fellow: Insect Systematics; Department of Entomology, Michigan State University. Mentor: Dr. Anthony I. Cognato

- 2006-2007: Adjunct Curator: Heteroptera, A. J. Cook Arthropod Research Collection. Department of Entomology, Michigan State University.
- 2004-2006: EPSCoR/ National Science Foundation Ph.D. Candidate Scholar: Department of Entomology, North Dakota State University. Advisor: Dr. David A. Rider
- 2003-2004: Fulbright Scholar: United States Department of State and the Australian-American Fulbright Commission: Centre For Biodiversity and Conservation Research, The Australian Museum, Sydney, NSW, Australia. Mentor: Dr. Gerry Cassis
- 2002-2003: National Science Foundation GraSUS GK-12 Teaching Fellow: CSME, North Dakota State University. Moorhead Senior High School, 9-12 grade Science, Moorhead, Minnesota.
- 2001-2002: National Science Foundation GraSUS GK-12 Teaching Fellow: CSME, North Dakota State University. Discovery Junior High and Moorhead Junior High School, 8th grade Science. Fargo, North Dakota and Moorhead, Minnesota.
- 2001: Temporary Assistant Professor: Insect Morphology; Department of Entomology, North Dakota State University.
- 2000-2006: Graduate Research Assistant: Department of Entomology, North Dakota State University. (Ph.D. candidacy) Advisor: Dr. David A. Rider
- 1997-2000: Graduate Research Assistant: Department of Entomology, North Dakota State University. (M.S. degree) Advisor: Dr. David A. Rider
- 1997-2006: Curator: aquatic and semiaquatic Heteroptera and aquatic Coleoptera, North Dakota State Insect Reference Collection, Department of Entomology, North Dakota State University.
- 1997-2001: Graduate Teaching Assistant: General Entomology, Department of Entomology, North Dakota State University.
- 1997-2001: Graduate Teaching Assistant: Horticultural Entomology, Department of Entomology, North Dakota State University.
- 1997-2001: Graduate Teaching Assistant: Aquatic Entomology, Department of Entomology, North Dakota State University.
- 1994-1997: Assistant Curator: St. Cloud State University Insect Collection, Department of Biological Sciences, St. Cloud State University, St. Cloud, MN.
- 1996-1997. Teaching Assistant: General Entomology, Department of Biological Science, St. Cloud State University, St. Cloud, MN.
- 1996-1997. Teaching Assistant: Aquatic Entomology, Department of Biological Sciences, St. Cloud State University, St. Cloud, MN.
- 1996-1997. Teaching Assistant: Physical Geology, Department of Earth Sciences, St. Cloud State University, St. Cloud, MN.
- 1996-1997. Teaching Assistant: Historical Geology, Department of Earth Sciences, St. Cloud State University, St. Cloud, MN.

1995-1997: Student Technician: Department of Earth Sciences, St. Cloud State University, St. Cloud, MN.

1991-1992: Natural Sciences Technician: Museum of Discovery and Science, Ft. Lauderdale, FL.

1989-1991: United States Army, Active Duty: M-1 Abrams Tank Turret Mechanic.

RESEARCH ACTIVITIES (Curation & Collections)

GRANTS (AWARDED)

2012. Tinerella, P.P. (**Principal Investigator**). Biotic inventory of aquatic true bugs (Insecta: Heteroptera) of Big Thicket National Preserve, Texas, USA. [Big Thicket Association](#) and U. S. National Park Service. All Taxa Biotic Inventory (ATBI). (supplement: **\$1350; 1 year**)
2012. Tinerella, P.P. (**Principal Investigator**). NSF-Research Experience for Undergraduates (REU) Supplement: NSF-CSBR Program (**\$8,000; 1 year**)
2011. Tinerella, P.P. (**Principal Investigator**). Identification of arthropods of native and restored Minnesota tallgrass prairies. Minnesota Department of Natural Resources State Wildlife Research Grant. (**\$17,188.00; 6 months**)
2011. Tinerella, P.P. (**Principal Investigator**). Supplement for Collections Transfer: NSF-CSBR Program: Collection Transfer - USGS National Water Quality Insect Collection to University of Minnesota Insect Collection. (**\$50,000.00; 1 year**)
2011. Tinerella, P.P. (**Principal Investigator**), and R. W. Holzenthal. Digitization TCN: InvertNet - An Integrative Platform for Research on Environmental Change, Species Discovery, and Identification. NSF-EF: Advancing Digitization of Biological Collections Program. (**\$454,127.00; 4 years**)
2010. Tinerella, P.P. (**Principal Investigator**). Automation of Natural History Collections and Bioinformatics: Rapid Optical Data Acquisition and Automated Computerization at INHS. [NSF-DBI: Improving Biological Research Collections Program](#). (**\$278,064.00; 3 years**)
2010. Tinerella, P.P. (**Principal Investigator**), Five-year review of the federal recovery plan for the Hines emerald dragonfly, *Somatochlora hinei*. United States Fish and Wildlife Service & Illinois Department of Natural Resources. (**\$6667.00; 1 year**)
2009. Tinerella, P.P. (**Principal Investigator**), Biotic inventory of aquatic true bugs (Insecta: Heteroptera) of Big Thicket National Preserve, Texas, USA. Big Thicket Association and U. S. National Park Service. All Taxa Biotic Inventory. (**\$9,930.00; 2 years**)
2008. Tinerella, P.P. (**Principal Investigator**), Inventory of aquatic true bugs (Insecta: Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of the Great Smoky Mountains National Park, Tennessee and North Carolina, USA. Discover Life in America, Inc. ATBI-GRSM-NPS Grant Program. (**\$4,946.00; 1 year**)

2003. **Fulbright Postgraduate Scholarship:** The Australian Museum, Sydney, New South Wales, Australia. U.S. Department of State, International Institute of Education, and Australian-American Fulbright Commission. One-year postgraduate fellowship for study to Centre for Biodiversity and Conservation Research, The Australian Museum, Sydney. **(\$21,000.00 USD; 1 year)**
2003. CanaCOLL: Collection Study Grant. Canadian National Arthropod and Insect Collection, Ottawa, Ontario. Taxonomic research on aquatic Heteroptera. **(\$1,100.00)**
2001. Knipling Research Enhancement Grant. Department of Entomology, North Dakota State University. “Scanning Electron Microscopy study of *Micronecta* spp. genitalia (Heteroptera: Corixidae)” **(\$800.00)**
1999. Knipling Research Enhancement Grant. Department of Entomology, North Dakota State University. “Scanning Electron Microscopy study of the wing-to-wing coupling device in the Hemipteroid orders.” **(\$600.00)**
1998. Florida Entomological Society (FES) Minigrant Recipient. Proposal Title: “The Corixidae of North Dakota (Insecta: Heteroptera)”. **(\$100.00)**

RESEARCH PUBLICATIONS

2013. Koch, R.L., and P.P. Tinerella. First detections of brown marmorated stink bug, *Halyomorpha halys* Stål in Minnesota and a checklist of the stink bugs and allies (Pentatomoidea) of Minnesota. Great Lakes Entomologist. [*submitted*]
2013. Tinerella, P.P. Checklist of the water bugs (Insecta: Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of the Great Smoky Mountains National Park, USA. Psyche. [*in review*]
2013. Tinerella, P.P. Taxonomic revision and systematics of Australian pygmy water boatmen. Zootaxa. 3623: 1-121.
2009. Tinerella, P.P., S.J. Taylor, and J.E. McPherson. Checklist and new records of aquatic true bugs (Heteroptera: Nepomorpha) from Illinois. Journal of the Kansas Entomological Society 82: 293-299.
2008. Tinerella, P.P. Taxonomic revision and systematics of New Guinea and Oceania pygmy water boatmen (Heteroptera: Corixoidea: Micronectidae). Zootaxa 1797: 1-66.
2006. Tinerella, P.P., and J. T. Polhemus. A new species of *Neosigara* Lundblad (Heteroptera: Corixidae) from Colombia with a revised key to adults. Russian Entomological Journal 15(2): 221-222.
2006. Tinerella, P.P. A new species of *Micronecta* Kirkaldy from Fiji, with notes on Australasian congeners. In Rabitsch, W., (ed.): Hug the bug – For love of true bugs. Festschrift zum 70. Geburtstag von Ernst Heiss. — Denisia 19: 697-702.
2005. Tinerella, P.P., and R.W. Gundersen. The Corixidae of Minnesota (Insecta: Heteroptera). Pub. No. 23, Schafer-Post Series, North Dakota Insects. North Dakota State University, Fargo, N.D. 119 pp. **ISBN: 0-9766855-0-7**

2005. Tinerella, P.P., and A. W. DeLorme. First records of the creeping water bug *Ambrysus mormon mormon* Montandon (Heteroptera: Naucoridae) from North Dakota. *Journal of the Kansas Entomological Society* 78(2): 176-178.
2004. Tinerella, P.P. and J.T. Polhemus. A new species of *Micronecta* Kirkaldy (Heteroptera: Corixidae: Micronectinae) from Irian Jaya with a key to the *Micronecta* of New Guinea. *Journal of the New York Entomological Society* 112(2): 183-189. (2005)
2003. Tinerella, P.P. New records of ground beetles (Coleoptera: Carabidae) from North Dakota. *Journal of the Kansas Entomological Society* 76(4): 115-118.
2003. Fauske, G.M., P.P. Tinerella, and D.A. Rider. A list of the lady beetles (Coleoptera: Coccinellidae) of North Dakota with new records from North Dakota and Minnesota. *Journal of the Kansas Entomological Society* 76(1): 38-46.
2001. Tinerella, P.P., and D.A. Rider. New records of five ground beetles (Coleoptera: Carabidae) for Minnesota. *Entomological News* 112(5): 319-322.
2000. Tinerella, P.P., and D.A. Rider. Occurrence of the tiger beetle *Cicindela cursitans* LeConte (Coleoptera: Carabidae) in Northwestern Minnesota. *Entomological News*. 111(5): 367-369.
2000. Tinerella, P.P. First report of *Calleida purpurea* Say (Coleoptera: Carabidae) in Minnesota and a note of its occurrence on *Anemone patens* L. *Entomological News* 111(3): 193-195.
1999. Tinerella, P.P., and G.M. Fauske. Occurrence of *Onthophagus nuchicornis* Linnaeus in North Dakota. *Entomological News* 110(1): 22-26.
1997. Gundersen, R.W., and P.P. Tinerella. Minnesota Dytiscidae II Laccophilinae, and Colymbetinae, except *Agabus*. *Occasional Papers in Aquatic Biology* St. Cloud State University, Vol. 4, No.1. 54 pp.

TECHNICAL REPORTS

2012. Tinerella, P.P. Aquatic true bugs (Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of Big Thicket National Preserve. III. Preliminary Checklist, distributions, and habitat classification. Thicket of Diversity and National Park Service, BITH NPS/ATBI Report.
2011. Tinerella, P.P. Aquatic true bugs (Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of Big Thicket National Preserve. III. Preliminary Checklist, distributions, and habitat classification. Thicket of Diversity and National Park Service, BITH NPS/ATBI Report.
2010. Tinerella, P.P. Aquatic true bugs (Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of Big Thicket National Preserve. II. Preliminary checklist and distributions. Thicket of Diversity and National Park Service, BITH NPS ATBI Report.

2009. Tinerella, P.P. Aquatic true bugs (Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of Big Thicket National Preserve. I. Preliminary Checklist. Thicket of Diversity and National Park Service, BITH NPS/ATBI Report.
2009. Tinerella, P.P. Inventory of aquatic true bugs (Insecta: Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha) of the Great Smoky Mountains National Park, North Carolina & Tennessee, USA. U.S. National Park Service Technical Report 2009 (22): 1-6.

ABSTRACTS

2013. Wilbrandt, G.M. and P.P. Tinerella. Collections Digitization and Biodiversity Data Discovery: Explorations of Specimen-Based Taxonomy in the Digital World. Proceedings of the 28th Annual Meeting of the Society for the Preservation of Natural History Collections.
2012. Wilbrandt, G.M. and P.P. Tinerella. What is *Sigara* Fabricius (Heteroptera: Corixidae)? 237 years of fascinations, frustrations, and facies. Proceedings of the 68th Annual Entomological Society of Manitoba.
2012. J.L. Snyder and P.P. Tinerella. The Land of 10,000 Lakes and 10,000 Habitats?: Minnesota Water Bug Faunistics, Taxonomy, and Biology (Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha). Proceedings of the 68th Annual Entomological Society of Manitoba.
2012. Tinerella, P.P., G.M. Wilbrandt, J.L. Snyder, and R.W. Holzenthal. Advances in collections digitization and biodiversity data discovery: Status and accessibility of the University of Minnesota [Virtual] Insect Collection (UMSP). Proceedings of the 68th Annual Entomological Society of Manitoba.
2010. Tinerella, P.P., and S.W. Heads. Revision of the aquatic true bugs (Insecta: Heteroptera) of the Crato Formation (Lower Cretaceous) from northeastern Brazil. Transactions of the Illinois State Academy of Sciences. 103: 65.
2010. Jana, R., and P.P. Tinerella. The Ticks of Illinois (Arachnida: Acari: Ixodida): A WWW Online Resource for Identification, Distribution, Biology, and Epidemiological Associations. Transactions of the Illinois State Academy of Sciences. 103: 70.
2008. Fleener, C.E., and P.P. Tinerella. Comparison of an additional ribosomal DNA fragment (28S rDNA d2-3 region) contributing to a molecular phylogeny of the water boatmen. Transactions of the Illinois State Academy of Sciences. 101: 52.
2008. Tinerella, P.P., and S.J. Taylor. From days of oar: preliminary results of a survey of the water bugs of Illinois (Heteroptera: Nepomorpha). Transactions of the Illinois State Academy of Sciences. 101: 50.
2000. Tinerella, P.P., and D.A. Rider. The ground beetles (Coleoptera: Carabidae) of tallgrass prairie remnants in Western Minnesota. Proceedings of the 92nd Annual Meeting of the North Dakota Academy of Science. Moorhead, MN.

1998. Tinerella, P.P. and D.A. Rider. The carabid habit: Ground beetle life on the Northern tallgrass prairie. Proceedings of the Sixty-ninth Rocky Mountain Conference of Entomologists (RMCE). Woodland Park, CO.

PRESENTATIONS

Invited Presentations

2011. Biodiversity Assessment, Inventory, and Monitoring: Integrated studies on the aquatic true bug and aquatic beetle biota of Big Thicket National Preserve. Eastfield College NSF-STEM Summer Field Research Program, Big Thicket National Preserve, Saratoga, TX & Mesquite, TX.
2011. Aquatic Insect Bioacoustics and Biodiversity Assessment: The (Underwater) Message... Eastfield College NSF-STEM Summer Field Research Program, Big Thicket National Preserve, Saratoga, TX & Mesquite, TX.
2010. Bugs, Beetles, and Biodiversity: From taxonomy to ecosystems. U.S. National Park Service, Big Thicket National Preserve Field Research Station, Saratoga, TX. All Taxa Biodiversity Inventory (ATBI).
2010. Rapid Automation and Data Acquisition Workflows in Natural History Collections: Digital Biological Collections Working Group; NSF-National Evolutionary Synthesis Center (NESCent); Duke University, Raleigh, NC
2010. Biological Collections Data Acquisition and Integration. Workshop presenter and participant. NSF-Research Coordination Network: CollectionsWeb; Tulane University, New Orleans, LA
2009. Midwest Environmental Education Conference. Insects and Biodiversity: The value of scientific collections. Seminar and INHS Entomology Collections tour.
2009. Water bug systematics (Heteroptera): Status and future directions. University of California – Riverside, BIOSYNC Encyclopedia of Life (EOL) Heteroptera Synthesis Meeting.
2008. Bugs, Bauplan, and Bioacoustics: Towards a synthesis of the water bugs (Insecta: Heteroptera: Nepomorpha). Faculty Affiliate Seminar; Department of Entomology, UIUC.
2006. Annual Meeting of the Entomological Society of America. Systematics of the water boatmen (Heteroptera: Corixoidea): Status, advances, and future direction.
2006. Seminar Series, Department of Biology, University of North Dakota, Grand Forks, ND. Systematics of the pygmy water boatmen (Heteroptera: Corixidae: Micronectinae).
2004. XXII International Congress of Entomology, Brisbane, Queensland, Australia. The Micronectinae (Heteroptera: Corixidae) of the Australian region: diversity and biogeography, co-author: Dr. David A. Rider.
2002. Annual Meeting of the Entomological Society of America. Systematics and Zoogeography of Micronectinae (Heteroptera: Corixidae).

2001. Annual Meeting of the Entomological Society of America. An SEM survey of the wing-coupling device in the Heteroptera and related groups, co-author: Dr. David A. Rider.
2000. Annual Meeting of the North Dakota Academy of Science. The ground beetles (Coleoptera: Carabidae) of tallgrass prairie remnants in Western Minnesota, co-author: Dr. David A. Rider.
1999. University of Minnesota Biological Field Station, Itasca State Park, MN/ MN Department of Natural Resources. Wetland Aquatic Invertebrates of Minnesota.
1999. Annual Meeting of the Minnesota Prairie Chicken Society. Prairie Invertebrates, coauthor: Dr. David A. Rider.
1999. Annual Meeting of the Minnesota Chapter of the Nature Conservancy. Prairie Entomology.
1999. Annual Meeting of the Entomological Society of America, North Central Branch. Prairie Arthropods: Biodiversity and Management: Symposium: The Effects of Standard Prairie Management Practices on Great Plains Tallgrass Prairie Ground Beetles (Coleoptera: Carabidae), co-author: Dr. David A. Rider.

Meeting/ Professional Presentations

2013. Wilbrandt, G.M. and P.P. Tinerella. Collections Digitization and Biodiversity Data Discovery: Explorations of Specimen-Based Taxonomy in the Digital World. 28th Annual Meeting of the Society for the Preservation of Natural History Collections. Rapid City, SD.
2013. Tinerella, P.P., and R.W. Holzenthal. Donation of the USGS NAWQA Macroinvertebrate Collection to the University of Minnesota. 61st Annual Meeting of the Society for Freshwater Science. Jacksonville, FL.
2012. Wilbrandt, G.M. and P.P. Tinerella. 2012. What is *Sigara* Fabricius (Heteroptera: Corixidae)? 237 years of fascinations, frustrations, and facies. 68th Annual Entomological Society of Manitoba. Winnipeg, MB
2012. J.L. Snyder and P.P. Tinerella. 2012. The Land of 10,000 Lakes and 10,000 Habitats?: Minnesota Water Bug Faunistics, Taxonomy, and Biology (Heteroptera: Nepomorpha, Gerromorpha, Leptopodomorpha). 68th Annual Entomological Society of Manitoba. Winnipeg, MB
2012. Tinerella, P.P., G.M. Wilbrandt, J.L. Snyder, and R.W. Holzenthal. Advances in collections digitization and biodiversity data discovery: Status and accessibility of the University of Minnesota [Virtual] Insect Collection (UMSP). 68th Annual Entomological Society of Manitoba. Winnipeg, MB
2010. The ticks (Acari: Ixodida) of Illinois: A WWW online resource for identification, distribution, biology, and epidemiological associations. co-authors: Rebecca Jana* and Nohra Mateus-Panilla. 102nd Illinois State Academy of Sciences meeting, Decatur, IL

2009. *Nomenclatori Nepomorpha*. Towards a unified digital (and paper) water bug catalog. University of California – Riverside, BIOSYNC Encyclopedia of Life (EOL) Heteroptera Synthesis Meeting.
2008. Preliminary results of an inventory of an inventory of aquatic true bugs (Insecta: Heteroptera) of the Great Smoky Mountains National Park, U.S.A. Discover Life in America, 2008 All-Taxa Biotic Inventory Conference. Gatlinburg, TN.
2006. Phylogenetic ingroup relationships of the water boatmen (Insect: Heteroptera: Corixoidea) and systematics of Australasian pygmy water boatmen (Corixoidea: Micronectidae). Ph.D. defense seminar. Department of Entomology, North Dakota State University.
2005. Preliminary phylogeny of the Corixidae based on morphology and molecules, co-authors: Dr. Gerry Cassis, Dr. Rebecca N. Johnson, Dr. Rebecca B. Simmons, Sarah J. Johnson, and Dr. David A Rider. Annual Meeting of the Entomological Society of America.
2002. Systematics of Eastern Hemisphere Micronectinae (Heteroptera: Corixidae): A progress report on studies in Indomalaysia and Oceania, co-author: Dr. David A. Rider. Annual Meeting of the Entomological Society of America, North Central Branch.
2002. The aquatic and semiaquatic true bugs of North Dakota (Heteroptera: Gerromorpha, Nepomorpha, Leptopodomorpha). Annual Meeting of the Entomological Society of America, North Central Branch.
2000. The ground beetles (Coleoptera: Carabidae) of the tallgrass prairie parkland. M.S. Thesis Defense, Department of Entomology, North Dakota State University
2000. South Florida's adventive punk tree *Maleleuca quiquinervia* S. T. Blake: Biology and Biological Control. Graduate Seminar Series; Department of Entomology, North Dakota State University.
2000. The aquatic and semi-aquatic Heteroptera of North Dakota. Graduate Seminar Series; Department of Entomology, North Dakota State University.
1999. Systematics and phylogeny of the lice (Insecta: Phthiraptera), with discussion of medically and veterinary important lice. Medical/ Veterinary Entomology Graduate Seminar Series; Department of Entomology, North Dakota State University.
1998. Ecology of select ground beetle taxa (Coleoptera: Carabidae) of the great plains tallgrass prairie region, co-author: Dr. David A. Rider. Annual Meeting of the Entomological Society of America.
1998. Preliminary results of amorphological analysis of the Heteropterous wing coupling device (Insecta: Heteroptera), co-author: Dr. David A. Rider. Annual Meeting of the Entomological Society of America.
1998. The wing coupling mechanism in Heteroptera, co-author: Dr. David A. Rider. Annual Meeting of the Entomological Society of Manitoba.

1998. The effects of standard management practices on tallgrass prairie arthropods: An overview of research conducted from 1995-97, coauthor: Dr. David A. Rider. Rocky Mountain Entomology Conference.
1998. Wing coupling in the Heteroptera, co-author: Dr. David A. Rider. International Heteropterists Society, 1st Quadrennial Meeting.
1998. The Hemelytra of the Corixidae as a Taxonomic Aid. Sigma Xi, The Scientific Research Society, Student Paper Competition, North Dakota State University.
1998. Bugs on the Oar: A Synopsis of the Water Boatmen (Heteroptera: Corixidae) of the Northern Great Plains, With an Emphasis on the Fauna of Minnesota. Graduate Seminar Series, Department of Entomology, North Dakota State University.
1998. The Effects of Standard Management Practices on Tallgrass Prairie Arthropods: A Preliminary Report on the Ground Beetles (Coleoptera: Carabidae), co-author: Dr. David A. Rider. Annual Meeting of the Entomological Society of America, North Central Branch.
1998. Notes on the use of Hemelytra of the Water Boatmen (Heteroptera: Corixidae) as an Aid in Identification. Annual Meeting of the Entomological Society of America, North Central Branch.
1997. Strike-slip Faulting in Thrusted Glacial Sediments in the Powder Ridge Barrow Pit, Stearns County, Minnesota, co-authored with Thomas Edgar and Dr. Garry G. Anderson. Annual Meeting of the Geological Society of America, North Central Branch.
1996. Structural Influences on Ground Water Movement, Stearns County Quarry Park and Nature Preserve, Minnesota, co-authors: Dr. Jean L. Hoff, Tanya L. Fischer, and Michael A. Harder. Annual Meeting of the Geological Society of America, North Central Branch.
1996. Radiometric Age Determination and Identification of Wood Samples from the St. Croix Moraine, East Central Minnesota, co-authors: Dr. Stephanie S. Digby and Dr. Garry G. Anderson. [**Undergraduate Thesis Presentation**] Annual Meeting of the Geological Society of America, North Central Branch.

SYMPOSIA

1999. Symposium organizer for Entomological Society of America North Central Branch Annual Meeting; "Prairie Arthropods: Biodiversity and Management". Co-organizer: Dr. Gerald M. Fauske.
(<http://www.ent.iastate.edu/entsoc/ncb99/prog/symprai.html>)

MEDIA/ DOCUMENTARY

1999. Bell LIVE! On the Prairie, Glyndon, MN. Electronic Field Trip for 4 - 8th grade students. Broadcast 13 October 1999, via satellite, nationwide, (1 hour air time, 3 consecutive broadcasts). University of Minnesota and the Bell Museum of Natural History, Minneapolis, MN. **[Invited Appearance]**
(<http://www.bellmuseum.org/distancelearning/prairie/>)
(http://www.bellmuseum.org/distancelearning/bio_tinerella.html)
(<http://www.bellmuseum.org/distancelearning/belllive.html>)

AWARDS AND SCHOLARSHIPS

2006. Graduate Student Research Award, College of Agriculture, Food Systems, and Natural Resources, NDSU Graduate School, North Dakota State University.
2005. Graduate Student Travel Award, NDSU Research and Consulting Committee, North Dakota State University.
2004. Graduate Student Travel Award, NDSU Research and Consulting Committee, North Dakota State University.
2002. Graduate Student Travel Award, NDSU Research and Consulting Committee, North Dakota State University.
2001. Beatty-Munro Scholar; Award for Academic Achievement, Department of Entomology, North Dakota State University.
1999. Beatty-Munro Scholar; Award for Academic Achievement, Department of Entomology, North Dakota State University.
1998. Graduate Student Travel Award, NDSU Research and Consulting Committee, North Dakota State University.
1998. Award for First Place Graduate Student Paper Presentation. Annual Meeting of the Entomological Society of Manitoba, Winnipeg, MB, Canada.
1998. Award for First Place Graduate Student Paper Presentation: 1998 Rocky Mountain Entomology Conference, Woodland Park, CO.
1998. Graduate Student Scholarship to attend the 69th Annual Rocky Mountain Entomology Conference, Woodland Park, Colorado USA.
1998. Award for First Place M.S. Oral Paper Presentation, 1998 North Central Branch Meeting, Entomological Society of America, Sioux Falls, SD.
1998. Graduate Student Travel Award, NDSU Research and Consulting Committee, North Dakota State University.
1996. College of Science and Technology Undergraduate Research Award, St. Cloud State University, St. Cloud, MN. [Undergraduate Thesis]

TEACHING ACTIVITIES

FELLOWSHIPS AND APPOINTMENTS

- 2002-2003: National Science Foundation GraSUS GK-12 Teaching Fellow: CSME, North Dakota State University. Moorhead Senior High School, 9-12 grade Science, Moorhead, Minnesota.
- 2001-2002: National Science Foundation GraSUS GK-12 Teaching Fellow: CSME, North Dakota State University. Discovery Junior High and Moorhead Junior High School, 8th grade Science. Fargo, North Dakota and Moorhead, Minnesota.
- 2001: Temporary Assistant Professor: Insect Morphology; Department of Entomology, North Dakota State University.

ACADEMIC COURSES TAUGHT

- ESPM 1012H: Environmental Science and Society (Honors); Environmental Sciences, Policy, and Management Program, University of Minnesota, (**Spring 2011, 2012, 2013**)
- ENT 5910: Special Problems in Entomology; Department of Entomology, University of Minnesota (**Spring 2013**: Biodiversity: Species Description and Taxonomic Methods)
- ENT 5910: Special Problems in Entomology; Department of Entomology, University of Minnesota (**Spring 2013**: Faunistics and Conservation Biology: entomology research experience for undergraduates: 2 credits)
- ENT 5910: Special Problems in Entomology; Department of Entomology, University of Minnesota (**Fall 2011**: Museum Administration & Curation: 1 credit)
- FIELD COURSE: Aquatic Entomology and Biodiversity Conservation: Two-week field and laboratory-based course taught to Eastfield College (Mesquite, TX) NSF-STEP undergraduate scholars. Big Thicket Field Research Station, Saratoga, TX. (2010; 2011)
- IB 409: Independent Research; Illinois Natural History Survey, University of Illinois (undergraduate level)
- ENT 850: Insect Physiology; Department of Entomology, Michigan State University (graduate level)
- ENT 750: Systematic Entomology; Department of Entomology, North Dakota State University (graduate level)
- ENT 760: Insect Structure; Department of Entomology, North Dakota State University (graduate level)
- ENT 350: General Entomology; Department of Entomology, North Dakota State University (undergraduate level)
- BIOL 454: Aquatic Entomology; Department of Biological Sciences, St. Cloud State University and North Dakota State University (undergraduate/graduate)
- BIOL 434: Freshwater Invertebrate Zoology; Department of Biological Sciences, St. Cloud State University (undergraduate/graduate)

GUEST LECTURES

2010. Big Thicket National Preserve: Biotic inventory of aquatic true bugs (Heteroptera) & beetles (Coleoptera). Science Café: Public Forum. Big Thicket Association and U.S. National Park Service (BITH). Beaumont, TX.
2009. Department of Entomology, UIUC: IB 109 undergraduate course (Dr. May Berenbaum): Guest lecture: Insect Diversity; and INHS Entomology Collections tour.
2008. Master Naturalist Field Course: Aquatic Macroinvertebrates of Illinois. Champaign County Forest Preserve District. Invited lecture and field course.
2008. Department of Entomology, UIUC: IB 109 undergraduate course (Dr. May Berenbaum): Guest lecture: Insect Diversity; and INHS Entomology Collections tour.
1997. Aquatic Entomology. Lecture and Collecting Trip to Undergraduate Wetland Ecology Class, Department of Biological Sciences, St. Cloud State University, St. Cloud, MN.

STUDENTS ADVISED

- Gretchen Wilbrandt: (2012-Current) Ph.D., Insect Systematics & Biodiversity Informatics; Department of Entomology, University of Minnesota
- Jamee Snyder: (2012-Current) Undergraduate NSF-REU Student: Insect Conservation Biology, Department of Entomology, University of Minnesota
- Daniel Donley: (2011) (Undergraduate Research): NSF-STEP Scholar: Taxonomy, Morphology; Eastfield College, Mesquite, TX
- Maricela Galaviz: (2011) (Undergraduate Research): NSF-STEP Scholar: Taxonomy, Morphology; Eastfield College, Mesquite, TX
- Sheka Kanu: (2011) (Undergraduate Research): NSF-STEP Scholar: Taxonomy, Morphology; Eastfield College, Mesquite, TX
- Carlos Salgado: (2011) MAST International Student (M.S.) Insect Collection Curatorial Intern, Department of Entomology, University of Minnesota
- Daniel Gordon: (2010) B.S. (Undergraduate Research): NSF-STEP Scholar: Taxonomy, Morphology; Eastfield College, Mesquite, TX
- Cecilia Vargas: (2010) B.S. (Undergraduate Research): NSF-STEP Scholar: Taxonomy, Morphology; Eastfield College, Mesquite, TX
- Christine Fleener: (2008-2010) B.S. & B.A. (Undergraduate Research): Animal Behavior, Molecular Phylogenetics; University of Illinois
- Whitney Banning: (2008-2010) Ph.D. Phylogeography, Population Genetics; University of Illinois
- Rebecca Jana: (2008-2010) B.S. (Undergraduate Research): Taxonomy, Morphology, Faunistics
- RJ Marsan: (2008-2010) B.S. (Undergraduate Research): Biodiversity Informatics, Computer Science

Evan Glynn: (2008-2009) B.S. (Undergraduate Research): Behavior, Developmental Biology

Jessica Metro: (2008-2009) B.A. (Undergraduate) Web design and biodiversity informatics

Cassie Pontone: (2008-2009) B.A. (Undergraduate) Museum Administration and Curatorial Studies

Stephanie Zec: (2008-2009) B.S. (Undergraduate) Museum Administration and Curatorial Studies

Claire Johnson: (2008) B.S. (Undergraduate Research): Morphology, Behavior

SERVICE ACTIVITIES

SERVICE AND COMMITTEES

- 2011-2013. Entomology Graduate Student Written Preliminary Exam Committee, University of Minnesota. (served as a chair and a member; 2012)
- 2009-2010. Preservation Working Group, University of Illinois at Urbana-Champaign. <http://will.illinois.edu/pwg>
- 2009-2010. Information Technology Committee (ITC), Illinois Natural History Survey, University of Illinois.
- 2007-2010. Endangered Species Technical Advisory Committee (ESTAC): Invertebrates. Joint INHS & Illinois Department of Natural Resources (IDNR).
- 2007-2010. Collections Committee, Illinois Natural History Survey, University of Illinois.
- 2007. Insect Systematics Postdoctoral Researcher Search Committee. Illinois Natural History Survey, University of Illinois.
- 2002. ND Science Olympiad Event Coordinator, "From a Distance": Division C (High School). North Dakota State University.
- 2002. Student Competition Judge: B. S. and M. S. Student Competition (Oral Presentation and Poster format), Entomological Society of America, North Central Branch Meeting.
- 2002. Linnaean Games Team Captain, North Dakota State University, Entomological Society of America, North Central Branch Meeting.
- 2001-2002. North Dakota Agricultural Experiment Station Director Search Committee, Graduate Student Representative, College of Agriculture, North Dakota State University.
- 2000. Judging Committee: 51st North Dakota State Science and Engineering Fair, North Dakota State University.
- 2000. North Dakota Science Olympiad, Assistant Proctor, "Water Quality" exam Division B (Junior High School). North Dakota State University.
- 1999. Linnaean Games Team Captain, North Dakota State University, Entomological Society of America, North Central Branch Meeting.

- 1998-2000. Departmental Graduate Student Representative to Entomology Faculty, Department of Entomology, North Dakota State University.
- 1998. Cereal Crops and New/Alternate Crops Pest Management Search Committee, Graduate Student Representative, Department of Entomology, North Dakota State University.
- 1998. Graduate Core Curricula Review Committee, - Graduate Student Representative, Department of Entomology, North Dakota State University.
- 1998. President, Entomology Club, Department of Entomology, North Dakota State University. 1998. Linnaean Games Team Captain, North Dakota State University, Entomological Society of America, North Central Branch Meeting.

EXTENSION AND OUTREACH (including popular publications)

- 2010. [Fossil Insects!](#) 27th Annual Insect Fear Film Festival, University of Illinois at Urbana-Champaign
- 2010. Preservation Working Group: “Preservation Emporium”; Spurlock Museum, University of Illinois. Program to general public on Natural History Collections: Preservation and Management.
- 2009. [“Illinois Aquatic Macroinvertebrates”](#). Two-sided educational color poster produced in collaboration with Illinois Department of Natural Resources. (2009. Preservation Working Group: “Preservation Emporium”; Spurlock Museum, University of Illinois. Program to general public on Natural History Collections: Preservation and Management.
- 2007. Illinois DNR External Advisory Committee : Biological Collections Tour. Illinois Natural History Survey, University of Illinois.
- 2007. An Evening of Entomology. “Ask the Experts”; General Entomology Panel. Illinois Natural History Survey.
- 2005. “Bugs All Around”. Interpretive presentation on insects and kin to pre-school children, Browns Valley School, Browns Valley, Minnesota.
- 2005. “Down Under: Bugs, Beasts, and Botany: The Natural (and not so...) History of Australia”. Combined biology, geography, and history presentation for 3rd grade students, Browns Valley School, Browns Valley, Minnesota.
- 2005. “What’s Buzzin’ At Your Library?”; Summer library series reading/ activity program. Viking Library System, [Minnesota]; Interpretive program combining insects and kin, with reading and craft activities; All ages. Browns Valley Public Library, Browns Valley, Minnesota.
- 2005. “What’s That Buggin’ Me?” Interpretive program on insects and relatives found in the region; K-3 grade. Browns Valley Public Library, Browns Valley Minnesota.
- 2004. “The Autumn Prairie”: Tallgrass Prairie Field Trip; Bonanza Nature Center, Big Stone, Minnesota. Interpretive field trip program for 3rd grade class; Browns Valley School, Browns Valley, Minnesota.

2004. "Arthropods and Other Creepy Crawlies". Interpretive presentation on arthropods and kin to 3rd grade class, Browns Valley School, Browns Valley, Minnesota.
1999. "Entomology- Buggin' Out". Program presented to the Tri-County Humane Society's Alumni Reunion, St. Cloud, MN USA, with Donald Carey.
1998. "Entomology; What's Bugging You?" Fargo Public Schools & Concordia College, Moorhead, MN., with Donald Carey, Lee Pederson, Patricia Anderson, and Megan DiPirro.
1998. "Crunchy Pizza and Insect Spit". Market Place for Kids. Fargo Public Schools, Civic Memorial Auditorium, Fargo, ND USA, with Donald Carey.
1997. "Insects and You". Community Extension through Department of Biological Sciences, St. Cloud State University, St. Cloud, MN. 1996. "Insect Creature Feature". Community Extension through Department of Biological Sciences, St. Cloud State University, St. Cloud, MN.
1996. "Insects and You". Biological Sciences Annual Extension Program for High School Students. Department of Biological Sciences, St. Cloud State University, St. Cloud, MN. **(invited presentation)**
1996. "The Bats of the Upper Great Plains". Heritage Nature Center, Stearns County, MN.
1996. "Bats in Your Belfry", Heritage Nature Center, Central Minnesota Audubon Society Lecture Series, St. Cloud, MN. **(invited presentation)**
1995. "Bat Chat", The Bats of Minnesota and the Great Plains". Wild Bird Crossing Store Guest Lecture Series. St. Cloud, MN. **(invited presentation)**

PROFESSIONAL MEMBERSHIPS

American Entomological Society
Central States Entomological Society
Entomological Society of America
International Heteropterists society
New York Entomological Society
North American Benthological Society

CURATORIAL/ MUSEUM EXPERIENCE

Australian Museum, Sydney NSW Australia – (Nepomorpha and Gerromorpha)
Australian National Insect Collection, CSIRO Entomology, Canberra – (Nepomorpha)
American Museum of Natural History, New York, New York USA – (Corixidae)
Berlin Museum of Natural History, Berlin, Germany – (Corixidae: Micronectidae)
Canadian National Collection, Agriculture and Agri-Food Canada, Ottawa, Canada – (Corixidae)
Colorado Entomological Collection, Englewood Colorado USA – (Corixidae: Micronectidae)
Eastern New Mexico University, Portales, New Mexico, USA – (Corixidae)
Illinois Natural History Survey, Insect Collection; Champaign, Illinois USA – (Heteroptera)
Melbourne Museum, Melbourne, Victoria, Australia – (Nepomorpha and Gerromorpha)
North Dakota State University, Fargo, North Dakota USA – (Nepomorpha and Gerromorpha)
South Australian Museum, Adelaide, South Australia – (Corixidae: Micronectidae)

South Dakota State University, Brookings, South Dakota USA – (Corixidae)
St. Cloud State University, St. Cloud, MN, USA– (Heteroptera and Coleoptera: Carabidae)
Texas Tech Univ., Lubbock, TX, USA – (Nepomorpha and Gerromorpha)
United States National Museum, Washington, D.C., USA – (Corixidae)
University of Kansas, Snow Entomological Museum, Lawrence, Kansas USA – (Nepomorpha)
University of Minnesota, St. Paul, Minnesota USA – (Nepomorpha and Gerromorpha)
Western Australian Museum, Perth, Australia – (Micronelectidae)
West Virginia Department of Agriculture, Charleston, West Virginia USA – (Corixidae)
Enns Entomology Museum, Univ. of Missouri, Columbia, Missouri USA (Micronelectidae)

FIELD EXPERIENCE

1995-1997. Upper Midwest and Southeastern USA. (Aquatic Heteroptera; Coleoptera)
1997. Northeastern and Southwestern USA. (Heteroptera, Coleoptera)
1997-2001. Northwestern Minnesota. (Carabidae)
1997-2006. Upper Great Plains, North America. (Heteroptera, Coleoptera)
1999-2002. Saskatchewan and Manitoba, Canada. (Nepomorpha and aquatic Coleoptera)
2002. Northwestern USA. (Heteroptera, Coleoptera)
2004. Tasmania, Australia. (Heteroptera, Coleoptera)
2004. New South Wales, Australian Capitol Territory; Victoria, Australia. (Heteroptera)
2006-2007. Michigan. (Heteroptera and Coleoptera)
2007-Present. Illinois, Tennessee, Arkansas, Louisiana, Mississippi, Texas. (Heteroptera and Coleoptera)

RESEARCH INTERESTS

- Taxonomy, systematics, and faunistics of aquatic true bugs (Heteroptera) and beetles (Coleoptera)
- Preservation, philosophy, and administration of natural history collections
- Biodiversity Informatics & Virtual Natural History Collections Operations
- Biodiversity and Environmental Education; K-12, Post-secondary, and Biodiversity Public Relations
- Bioacoustics of aquatic true bugs and aquatic beetles
- Conservation biology