

# CURRICULUM VITAE - JONATHAN M. BOSSENBROEK

Assistant Professor  
Department of Environmental Sciences  
University of Toledo  
Toledo, OH 43606-3390  
Email: Jonathan.Bossenbroek@utoledo.edu; Tel. 419-530-8376

## PERSONAL:

Born 31 October 1973, married, three children

## EDUCATION:

Colorado State University, Ft. Collins, Ph.D. Ecology – 2004  
Committee: John Wiens (Advisor), Boris Kondratieff, Thomas Stohlgren, Bea Van Horne  
Dissertation: Spatial structure and scaling of beetle, bird and plant communities in North American grasslands  
University of Wisconsin - Green Bay, Green Bay, M.S. Environmental Sciences and Policy - 1999  
Committee: Jeffrey C. Nekola (Advisor), Clifford Kraft, Gregory Davis  
Thesis: Modeling the dispersal of *Dreissena polymorph* (zebra mussel) into the inland lakes of the western Great Lakes region using a gravity model  
Calvin College, Grand Rapids, MI, B.S. Environmental Sciences (emphasis in Biology) - 1996  
Advisor: Dr. Uko Zylstra

## PROFESSIONAL EXPERIENCE:

2005-Present Assistant Professor of Ecology - University of Toledo, Department of Environmental Sciences and the Lake Erie Center  
2003-2005 Postdoctoral Research Associate – University of Notre Dame  
2002-2003 Graduate Teaching Assistant, Biology Department - Colorado State University  
1999-2002 Graduate Research Assistant, Graduate Degree Program in Ecology - Colorado State University  
1998-1999 Graduate Research Assistant, Institute for Land and Water Studies – University of Wisconsin-Green Bay  
1998 Research Assistant, University of Wisconsin - Green Bay  
1998 Research Technician, Great Lakes Research Center. Milwaukee, WI  
1997-1998 Graduate Teaching Assistant, University of Wisconsin - Green Bay  
1996-1997 Sample Receiving/GIS Technician, FTC&H Analytical Labs/Engineering. Ada, MI  
1996 Research Technician, Grand Valley State University - Water Resources Institute. Allendale, MI

## COURSES TAUGHT:

Special Topics in Ecology: Applied Spatial Ecology (Fall 2008)  
Special Topics in Ecology: Confronting Models with Data (Spring 2008)  
Special Topics in Ecology: Biological Invasions and Risk Assessment (Spring 2007)  
General Ecology EEES 3050 (Fall 2006, 2007, 2008)  
Special Topics in Ecology: Applied Landscape Ecology (Spring 2006)  
Applied Landscape Ecology – University of Notre Dame (2004)

**PUBLICATIONS (Peer Reviewed; \*indicates student):**

- Bossenbroek, J.M.**, C.E. Kraft, and J.C. Nekola. 2001. Prediction of Long-Distance Dispersal Using Gravity Models: Zebra Mussel Invasion of Inland Lakes. *Ecological Applications* 11:1778-1788.
- Lehmer, E. M., **J. M. Bossenbroek**, and B. Van Horne. 2003. The influence of environment, energy status, and sex on body temperature patterns of free-ranging black-tailed prairie dogs (*Cynomys ludovicianus*). *Physiological and Biochemical Zoology* 76:72-83.
- Drake, J.M. and **J.M. Bossenbroek**. 2004. The Potential Distribution of Zebra Mussels (*Dreissena polymorpha*) in the U.S.A. *BioScience* 54:931-941.
- Bobeldyk, A.M, **J.M. Bossenbroek**, M.A. Evan-White, D.M Lodge and G.A. Lamberti. 2005. Secondary spread of zebra mussels (*Dreissena polymorpha*) in lake-stream systems. *Ecoscience* 12:414-421.
- Bossenbroek, J.M.**, H.H. Wagner and J.A. Wiens. 2005. Taxon-dependent scaling: beetles, birds and vegetation at four North American grassland sites. *Landscape Ecology* 20:675-688.
- Bossenbroek, J.M.**, J. McNulty and R. Keller. 2005. Can ecologists heat up the discussion on invasive species risk?. *Risk Analysis* 25:1595-1597.
- Leung, B., **J.M. Bossenbroek** and D.M. Lodge. 2006. Boats, pathways, and aquatic biological invasions: Estimating dispersal potential with gravity models. *Biological Invasions* 8:241-254.
- Johnson, L.E., **J.M. Bossenbroek**, and C.E. Kraft. 2006. Pathways and patterns of the post-establishment spread of non-indigenous aquatic species across multiple spatial and temporal scales: the continuing invasion of the zebra mussels in North America. *Biological Invasions* 8: 475-489.
- Bossenbroek, J.M.**, L.E. Johnson, B. Peters and D.M. Lodge. 2007. Forecasting the expansion of zebra mussels in the United States. *Conservation Biology* 21:800-810.
- Iverson LR, Prasad A, **Bossenbroek J**, Sydnor D, Schwartz MW. 2008. Modeling Potential Movements of the Emerald Ash Borer: the Model Framework. In The Encyclopedia of Forest Environmental Threats (eds. Lee, and Beatty). [www.threats.forestencyclopedia.net](http://www.threats.forestencyclopedia.net).
- Morzillo, A.T., J.W. Hollister, C. A. Drew, M.E. Rocca, M.E. Baker, **J.M. Bossenbroek**, and C.A. Mazzarella. 2008. A young scientist's guide to gainful employment: recent graduates' experiences and successful strategies. *ESA Bulletin* 89:193-203.
- Bodamer, B.\* and **J.M. Bossenbroek**. 2008. Wetlands as barriers: Effects of vegetated waterways on downstream dispersal of zebra mussels (*Dreissena polymorpha*). *Freshwater Biology* 53:2051-2060.
- Bossenbroek, J.M.**, D. Finnoff and J. Shogren. *In press*. Advances in ecological and economical analysis of invasive species: dreissenid mussels as a case study. In *Bioeconomics of Invasive Species: Integrating Ecology, Economics and Management* (eds. Keller, Lodge, Lewis, and Shogren). Oxford University Press.
- Jerde, C. and **J.M. Bossenbroek**. *In press*. Uncertain Invasions: A biological perspective. In *Bioeconomics of Invasive Species: Integrating Ecology, Economics and Management* (eds. Keller, Lodge, Lewis, and Shogren). Oxford University Press.
- Muirhead, J. R., A. M. Bobeldyk, **J. M. Bossenbroek**, K. Egan & C. Jerde. *In press*. Estimating dispersal and predicting spread of nonindigenous species. In *Bioeconomics of Invasive Species: Integrating Ecology, Economics and Management* (eds. Keller, Lodge, Lewis, and Shogren). Oxford University Press.

Herborg, L.M., J. Drake, J. Rothlisberger & **J. M. Bossenbroek**. *In press*. Forecasting suitable habitat for invasive species using ecological niche models and the policy implications of forecasts. In *Bioeconomics of Invasive Species: Integrating Ecology, Economics and Management* (eds. Keller, Lodge, Lewis, and Shogren). Oxford University Press.

### Submitted

Drake, J.M. and **J.M. Bossenbroek**. *In review*. Profiling ecosystem vulnerability to invasion by zebra mussels with support vector machines. Submitted to *Proc. R. Soc. B*.

**Bossenbroek, J.M.** and C.L. Jerde. *In review*. Modeling the long-distance dispersal of the emerald ash borer: assessing relative propagule pressure and uncertainty. Submitted to *Resource and Energy Economics*.

Prasad A., L.R. Iverson, M. Peters, **J.M. Bossenbroek**, D. Sydnor, M. Schwartz. *In review*. Modeling the invasive emerald ash borer risk in Ohio, USA - it's mainly about roads. Submitted to *Landscape Ecology*

DeVanna, K.M., B.L. Bodamer\*, C.G. Wellington\*, E. Hammer, C.M. Mayer and **J.M. Bossenbroek**. *In review*. An alternative hypothesis to invasional meltdown in the Laurentian Great Lakes: General facilitation by *Dreissena*. Submitted to *Biological Invasions*.

Wellington, C. G. \*, C.M. Mayer, and **J.M. Bossenbroek**. *In review*. Effects of turbidity and prey density on the foraging success of age zero *Perca flavescens*. Submitted to *Journal of Fish Biology*

### In Preparation

**Bossenbroek, J.M.** and J.M. Drake. Habitat overlap between non-native mollusks (*Corbicula fluminea* and *Dreissena polymorpha*) and freshwater mussels (Unionidae) in Tennessee.

Warziniack, T., D. Finnoff, **J.M. Bossenbroek**, J.F. Shogren, D.M. Lodge. What is it worth to keep Dreissenid Mussels out of the Columbia River Basin?

### Book Reviews

**Bossenbroek, J.M.** 2004. Review of *Ecosystem Management: Adaptive, Community-Based Conservation* by G.M. Meffe, L. Nielsen, R. Knight, and D. Schenborn (editors.). *Landscape Ecology* 19: 813-814.

### INVITED SEMINARS AND SYMPOSIA

- Ecological Society of America symposium "Ecological Pattern, Process, and Spatial Extent", Madison, WI 8/2001 – Organized by Drs. Jeff Nekola and Helene Wagner.
- The Nature Conservancy Science Day at Colorado State University, Fort Collins, CO 11/2001 – Organized by the Colorado TNC.
- American Fisheries Society symposium "Threats to Western Waters", Salt Lake City, UT 3/2004 – Organized by Robert Pitman USFWS
- Northeast Aquatic Nuisance Species Panel: Special Zebra Mussel Session, Newport, RI 5/18/2004 – Organized by Charles R. O'Neill, Jr. NY SeaGrant
- Bonneville Power Administration – "Assessing the Potential Ecological and Economic Impacts of Zebra Mussels to Western River Systems", Portland, OR 6/15/2004 – Organized by Jim Irish, BPA.

- Western Regional Panel for Aquatic Nuisance Species - Anchorage, AK 9/09/2004 – Organized by Tina Proctor, USFWS.
- University of Notre Dame – BioMass Student Seminar Series, Notre Dame, IN 10/29/2004.
- University of Toledo – “Integrating scale and space in ecological systems: From grasslands to the Great Lakes”, Toledo, OH 03/03/2005
- Lake Erie Center/Univ. of Toledo – “Onslaught of the Emerald Ash Borer”, Oregon, OH 10/11/2005
- University of Bowling Green: Department of Biological Sciences Seminar Series – Bowling Green, OH 11/9/2005.
- Heidelberg College: Biology Department Evening Colloquium Series – Tiffin, OH 1/26/2006.
- Calvin College: Biology Department Seminar Series – Grand Rapids, MI 4/7/2006.
- University of Windsor: GLIER Research Seminar Series – Windsor, Ont. 4/20/2006.
- US-IALE Symposia on “Connectivity”, SanDiego, CA 3/28/2006.
- 2006 PREISM Organizational Meeting, Washington D.C. 10/18/2006.
- Wittenberg College: Biology Department Seminar, Springfield, OH 2/19/2007
- Ohio Agricultural Research and Development Center/Ohio State University, Wooster, OH 5/4/2007
- University of Pittsburg – Pymatuning Seminar Series 2007, Linesville, PA 5/30/2007
- Michigan State University – Workshop on the Economics of Invasive Species in the Great Lakes, organized by Dr. Rick Horan, Lansing, MI 10/8-9/2007.
- Michigan 2007 Annual DNR Fisheries Research Meeting, Alpena, MI 10/10/2007
- 2007 PREISM Organizational Meeting, Washington D.C. 10/18/2007.
- Student Watershed Watch Summit, Toledo, OH, 11/14/2007.
- University of Georgia River Basin Center Symposium, Athens, GA, 12/14/2007.
- Expert workshop preventing biological invasions: Best practices in pre-import risk screening for species of live animals in international trade. Organized by the Global Invasive Species Programme (GISP), the Invasive Species Specialist Group of the Species Survival Commission of IUCN and the Secretariat of the Convention on Biological Diversity (SCBD), in collaboration with the University of Notre Dame and Defenders of Wildlife. University of Notre Dame, IN 4/9-11/2008.

**PRESENTATIONS AT MEETINGS (1<sup>st</sup> Author Only in years prior to 2005, \*Graduate Students)**

**Oral**

Bossenbroek, J. M. 2001. Gravity Models: From long-distance dispersal to local patterns of movement. Ecological Society of America - Madison, Wisconsin.

Bossenbroek, J. M. and J. A. Wiens. 2002. Spatial structure of grassland bird communities. 17th Annual Symposium of the International Association for Landscape Ecology, April 2002, Lincoln, Nebraska.

Bossenbroek, J. M., H. H. Wagner, J. A. Wiens. 2002. Thresholds in community composition: avoiding the presumptions of a priori classification. Ecological Society of America –Tuscon, Arizona.

- Bossenbroek, J. M. and Wiens, J.A. 2003. The scale dependence of species richness and heterogeneity: An analysis of plants and beetles in Colorado and Kansas. 18th Annual Symposium of the International Association for Landscape Ecology, April 2003, Banff Centre, Alberta, Canada.
- Bossenbroek, J.M., D.M. Lodge, J.M. Drake and B. Leung. 2004. Assessing the Potential Ecological and Economic Impacts of Zebra Mussels to Western River Systems. American Fisheries Society – Western Division Annual Meeting. March 2004, Salt Lake City, Utah.
- Bossenbroek, J.M., D.M. Lodge, J.M. Drake and B. Leung. 2004. The Role of Habitat Suitability and Dispersal Potential in Limiting the Range of an Aquatic Invasive Species. 19th Annual Symposium of the International Association for Landscape Ecology. April 2004, Las Vegas, Nevada.
- Bossenbroek, J.M., B. Leung, D.M. Lodge, and J.M. Drake. 2004. Habitat suitability and dispersal potential: Keys to understanding the range of an aquatic invasive species. Ecological Society of America Annual Meeting – Portland, OR.
- Bossenbroek, J.M. 2005. Using gravity models to predict pathways of aquatic invasive species. 20th Annual Symposium of the International Association for Landscape Ecology. March 2005, Syracuse, New York.
- Louis R. Iverson, L.R. A.M. Prasad, D. Sydnor, J.M. Bossenbroek, M.W. Schwartz. 2005. Modeling potential EAB spread through GIS/cell-based/gravity models with data bolstered by web-based inputs. Emerald Ash Borer (EAB) Annual Review and Research Planning Session. Pittsburgh, PA.
- Bossenbroek, J.M., Finoff, D. C., Saphores, J. D., Lodge, D.M. 2005. Evaluating the 100th Meridian Initiative: What is it worth to keep zebra mussels out of the Columbia River? Estuarine Research Federation Biennial Conference. October 2005. Norfolk, VA.
- Bossenbroek, J.M. 2006. The importance of stream connections for the dispersal of aquatic invasive species. 21st Annual Symposium of the International Association for Landscape Ecology. March 2006, San Diego, California.
- Louis R. Iverson, A Prasad, J Bossenbroek, D Sydnor and M Schwartz. 2006. Modeling potential movements of a killer: the emerald ash borer. 21st Annual Symposium of the International Association for Landscape Ecology. March 2006, San Diego, California.
- Bossenbroek, J.M. 2006. The importance of stream connections for the dispersal of aquatic invasive species. IAGLR. May 2006, Windsor, Ontario.
- Louis R. Iverson, A Prasad, J Bossenbroek, D Sydnor and M Schwartz. 2006. Modeling Potential Movements of a Ash Threat: The Emerald Ash Borer. Advances in Threat Assessment and Their Application to Forest and Rangeland Management Conference. July 2006. Boulder, Colorado
- Bossenbroek, J., L. Iverson, A Prasad, J Bossenbroek, D Sydnor and M Schwartz. 2006. Modeling the dispersal mechanisms of the emerald ash borer in Ohio and Michigan. Ecological Society of America. August 2006. Memphis, Tennessee.
- Bodamer, B\*, Bossenbroek, J. and Hartson, D. 2007. The effects of wetlands on zebra mussel (*Dreissena polymorpha*) dispersal in coupled lake-stream systems. 22st Annual Symposium of the International Association for Landscape Ecology. April 2007, Tucson, Arizona.
- Bossenbroek, J. 2007. Modeling the long-distance dispersal of the emerald ash borer. 22st Annual Symposium of the International Association for Landscape Ecology. April 2007, Tucson, Arizona.

- Jerde, C.L. W.A. Nelson, J.M. Bossenbroek, M.A. Lewis. 2007 The risk of being relative about invasions. Ecological Society of America. August 2007. San Jose, CA.
- Bossenbroek, J.M., Finoff, D. C., Lodge, D.M. 2007 The bioeconomics of dreissenid mussels in the western United States. Ecological Society of America. August 2007. San Jose, CA.
- Bodamer\* B.L., DeVanna K.M., Wellington\* C.G., Hammer E., Bossenbroek J.M., and Mayer C.M. An alternative hypothesis for Invasional Meltdown: General facilitation by Dreissena. Fifth Biennial Conference of the Lake Erie Millennium Network 29 April - 1 May 2008, University of Windsor.
- Bodamer\*, B.L. and Bossenbroek, J.M. 2008. Wetlands as barriers: effects of vegetated waterways on the downstream dispersal of zebra mussels (*Dreissena polymorpha*). IAGLR, Peterborough, Ontario.
- Wellington\*, C.G., Mayer, C.M., and Bossenbroek, J.M. 2008. Physical and biological factors influencing foraging success of age-0 yellow perch. IAGLR, Peterborough, Ontario (C)
- Wellington,\* C, Mayer, C.M. and Bossenbroek, J.M. 2008. Physical and biological factors affecting foraging success of age-0 yellow perch. Ohio State University, Aquatic Ecology Laboratory Research Review.

### **Posters**

- Bossenbroek, J., C. Kraft, and J. Nekola. 1999. Forecasting the Distribution of Zebra Mussel Infested Inland Lakes using a Production-Constrained Gravity Model. International Association of Landscape Ecologists – 5<sup>th</sup> World Congress, August 1999, Snowmass, Colorado.
- Bossenbroek, J., H. Wagner, M. Hawks, J. Wiens, B. Van Horne. 2000. Grasshoppers in Space: Comparisons of Multivariate Methods for Analyzing Landscape Patterns. 15th Annual Symposium of the International Association for Landscape Ecology, April 2000, Fort Lauderdale, Florida.
- Bossenbroek, J. M., H. H. Wagner, M. M. Hawks, J. A. Wiens, B. Van Horne. 2001. Scale dependency from Colorado to Kansas: How the environment and the beetles come together. 16th Annual Symposium of the International Association for Landscape Ecology, April 2001, Tempe, Arizona.
- Bossenbroek, J. M., H. H. Wagner, and J. A. Wiens. 2003. Scale dependence or spatial autocorrelation? An analysis of beetle, bird, and plant communities across a regional moisture gradient. 6th International Association for Landscape Ecology World Congress. July 2003. Darwin, Australia.
- Bossenbroek, J. M. and J. McNulty. 2004. Communicating risk messages to diverse audiences. Research Conference on Environment Risk and Nonindigenous Species Invasions in the Great Lakes Region: Risk Analysis, Management, and Communication. Oct. 2004. Cleveland, Ohio.
- DeVanna, K.M., Bodamer, B.L. \*, Wellington, C.G. \*, Hammer, E., Bossenbroek, J.M., and Mayer, C.M. 2007. An alternative hypothesis for Invasional Meltdown: General facilitation by dreissena. Sigma Xi – Univ. of Toledo Chapter. Sept. 2007. Toledo, OH
- Crail, T.D. \*, J.M. Bossenbroek, J.F. Gottgens. 2007. Ohio habitat use of three state-listed darter species belonging to the subgenus *Nothonotus*. Southeastern Fishes Council. Nov. 2007. Chattanooga TN.

### **MEDIA COVERAGE OF RESEARCH and Miscellaneous Publications**

Interviewed by WTOL Channel 11 about the Status of the Emerald Ash Borer in Our Area, July 25, 2007.

Quoted in “Michigan, Ohio get grant to study invasive species “ by Kevin Walker. Farm World. Nov. 1, 2006.

Keller, R.P., J.M. Drake, D.M. Lodge, and J.M. Bossenbroek. 2005. Submission to Department of Agriculture on proposed rules 7 CFR Part 319 – Nursery Stock Regulations. Docket ID APHIS-2005-0020, Agency Docket # 03-069-2

Quoted in “Researchers Studying Zebra Mussel Threat to Columbia Basin”, Columbia Basin Bulletin Jan. 14, 2005 (<http://www.cbbulletin.com/Free/33929.aspx>)

McNulty, J.M., D.M. Lodge, Bossenbroek, J. & Keller, R.P. 2004. [Letter] Say no to zebra mussels. Tropical Fish Hobbyist. May 2004 pp.8-9.

## **HONORS/AWARDS**

NASA-MSU Professional Enhancement Award - US - IALE 2000

CSU Biology Travel Grants - 1999, 2000, 2001, 2002

Phi Kappa Phi - 1998

National Dean's List - 1998

## **EXTERNAL RESEARCH SUPPORT**

### **Current Grants**

State of Colorado - \$19,116. Principal Investigator. **Statewide Risk Analysis and Lake Pueblo Population Modeling of Zebra Mussels.**

USDA CSREES- \$225,000 for FY2008 Senior Personnel with Carol Stepien (P.I.), Michael Bisesi and many other Univ. of Toledo Senior Personnel. **Analysis of genetic disease resistance, geographic mapping, and public health concerns for VHS fish viral out break in the Great Lakes.**

Univ. of Toledo: USR&CAP - \$3,000 for 1 June 2008 – 31 Aug. 2008. Undergraduate advisor of Phillip Mathias (Undergraduate in the DES). **Distribution of Unionid Mussels in the Ottawa River from University of Toledo Main Campus to the Stranahan Arboretum.**

Great Lakes Fishery Commission \$146,000 for 1/1/2007 – 2008. Co-P.I. with C. Mayer – U. Toledo (P.I.), T. Bridgeman – U. Toledo (Co-P.I.), and Stuart Ludsin – NOAA-GLERL (Co-P.I.) – Preproposal accepted, full proposal submitted 6/1/2006. **Experimental and spatial modeling of environmental factors affecting foraging success of age-0 yellow perch.**

USDA NRC/PREISM - \$250,000 for 1 January 2007 – 31 Dec. 2008. Principal Investigator with D. Finnoff – U. Wyoming, L. Iverson – USDA Forest Service (Co-PIs), and P. Lawrence – UT, A. Prasad – USDA Forest Service, D. Sydnor – Ohio State Univ. (Collaborators). **Evaluating the economic costs and benefits of slowing the spread of the emerald ash borer in the Michigan and Ohio.**

USDA \$728,000 for Aug. 1 2006 – Sept. 1 2009. Co-P.I. with Daryl Dwyer (P.I.) and Kevin Czajkowski (Co-P.I.). **Phytoremediation plant research - Remediation of sites containing mixed contaminants.**

NSF DGE - Grad Teaching Fellows in K-12. \$2,400,000 for May 1, 2008 – April 30, 2013. Senior Personnel with C. Stepien (PI), T. Bridgeman, T. Fisher, C. Gruden, D. Moorhead (Co-P.I.s), and several other Senior Personnel. **Graduate Teaching Fellows in STEM High School Education: An Environmental Science Learning Community at the Land-Lake Ecosystem Interface.**

### **Submitted/Pending Grants**

NSF-Ecology - \$443,335 for 1 January 2008 – 31 December 2010. Principal Investigator with Co-P.I. John Drake of the University of Georgia. **Hierarchy of spatial scales: Niche partitioning of darters (Pisces: Percidae) across a latitudinal and zoogeographic gradient**

### **Past Grants**

NSF Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML). \$25,000. Senior Personnel with C. Stepien (PI), K. Czajkowski, K. Egan, C. Gruden, C. Mayer (Co-P.I.s), and D Dwyer, D. Moorhead, T. Bridgeman, C. Gruden, H. Gottgens, A. Krause (senior personnel). **Planning Proposal for the Lake Erie Research Center.**

Univ. of Toledo: USR&CAP - \$3,000 for 1 June 2007 – 31 Aug. 2007. Undergraduate advisor of Jill Reighard (Undergraduate in the DES). **The effects of coastal wetland habitats on the distribution of the zebra mussel.**

Univ. of Toledo: URAFP - \$12,000 for 1 June 2006 – 31 Dec. 2006. Principal Investigator. **Determining the effects of wetlands on the dispersal of zebra mussels in coupled lake-stream systems.**

USDA - \$16,000 for 7 July 2005 – 9 Sept. 2006. Principal Investigator. **Using gravity models to predict the long-distance dispersal potential of the emerald ash borer in the Upper Great Lakes Region.**

NOAA Sea Grant - \$448,664 for June 1 2005 – May 31 2007. Collaborator, with P.I. David Lodge and CoPIs Jason Shogren, David Finnoff and Jennifer Nalbone. **Economic impact of ballast-mediated invasive species in the Great Lakes.**

NOAA National Sea Grant. \$340,000 for 1 June 2003-31 May 2005. Awarded to David M. Lodge (P.I.), with the following Co-PIs or senior collaborators: Brian Leung (U Notre Dame), Jason Shogren (U. Wyoming), and David Finnoff (U. Central Florida). **Evaluating the ecological and economic value of the 100th Meridian Initiative.** \*

US Fish & Wildlife Service. \$40,000 for 2003-2005. Award to David M. Lodge (P.I.) **Evaluating the ecological and economic value of the 100th Meridian Initiative.** \*

\* - Portions written by J.M. Bossenbroek, and were the means of post-doc funding.

### **REVIEWING**

Manuscripts: *Conservation Biology, American Midland Naturalist, Landscape Ecology, Ecological Applications, Journal of Theoretical Biology, Environmental Management, Ecology, Frontiers in Ecology and the Environment, Biological Invasions*

Grant Proposals: *National Science Foundation, Canadian Aquatic Invasive Species Network (CAISN), USDA PREISM*

### **SOCIETIES**

Ecological Society of America

International Association of Landscape Ecology

American Institute of Biological Sciences

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The Nature Conservancy  
Phi Kappa Phi  
Sigma Xi - University of Toledo Chapter

## **STUDENTS**

### **Current Graduate Students**

Primary Advisor: Audra Croskey (M.S.), Maria Tumeo (M.S.)

Co-Advisor: Todd Crail (Ph.D with Dr. Hans Gottgens), Nathan Manning (Ph.D with Dr. Chris Mayer)

Committee Member: Joshua Brown (Ph.D), Kristen DeVanna (Ph.D), Ranjeet John (Ph.D.), Jessica Schaefer (M.S.), Sarah Petree (M.S.)

### **Past Graduate Students**

Primary Advisor: Betsy Bodamer (M.S. Defended 8/2007)

Co-Advisor: Colleen Wellington (M.S. with Dr. Chris Mayer, Defended 7/2008)

Committee Member: Jacob LaCroix (Ph.D. Defended 4/2006)

### **Undergraduate Research Advisor**

Phillip Mathias, Emily Heppner (UT Undergrad Research Technician)

Jill Reighard (University of Toledo: Undergraduate Summer Research and Creative Activity Program – Summer 2007)

Nathan Stroh (REU Student from North Dakota State Univ. – Summer 2007)

Jena Buchhop (REU Student from Wittenberg College – Summer 2006)

## **SERVICE**

### **University of Toledo**

#### **Committees**

Dept. of Environmental Sciences Assessment Committee (2007 - )

Lake Erie Center Science Advisory Board (2005 - )

Lake Erie Center Facilities Committee (2005 - )

Sigma Xi - University of Toledo Chapter: Treasurer (2006- )

#### **Societies/Organizations**

IALE - Panelist: for “Job hunting experiences of recent graduates” workshop. Tucson, Arizona on 9 April 2007

National Wildlife Federation – Participant: Symposium on Aquatic Invasive Species and Food Web Disruption: A Meeting of Scientists and Policymakers – 05/02/2005

The Nature Conservancy – Participant: workshop on defining TNC’s role in aquatic invasive species – 11/12/2003

IALE – Session Chair: Modeling Species Patterns. Las Vegas, 2004

IALE – Judge: Best Student Presentation. Las Vegas, 2004

#### **Community**

Co-led a session on Insect Trapping and identification for the EEES Summer Camp 2006.

Participant – Toledo Metroparks Blue Ribbon Panel to assess new information about emerald ash borer.

Hosted the Timberstone Junior High School's Lego team at the Lake Erie Center to discuss environmental threats to Lake Erie 11/2005.

Judge for Kennedy Middle School Science Fair – February 2004

Judge for home-schooled students’ science fair in Fort Collins – March 2002

Discussion leader on PBS Evolution series at Immanuel Christian Reformed Church, Fort  
Collins, CO – Winter 2002

**Colorado State University**

Graduate Representative – Senior Ecologist Search Committee, 2002-2003

Graduate Representative – Animal Ecologist Search Committee, 2001-2002

Colloquium Speaker Host for Dr. Jeffrey Nekola, 2001

Distinguished Ecologist Host for Dr. Robert Gardner, 2000