## J. ELLEN MARSDEN

Rubenstein School of Environment and Natural Resources University of Vermont, 308D Aiken Center, Burlington, VT 05405 ellen.marsden@uvm.edu

## RESEARCH INTERESTS

Great Lakes fisheries restoration and ecology; ecological effects of introduced species; lake trout early life history and spawning behavior; behavioral ecology; conservation of genetic resources in fishes

## **EDUCATION**

- Ph.D. Cornell University, Department of Natural Resources, 1988.
- M.S. Cornell University, Ecology & Systematics, 1985.
- B.A. Bryn Mawr College, Biology, 1978.

## PROFESSIONAL EXPERIENCE

Interim Director, Rubenstein Ecosystem Science Laboratory, Jan – June 2018

Chair, Wildlife and Fisheries Biology Program 2011-2016

Professor, University of Vermont, 2006- present

Associate Professor, University of Vermont, 2001 - 2006

Assistant Professor, University of Vermont, 1996 - 2001

Associate Professional Scientist, Illinois Natural History Survey; Director, Lake Michigan Biological Station, 1995-96; Assistant Professional Scientist and Director, 1990-95

Adjunct Professor, Northwestern University, 1992-96; University of Illinois-Champaign/Urbana 1994-7; Loyola University 1992-97; Purdue University 1995-7; Univ. of Wisconsin-Milwaukee 1995-2000 Research Associate, Cornell University, Department of Natural Resources, 1988-1990

## **AWARDS**

- 2021 Inducted as a Fellow of the American Fisheries Society
- 2019 New York Council Trout Unlimited Professional Achievement Award
- 2019 Christie-Loftus Award from the Great Lakes Fishery Commission
- 2017 Glen Elder Leadership Award for support of students in the LGTBO community
- 2015 Best Paper in Ichthyology in Copeia 2014 (Marsden and Tobi 2014)
- 2014 Most cited paper in Journal of Great Lakes Research 2009-2012 (Marsden and Hauser 2009)
- 2006 Editors Award, Journal of Great Lakes Research
- 2005 Best Paper Award, NY Chapter American Fisheries Society Conference, Liverpool, NY
- 2000 Marcia Caldwell Award for Commitment and Dedication to the Students of the School of Natural Resources, University of Vermont
- 1995 Best Paper Award, Mid-West Fish and Wildlife Conference, Detroit
- 1995 Best Paper (co-author) in Transactions of the American Fisheries Society (*Grewe et al. TAFS 123:309-320*)
- 1993 Best Paper Award, 83rd annual meeting of the Illinois Section of the American Water Works Association
- 1990 Honorable Mention for paper in N. Am. J. Fish. Manage. (Marsden et al. NAJFM 9:257-268).
- 1988 Best Paper Award, NY Chapter American Fisheries Society Conference, Binghamton, NY
- 1987 New York Sea Grant Scholar Award
- 1986 Best Paper Award, Best Student Presentation, NY Chapter American Fisheries Society Conference, Rome, NY

## PROFESSIONAL ACTIVITIES

PROFESSIONAL COMMITTEES:

Invited member, FishLamp, a workgroup of the Sea Lamprey Control Board, GLFC, 2021-present Great Lakes Fishery Commission, Board of Technical Experts, Fisheries Research Board, Core group, 2014-present

Publications Committee, Journal of Great Lakes Research, 2012-2015

Lake Trout Suppression Research Panel, Yellowstone Lake, 2013-present

Great Lakes Fishery Commission, Sea Lamprey Research Board, 2003-2012 (Chair 2005 – 2010)

Lake Champlain Basin Program Aquatic Nuisance Species Committee, 2005 - present

Fish Scientific Advisory Group for Vermont Endangered Species Committee, 2004 - 2010

Lake Champlain Sea Lamprey Alternatives Workgroup, 2003 – present; Chair 2006 - 2012

Lake Champlain Fisheries Technical Committee, Strategic Plan working group, 2005 - 2009

North-eastern Division American Fisheries Society Student Travel Awards Chair, 2004 - 2008

Great Lakes Fishery Commission, Lamprey Reproduction Reduction Task Force, 2004 - 2010

Great Lakes Fishery Commission, Lamprey Trapping and Pheromones Task Group, 2003 - 2005

Great Lakes Fishery Commission, Board of Technical Experts Lake Trout Task Area, 1997-99

Invited member, Aquatic Nuisance Species Task Force's Ballast Water Program Effectiveness and Adequacy Criteria Committee, 1999

Lake Champlain Fisheries Technical Committee, 1997 - present

Lake Champlain Native Mussel Working Group, 1997 - 2001

Yellow perch task group, Lake Michigan Technical Committee, 1993-1997

Creel task group, Lake Michigan Technical Committee, 1994-1997

Organizer, Round Goby Conference, sponsored by Illinois-Indiana Sea Grant, Chicago, Feb 21-22, 1996

Steering Committee, RESTORE: Restoration of Lake Trout in the Great Lakes: a Critical Assessment, Ann Arbor MI, Jan. 1994

Chair, American Fisheries Society North Central Division Great Lakes Technical Committee, 1995-6

Co-Chair, American Fisheries Society North Central Division Genetics Technical Committee, 1992-3

Chair of the Great Lakes Commission's Panel on Exotic Species, 1992-93; Panel's representative to the National Task Force on Non-indigenous Aquatic Nuisance Species - Research Protocol Committee.

Committee to Develop Confinement and Containment Protocols for Zebra Mussels, 1992

Zebra Mussel-Specific Research Protocol Development Committee (NOAA), 1992

Lake Michigan Technical Committee (Great Lakes Fishery Commission) 1991-1997

Lake Ontario Committee (Great Lakes Fishery Commission) 1986-90

Lower Lakes Lake Trout Coordination Group, 1985-90

## **EDITORIAL ACTIVITIES:**

Editor, Strategic Plan for Lake Champlain Fisheries, Fisheries Technical Committee, 2018-2019

Guest Editor, special issue on Lake Champlain, 2011, J. Great Lakes Res. 2011

Associate Editor, Journal of Great Lakes Research, 1995-2012

Principal Editor, Strategic Plan for Lake Champlain Fisheries, Fisheries Technical Committee, 2008 Guest Editor, special issue on Great Lakes Sea Lamprey Research Themes, 2007, J. Great Lakes Res. 33 (SI 2).

Special Editor, Marsden, J. E., J. L. Gunderson, M. R. Klepinger, and C. R. Bronte, eds. 1998.International symposium on Eurasian ruffe (*Gymnocephalus cernuus*) biology, impacts and control.J. Great Lakes Res. 24(2) special section.

Special Editor, Selgeby, J. H., R. L. Eshenroder, C. C. Krueger, J. E. Marsden, and R. L. Pycha, eds. 1995. International conference on restoration of lake trout in the Laurentian Great Lakes. J. Great Lakes Res., 21, suppl 1.

Special Editor, D. P. Philipp, J. M Epifanio, J. E. Marsden, and J. E. Claussen, eds. 1995. Protection of aquatic biodiversity. Proceedings of the World Fisheries Congress, Theme 3. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi

Associate Editor, North American Journal of Fisheries Management, 1992-1994 Newsletter Editor, Genetics Section, American Fisheries Society, 1991-92

## PROFESSIONAL SOCIETIES:

American Fisheries Society (local & National chapters, Genetics Section, Introduced Fish Section) International Association of Great Lakes Research

Fellow of the Cooperative Institute for Limnology and Ecosystems Research

Great Lakes Research Consortium

Freshwater Mussel Conservation Society

#### MANUSCRIPTS REVIEWED FOR:

Canadian Journal of Fisheries and Aquatic Sciences; Canadian Journal of Zoology; North American Journal of Fisheries Management; Journal of Great Lakes Research; Transactions of the American Fisheries Society; Fisheries (Bulletin of the American Fisheries Society); Journal of Heredity; CRC Press; Biotropica; Auk; Biological Invasions; Journal of Shellfish Research; Northeastern Naturalist, Archiv. Fur Hydrobiologie; American Midland Naturalist; Malacologia, Oecologia; Animal Behaviour; Aquatic Biology

#### GRANT PROPOSALS REVIEWED FOR:

Great Lakes Research Consortium; Great Lakes Fishery Commission; National Sea Grant Program; Wisconsin Sea Grant; Ohio Sea Grant; Michigan Sea Grant; New Jersey Sea Grant; National Science Foundation; Hudson River Foundation; Connecticut Sea Grant; Great Lakes Protection Fund; National Undersea Research Program

## **REVIEW PANELS:**

Program Advisory Council, New York Sea Grant, 2002-2011 UVM EPSCoR Awards Review Committee, 2003

#### **TEACHING**

COURSES TAUGHT

University of Vermont:

Scientific Writing and Interpretation (co-taught)

Natural Resources Ecology and Assessment

Fisheries Biology and Techniques (with field labs)

Fisheries Management

Fisheries Biology and Management (with field labs)

Aquatic Ecology and Watershed Science (graduate seminar)

Professional Skills (graduate course)

Ichthyology

Water as a Natural Resource

Conservation Biology (co-taught; with computer labs)

Cornell University:

Introductory Biology for majors (lab)

Introductory Biology for non-majors (lab)

GRADUATE STUDENTS ADVISED (with current positions)

Jenni Cawein, Northwestern University, co-advised (MS 1992)

Steven Robillard, University of Wisconsin-Milwaukee, co-advised (MS 1998) Illinois Dept. of Natural Resources

Jeffrey Stein, University of Illinois Champaign-Urbana (MS), Senior Research Scientist, Illinois Natural History Survey

David Hallac, University of Vermont (MS 1999) Superintendent, NPS, Cape Hatteras

Adam Zerrenner, University of Vermont (MS 2000) Field Supervisor, Southwest Region, USFWS

Brian Ellrott, University of Vermont (MS 2003) National Marine Fisheries Service, California

Eric Howe, University of Vermont (MS 2003, PhD 2006), Director, Lake Champlain Basin Program, VT

Steven Smith, University of Vermont (MS 2006) Fish Biologist, Lake Champlain Office, USFWS

Jacob Riley, University of Vermont (MS 2008) Stantec Consulting, ME

Wayne Bouffard, University of Vermont (MS 2009) USFWS, VT

Seth Herbst, University of Vermont (MS 2010) Michigan Dept. of Fisheries and Wildlife

Bret Ladago, University of Vermont (MS 2013) Fisheries Biologist, VT Dept, of Fish and Wildlife

Victoria Pinheiro, University of Vermont (MS, 2015) Climate Impacts Group, University of Washington

Lee Simard, University of Vermont (MS, 2016) Fisheries Biologist, VT Dept, of Fish and Wildlife

Carrie Kozel, University of Vermont (MS, 2016) Research Associate, Great Lakes Fishery Commission

Peter Euclide, University of Vermont (Ph.D., 2018) Post-doc, University of Wisconsin Stevens Point

Pascal Wilkins, University of Vermont (MS, 2020), Fisheries Biologist, NYDEC Lake Erie

Ben Block, University of Vermont (MS, 2020, co-advised with Jason Stockwell), TetraTech Inc.

Matthew Futia, University of Vermont (Ph.D., current)

Mia McReynolds, University of Vermont (Ph.D., current, co-advised with Jason Stockwell)

Shelby Scarfo, University of Vermont (MS, current)

# POST-DOCTORAL ASSOCIATES (with current positions)

Michael Chotkowski (USFWS, CA)

Declan McCabe (Associate Professor, Saint Michael's College VT)

Mark Beekey (Associate Professor, Sacred Heart University, CT)

Aude Lochet (Carey Institute, Millbrook, NY)

Rosalie Bruel (co-supervised with Jason Stockwell)

Ariana Chiapella (co-supervised with Jason Stockwell; lecturer, Univ. of Vermont)

Ben Marcy-Quay (current)

Justin Lesser (current, co-supervised with Jason Stockwell)

Bianca Possamai (current, co-supervised with Jason Stockwell)

#### GRADUATE STUDENT COMMITTEES

15 Ph.D. students (Purdue University, University of Vermont, University of Notre Dame, S. Louisiana University, Cornell University, Carleton University)

30 MS students (Northwestern University, Loyola University, University of Illinois-Champaign-Urbana, Central Michigan University, University of Vermont)

## EXTERNAL COMMITTEE MEMBER

Queen's University, Belfast, Ireland (Ph.D. student)

University of Maine, Orono (Ph.D. student)

Carleton University, Ottawa ONT (Ph.D. student)

University of Toronto (Ph.D. student)

Central Michigan University (Ph.D. student)

SUNY Brockport (MS student)

## **GRANTS** (\* indicates students)

2021-2023 Rinchard J, M Futia\*, JE Marsden, AN Evans, S Sañudo-Wilhemy. Do lake trout eggs and free embryos acquire thiamine during development in wild populations? GLFC, \$186,586, 2 years

2021-2023. Marsden JE, TR Binder, J He. Lake trout colonization of artificial reefs: who's interested, and how long does it take? Great Lakes Fishery Commission \$113,471

- 2020-2023 McNaught, S, T Galarowicz, J Jonas, J Smith, N Barton, JE Marsden. Importance of food and predators to lake whitefish and cisco recruitment in Lake Michigan. Great Lakes Fishery Trust, 2 years, \$207,000
- 2020-2024. Marsden, JE, JD Stockwell. Forage fish community monitoring in Lake Champlain. Lake Champlain Basin Program, \$238,822
- 2020-2021 Stockwell JD, JE Marsden, A Chiapella. How much carbon is in those mussels? The potential impact of a quagga mussel invasion on energy pathways in Lake Champlain. Water Resources Center, \$36,000.
- 2020-2021. Marsden, JE and M. Futia\*. Three-dimensional habitat occupancy of wild juvenile and stocked adult lake trout in Lake Champlain. Lake Champlain Sea Grant. \$77,630
- 2019-2020. Stockwell, JD, JE Marsden, R Bruel. A food web modeling approach to evaluate and predict impacts of Lake Champlain fish population changes. Lake Champlain Sea Grant Program. \$147,539
- 2018-2023 Marsden, JE, JD Stockwell. Lake Champlain fish ecology: a mesocosm approach to the Great Lakes. Great Lakes Fishery Commission. \$1,780,000.
- 2018-2020. Cooke, S. J., J. E. Marsden, D. P. Philipp, J. Claussen. Developing a conservation strategy for lake trout on Lake Papineau. NSERC and Kenauk Nature Preserve. \$110,000
- 2017. J. E. Marsden. Mobile receiver and telemetry for tracking fish. Lake Champlain Basin Program, \$10,000
- 2016 \*Euclide, P., and J. E. Marsden. Quantifying the extent and history of habitat fragmentation in the Lake Champlain basin. Water Resources Center \$10,000
- 2016 \*Kozel, C., and J. E. Marsden. Can early feeding ameliorate thiamine deficiency in wild lake trout fry? Water Resources Center thiamine and fry \$10,000
- 2015 Marsden, J. E. Evaluation of successful lake trout recruitment in Lake Champlain: what has changed? UVM John Hilton faculty research fund, \$10,151
- 2015 Stott, W. S. C. Riley, T. R. Binder, J. E. Marsden, C. C. Krueger, S. Koproski, A. Kowalski, Natural lake trout strain identification in northern Lake Huron. Great Lakes Fishery Commission. \$18,296
- 2014 Marsden, J. E. and J. D. Stockwell. An acoustic telemetry array for Lake Champlain: investigating effects of aquatic habitat fragmentation on lake whitefish. Water Resources Center. \$40,000
- 2014-2016 Marsden, J. E., J. Rinchard, and A. Evans. Can early feeding in lake trout fry ameliorate thiamine deficiency? Great Lakes Fishery Commission. \$138,977
- 2013-2018. Marsden, J. E. and J. D. Stockwell. Lake Champlain fish ecology: a mesocosm approach to the Great Lakes. Great Lakes Fishery Commission. \$945,000.
- 2013-2014. Marsden, J. E., C. Guy, R. Gresswell. Evaluation of lake trout egg distribution, density, and survival in Yellowstone Lake. Wyoming Council of Trout Unlimited. \$190,000
- 2012-2013 Marsden, J. E., J. Johnson. Attraction of spawning lake trout to conspecifics and reef odor. Great Lakes Fishery Commission \$50,000
- 2012-2013 Miehls, S. and J. E. Marsden. Diel and spatial movement patterns of downstream migrating sea lamprey transformers. Great Lakes Fishery Commission, Lake Champlain Sea Lamprey Alternatives Workgroup \$162,000
- 2011-2013. Marsden, J. E., W. Kilpatrick, and W. Ardren. Genetic examination of lake whitefish population sub-structuring among basins in Lake Champlain. State Wildlife Incentives Grant, VTDFW, \$39,688
- 2012-2013 Lochet, A., B. Fryer, J. E. Marsden. Tributary contributions to the production of parasiticand spawning- phase sea lamprey in Lake Champlain using recent advances in statolith microchemistry. Lake Champlain Sea Lamprey Alternatives Workgroup \$50,000
- 2011-13. Marsden, J. E. Restoration of native salmonids and other inter-jurisdictional fish in Lake Champlain. USFWS Cooperative Agreement. \$100,000

2011-12. Fitzgerald, E., J. E. Marsden, and B. Haselton. Measuring the effects of lakeshore development on littoral habitat quality in Mallets Bay, Vermont. Lake Champlain Basin Program. \$114,599

- 2010 Marsden, J. E. Restoration of native salmonids and other inter-jurisdictional fish in Lake Champlain. USFWS Cooperative Agreement. \$20,000
- 2010-2011. Adams, J., N. Dingledine, J. E. Marsden, and J. Johnson. Reef Habitat Restoration in Thunder Bay, Lake Huron. Estuaries Restoration Act. \$516,876.
- 2009-2010 Marsden, J. E. Evaluation of the Champlain Canal as a current exotic species vector. Lake Champlain Sea Grant, \$101,00
- 2009-2010 Adams, J., J. E. Marsden, J. Johnson, and N. Dingledine. Evaluation of habitat remediation in Thunder Bay, Lake Huron, on lake trout spawning success. Great Lakes Fish and Wildlife Restoration Act \$64,000
- 2009-2011 Determination of micro-elemental stability of sea lamprey statoliths. Marsden, J. E., S. Ludsin, B. Fryer, and E. Brothers. Great Lakes Fishery Commission, \$175,623
- 2009-2010. Emerging threats on Lake Champlain. Levine, S., J. E. Marsden, and M. Watzin. Lake Champlain Sea Grant, \$371,000.
- 2007 The effects of zebra mussel growth in different calcium levels on predatory selection by pumpkinseed sunfish (*Lepomis gibossus*). Partee, E. and J. E. Marsden. Helix Undergraduate Research Award, \$5,000.
- 2006-2008. Emerging threats on Lake Champlain. Levine, S., J. E. Marsden, and M. Watzin. Lake Champlain Sea Grant, \$450,000.
- 2005-2007. Aquatic Invasive Species Research: Use of migratory and sex pheromones to increase trapping efficiency of sea lamprey. Marsden, J. E. and D. L. Parrish. National Sea Grant, \$107,000
- 2004-2007. Evaluation of lake trout spawning habitat for Lake Michigan deep reefs. Janssen, J., C. Bronte, J. E. Marsden, and D. J. Jude. Great Lakes Fishery Trust, \$360,000
- 2004-2006 Distribution and factors affecting survival of sea lamprey eggs in and out of nests. Lake Champlain Basin Program, \$30,000
- 2004 RUBY summer internship to \*Rebecca Drapp, Saint Michael's College. Faculty advisor J. E. Marsden. \$5,000
- 2004 Sea lamprey egg survival in and out of nests. Marsden, J. E. Nature Conservancy \$10,000; USFWS 10,000.
- 2004-2006 Micro-elemental analysis of statoliths as a tool for tracking stream origins of sea lamprey. Ludsin, S. A., J. E. Marsden, and B. J. Fryer. Great Lakes Fishery Commission, 2 years, \$96,315
- 2004-2006 Development of a population viability model to optimize sea lamprey control strategies in Lake Champlain. Marsden, J. E., S. A. Ludsin, P. Sullivan, and B. J. Fryer. Lake Champlain Sea Grant, 2 years, \$83,990
- 2003-2004 Microelemental analysis of Lake Champlain sea lamprey statoliths. Martin, C. and J. E. Marsden. Lake Champlain Basin Program, \$10,000; USFWS. \$8,000.
- 2002 A test for inducible defense in the zebra mussel (*Dreissena polymorpha*). UVM Undergraduate Research and Faculty Mentoring grant, Matt Toomey\* and J. E. Marsden; \$3,000
- 2002-4 A multidimensional approach to evaluating a barrier at the Champlain Canal. Malchoff, M., J. E. Marsden, M. Hauser, E. Fitzpatrick, and W. Howland. National Sea Grant \$95,000
- 2001-2003 Aquatic Nuisance Species: Effect of zebra mussel colonization of soft sediments on foraging success and habitat choice by benthic fish. Marsden, J. E., Mark Beekey, Declan McCabe. National Sea Grant, \$125,758
- 2001-2004 Movement and population size of sea lamprey in Lake Champlain and its tributaries. J. E. Marsden, P. Sullivan, M. Malchoff. Great Lakes Fishery Commission. 2 years, \$122,253
- 2001-2002 Population size estimates of sea lamprey transformers in Lake Champlain tributaries. J. E. Marsden, D. Parrish. U. S. Geological Service, Biological Resources Division. 1 year, \$49,491.

2001-2003 Effects of interstitial predators on lake trout recruitment in Lake Michigan. J. Fitzsimons, J. E. Marsden, J. Jonas, and R. Claramunt. Great Lakes Fishery Trust. \$360,000; co-funding from Great Lakes Fishery Commission, \$135,000.

- 2000-2002 Developing ecosystem indicators and an environmental score card for the Lake Champlain Basin Program Watzin, M. C., D. Wang, R. Manning, B. Rosen, W. C. Hession, E. A. Cassell, J. E. Marsden, W. Kuentzel, and A. Shambaugh. Lake Champlain Basin Program, \$99,997
- 2000-2001 Investigation of lake trout spawning on deep reefs as a potential restoration tool. J. E. Marsden. National Undersea Research Program, \$42,448
- 2000-2002 Effect of zebra mussel colonization of soft sediments on burrowing invertebrates and insectivorous fish. J. E. Marsden. EPA-EPSCoR post-doctoral fellow award. \$60,000
- 2000 Assessment of stimuli that affect movement and detachment of adult zebra mussels. EPSCoR undergraduate summer grant to \*Matt Toomey (advisor: J. E. Marsden) \$5,000.
- 1999-2000 Compensatory responses of sea lamprey larvae to chronic population reduction; J. E. Marsden. Vermont EPSCoR Graduate Research Fellowship. \$21,630.
- 1999-2000 Population density and dynamics of sea lamprey populations in treated and untreated streams: growth rates, survival, sex ratio, and age at transformation. J. E. Marsden and \*A. Zerrenner. Great Lakes Fishery Commission. \$17,707.
- 1999 Effect of natural calcium levels on growth of zebra mussels and resistance to predation in Lake Champlain. Helix Minigrant for Undergraduate Research in Science. \*C. Newt and J. E. Marsden. \$3,500.
- 1998-99 Smelt research on Lake Champlain. VT Department of Fish and Wildlife. \$17,000
- 1998 Development of a monitoring protocol for the eastern sand darter, *Etheostoma pellucidum*, in the Poultney River, Vermont and New York. J. E. Marsden. The Nature Conservancy. \$5,000
- 1998 Genetic variation among *Eastern elliptio* (Mollusca: bivalvia) populations in the Lake Champlain basin. University of Vermont Undergraduate Research and Faculty Mentoring grant. \*E. Ennis and J. E Marsden. \$5,000
- 1997-8 Assessment of active dispersion by adult zebra mussels, and consequences for unionid mussel refugia. J. E. Marsden. Connecticut Sea Grant Program. \$4,974.
- 1997-8 Degradation and restoration of Lake Michigan: past and future of nonindigenous species (NIS). D. Lodge, D. Schneider, R. Sparks, J. E. Marsden. National Sea Grant Program. \$76,629
- 1996-8 Evaluation of potential for native mussel refugia following the invasion of zebra mussels. J. E. Marsden and D. Parrish. USFWS. \$67,000
- 1996-7 Application of genetic analysis to detect multiple paternity and sperm precedence in the freshwater snail Elimia. J. E. Marsden. University of Illinois Urbana-Champaign Campus Research Board, \$8,300
- 1997-9 Yellow perch population assessment in southwestern Lake Michigan. . J. E. Marsden and \*S. Robillard. IL Dept. of Natural Resources. \$307,566
- 1996-2001 Creel survey of the Illinois waters of Lake Michigan. IL Dept. of Natural Resources. J. E. Marsden and W. Brofka. \$123,947
- 1996 Parental strain analysis of wild-caught lake trout fry from Lake Michigan. J. E. Marsden and B. May. US Fish and Wildlife Service. \$3,195
- 1995-7 Sea Grant Non-Indigenous Species Extension Specialist at the Lake Michigan Biological Station. J. E. Marsden. Illinois-Indiana Sea Grant. \$125,000
- 1995 Preliminary assessment of the potential effects of introduced gobies on aquatic ecosystems in Illinois. D. Soluk, W. Resetarits, J. E. Marsden, and J. Janssen. Environmental Protection Trust Fund Commission. \$149,515
- 1995 Parental strain analysis of wild-caught lake trout fry from Lake Michigan. J. E. Marsden and B. May. US Fish and Wildlife Service. \$4,135
- 1995 A genetic, morphological, and ecological analysis of freshwater gastropods in southwestern Lake Michigan. J. E. Marsden. University of Illinois – Urbana-Champaign Campus Research Board, \$9,300

1995 Detection of actively-used lake trout spawning reefs and assessment of egg vulnerability to sculpins. J. Janssen and J. E. Marsden. National Undersea Research Program. Submersible use + \$5,000

- 1994-7 Yellow perch population assessment in southwestern Lake Michigan, including evaluation of sampling techniques. J. E. Marsden and D. P. Philipp. IL Dept. of Conservation. \$239,666
- 1994-7 Reproductive success of stocked lake trout in southwestern Lake Michigan. J. E. Marsden. IL Dept. of Conservation. \$143,278
- 1994-7 Effect of zebra mussel colonization of native gastropod shells: fecundity, feeding rates, energetics, and mortality. National Sea Grant. J. E. Marsden, D. Schneider, and D. Padilla \$128,183
- 1993-5Creel survey of the Illinois waters of Lake Michigan. J. E. Marsden. IL Dept. of Conservation. \$243,300
- 1992 Effects of puncturing the gas bladder and decompression on survival of tagged yellow perch. J. E. Marsden. IL-IN Sea Grant. \$4,000.
- 1992 Long-term zebra mussel monitoring in south-western Lake Michigan. J. E. Marsden. Critical Trends Assessment Committee. \$2,250
- 1991-3 Identification of actively used near-shore lake trout spawning sites in south-eastern Lake Michigan. J. E. Marsden. Illinois-Indiana Sea Grant Program. \$59,500
- 1991-3 Zebra mussel study on Lake Michigan. J. E. Marsden. Illinois Department of Conservation. \$135,000
- 1991-3 Genetics of zebra mussel populations: critical data for ecological studies and development of effective long-term control strategies. J. E. Marsden and B. May. US Environmental Protection Agency. \$102,113
- 1990 Development of a standardized protocol to monitor the spread and density of zebra mussel (*Dreissena polymorpha*) populations. J. E. Marsden, A. Aitken, R. Engel and D. Molloy. Great Lakes Research Consortium, \$8,500
- 1989 Identification of parental strains of lake trout eggs captured during spawning in Lake Ontario. C. C. Krueger and J. E. Marsden. New York Sea Grant Institute. \$9,570.
- 1989 Effect of substrate size on spawning site selection by lake trout and on overwinter mortality of eggs. C. C. Krueger and J. E. Marsden. New York Sea Grant Institute. \$83,538.
- 1988 Analysis of strain composition of lake trout eggs. J. E. Marsden. Empire State Lake Ontario Derby, Inc. \$2,000.
- 1988 Comparison of substrate selected by spawning lake trout, and evaluation of techniques for egg collection. C. C. Krueger and J. E. Marsden. Great Lakes Fishery Commission. \$78,880.
- 1987 Identification of the sources and amount of lake trout egg mortality on a reef in Lake Ontario. C. C. Krueger and J. E. Marsden. Great Lakes Fishery Commission. \$32,537.
- 1979-1987 Genetics Society of America student travel award; American Museum of Natural History Roosevelt Award; Local Sigma Xi Award; National Sigma Xi Grants-in-Aid of Research; Cornell University summer research grant; Explorer's Club Education and Youth Activities Fund grant; Bermuda Biological Station Scholarship

## PUBLICATIONS (\*graduate student authors; \*\* undergraduate student authors)

REVIEWED CHAPTERS

- Binder, T, C Bronte, **JE Marsden**. 2021. Chapter 6: Movement and Behavior. In: Lake Charr *Salvelinus namaycush*: Biology, Ecology, Distribution, and Management, AM Muir, CC Krueger, MJ Hansen, and SC Riley, eds. Springer Fish & Fisheries Series Series Ed.: D Noakes
- Goetz, R, AN Evans, **JE Marsden**, K Richter, SC Riley, D Tillitt. 2021. Chapter 9: Reproductive Biology, Developmental Ontogeny, and Early Life History. In: Lake Charr *Salvelinus namaycush*: Biology, Ecology, Distribution, and Management, AM Muir, CC Krueger, MJ Hansen, and SC Riley, eds. Springer Fish & Fisheries Series Series Ed.: D Noakes

Marsden, JE, TR Binder, SA Farha, SC Riley, and CC Krueger. 2021. Chapter 5: Habitat. In: Lake Charr *Salvelinus namaycush*: Biology, Ecology, Distribution, and Management, AM Muir, CC Krueger, MJ Hansen, and SC Riley, eds. Springer Fish & Fisheries Series – Series Ed.: D Noakes

- Marsden, JE, AM Muir, and CC Krueger. 2021. Chapter 11: Terminology issues in lake charr early development. In: Lake Charr *Salvelinus namaycush*: Biology, Ecology, Distribution, and Management, AM Muir, CC Krueger, MJ Hansen, and SC Riley, eds. Springer Fish & Fisheries Series Series Ed.: D Noakes
- **Marsden, JE,** and MJ Siefkes. 2019. Control of invasive Sea Lamprey in the Great Lakes, Lake Champlain, and Finger Lakes of New York. *In* Lampreys: Biology, Conservation and Control, Vol. 2. *Edited by* MF Docker. Springer, Dordrecht, Netherlands. pp. 411–479.
- **Marsden, JE,** P Stangel, A Shambaugh. 2013. Zebra mussels in Lake Champlain: a sixteen-year monitoring database. Chapter 2, In: T Nalepa and D Schloesser, Quagga and Zebra Mussels: Biology, Impacts, and Control, 2<sup>nd</sup> ed. CRC Press.
- Thurow, RF, CA Dolloff, and **JE Marsden**. 2012. Visual observation of fish and aquatic habitat. Chapter 17, In: AV Zale, DL Parrish, and TM Sutton, eds., Fisheries Techniques 3<sup>rd</sup> ed., American Fisheries Society, Bethesda, MD.

#### REVIEWED JOURNAL ARTICLES

- Lesser, J., R Bruel, B. Marcy-Quay, JD Stockwell, **JE Marsden**. In review. Whole-lake food web model indicates alewife invasion fuels lake trout restoration and alters patterns of trophic flow in Lake Champlain. J Great Lakes Res
- Marcy-Quay, B, CC Wilson, CA Osborne, **JE Marsden**. In review. Optimization of an amplicon sequencing-based microsatellite panel and protocol for stock identification and kinship inference of lake trout *Salvelinus namaycush*. Mol. Ecol. Res.
- **Marsden, J. E.,** A Chiapella, W Keeton, AM Morales-Williams. In review. Large woody debris in lakes—an underestimated carbon sink. Freshwater Biology
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- **Marsden, J. E.** 1992. Standard protocols for monitoring and sampling zebra mussels. Illinois Natural History Survey Biological Notes 138. 40pp.
- **Marsden, J. E.**, and C. C. Krueger. 1991. Spawning by hatchery-origin lake trout in Lake Ontario: data from egg collections, substrate analysis, and diver observations. Can. J. Fish. Aquat. Sci. 48:2377-2384.
- **Marsden, J. E.**, C. C. Krueger, and H. Hawkins. 1991. An improved trap for passive capture of demersal eggs during spawning: an efficiency comparison with egg nets. N. Am. J. Fish. Manage. 11:364-368.
- **Marsden, J. E.,** C. C Krueger, and B. May. 1989. Identification of parental origins of naturally produced lake trout fry in Lake Ontario: application of mixed stock analysis to a second generation. N. Am. J. Fish. Manage. 9:257-268.
- Horns, W. H., **J. E. Marsden** and C. C. Krueger. 1989. An inexpensive method for quantitative assessment of demersal egg deposition. N. Am. J. Fish. Manage. 9:280-286.
- Krueger, C. C., **J. E. Marsden**, H. L. Kincaid and B. May. 1989. Genetic differentiation among lake trout strains stocked into Lake Ontario. Trans. Am. Fish. Soc. 118:317-330.
- **Marsden, J. E.**, C. C. Krueger and C. P. Schneider. 1988. Evidence of natural reproduction by stocked lake trout in Lake Ontario. J. Great Lakes Res. 14:3-8.
- **Marsden, J. E.**, C. C. Krueger, H. Kincaid, and B. May. 1987. Inheritance of duplicated fumarase and phosphogluco-mutase loci in lake trout (*Salvelinus namaycush*). Heredity 58:365-372.
- **Marsden, J. E.**, S. J. Schwager, and B. May. 1987. Single locus inheritance in the tetraploid treefrog *Hyla versicolor* with an analysis of expected progeny ratios in tetraploid organisms. Genetics 116:299-311.

Krueger, C. C., **J. E. Marsden**, and B. May. 1986. Genetic comparison of New York hatchery brown trout strains. New York Fish and Game Journal 33:16-27.

- Kamel, S., **J. E. Marsden**, F. H. Pough. 1985. Diploid and tetraploid grey treefrogs (*Hyla chrysoscelis* and *Hyla versicolor*) have similar metabolic rates. Comp. Biochem. Physiol 82A:217-220.
- **Marsden, J. E.**, and B. May. 1984. Feather pulp: a non-destructive technique for sampling birds for electrophoretic studies. Auk 101:173-175.
- Stoddard, P. K., J. E. Marsden, and T. C. Williams. 1983. Computer simulation of transatlantic bird migration. Animal Behavior 31:173-180.
- Williams, T. C., **J. E. Marsden**, T. Lloyd-Evans, V. Krauthammer, and H. Krauthammer. 1981. Spring migration studied by mist-netting, ceilometer, and an ORNITHAR radar at Manomet, Massachusetts. J. Field Ornithology 52:177-190.
- **Marsden, J. E.**, T. C. Williams, V. Krauthammer, and H. Krauthammer. 1980. Effect of nuclear power plant lights on migrants. J. Field Ornithology 51:315-318.

#### PUBLISHED ABSTRACTS

- Marsden, J. E., A. Spidle, and B. May. 1994. Genetics of the zebra mussel, *Dreissena polymorpha*, and related taxa. American Zoologist 34:17.
- Marsden, J.E., & May, B. 1992. Genetic polymorphism among disjunct populations of zebra mussel in the Great Lakes. J. Shellfish. Res. 11: 231
- Marsden, J. E. 1990. Development and use of standardized zebra mussel monitoring guidelines. J. Shellfish Res. 10:257.
- Marsden, J. E., C. C. Krueger, and B. May. 1986. Distribution of genetic variation within and among hatchery strains of lake trout (*Salvelinus namaycush*). Aquaculture 57:371-372.

#### NON-REVIEWED PUBLICATIONS

- Marsden, J. E. 2021. A perspective on lake monsters. LakeLines 41:30-32
- Hurst, S., L. Durfey, C. MacKenzie, J. E. Marsden, D. L. Parrish, and B. A. Young. 2020. Strategic Plan for Lake Champlain Fisheries. Lake Champlain Fish and Wildlife Management Cooperative.
- Trout Unlimited, 2014. Science Supporting Management of Yellowstone Lake Fisheries. J. E. Williams, J. Varley, M L. Jones, J. E Marsden, P. J. Martinez, and W. A Hubert, contributors. Trout Unlimited, Wyoming.
- Contributor (with 15 authors), 2009. Lake Champlain Basin Aquatic Invasive Species Guide. Lake Champlain Basin Program, Grand Isle, VT
- Marsden, J. E. 2000. Aquatic community ecology. Proceedings of the Taking Stock symposium sponsored by Great Lakes United.
- Marsden, J. E., W. Bouffard, B. Chipman, L. Nashett, and A. Zerrenner. 2000. Sea lamprey control in Lake Champlain. FOCUS (Great Lakes Fishery Commission newsletter)
- Marsden, J. E. 1998. The elements of an effective zebra mussel monitoring program. Proceedings, Conference on Zebra Mussels in Ireland
- Marsden, J. E. 1998. Ecological impacts of zebra mussels in North America. Proceedings, Conference on Zebra Mussels in Ireland
- Marsden, J. E. and M. A. Chotkowski. 1998. Effect of zebra mussels on lake trout spawning reefs. *Dreissena*! 9(2):1-3.
- Marsden, J. E. 1997. Zebra mussel research. Lake Champlain International Derby Gazette.
- Marsden, J. E. 1996. The round goby: innocent until proven guilty? ANS Update 2(2):1
- Marsden, J. E. and D. Jude. 1996. The Round Goby a fact sheet published by the Illinois-Indiana Sea Grant Program.
- Marsden, J. E., and M. Chotkowski. 1995. The round goby invades Lake Michigan. *Illinois Natural History Survey Reports* No. 336

Keniry, T. and J. E. Marsden. 1995. Status of zebra mussels in southwestern Lake Michigan. Our Living Resources 1994, National Biological Survey.

- Marsden, J. E., K. Cummings, and R. Fields. 1994. Zebra mussel control response. *Fisheries* 19(8):44. Sparks, R., S. Whitney, J. Stoeckel, E. Ratcliff, S. Stenzel, R. Sparks, D. Blodget, J. E. Marsden, and D. Schneider. 1994. Gateway to invasion. *Illinois Natural History Survey Reports* No. 330.
- Schneider, D. W., and J. E. Marsden. 1994. Zebra mussels and Lake Michigan snails. *Illinois Natural History Survey Reports* No. 328.
- Marsden, J. E. 1993. Lake trout spawning in Lake Michigan. *Illinois Natural History Survey Reports* No. 324.
- Marsden, J. E. 1993. Responding to aquatic pest species: control or management? Fisheries 18:4-5.
- Marsden, J. E. 1992. The zebra mussel invasion. Aquaticus, Journal of the Shedd Aquarium 23:19-27
- Marsden, J. E., E. Mills, A. Spidle, and B. May. 1992. Quagga mussel update. *Dreissena polymorpha Information Review*, New York Zebra Mussel Information Clearinghouse, 3(3):1-3.
- Marsden, J. E., and D. M. Lansky. 1992. Tolerating zebra mussels: the industry scenario. *Proceedings: Electric Utility Zebra Mussel Control Technology Conference*, Itasca, IL, Oct. 1991. pp 4.15-4.19.
- Marsden, J. E., R. E. Sparks, and K. D. Blodgett. 1991. Overview of the zebra mussel invasion: biology, impacts, and projected spread. *Proceedings of the Governor's Conference on the Management of the Illinois River System.* pp 88-95.
- Sparks, R., and J. E. Marsden. 1991. Mussel alert. *Illinois Natural History Survey Report* No. 310.
- Marsden, J. E. 1991. Development of a standardized sampling protocol to monitor the spread and density of zebra mussel (*Dreissena polymorpha*) populations. *Dreissena polymorpha Information Review*, New York Zebra Mussel Information Clearinghouse, 1(2):4-5.
- Schneider, C. P., T. Schaner, J. E. Marsden, and D. Busch. 1991. Lake Ontario lake trout rehabilitation plan 1990 Revision. Working draft, NY Department of Environmental Conservation. 65pp.
- Marsden, J. E. 1990. Blind reviews. Nature 344:698.
- Marsden, J. E. 1990. Blind reviews promote objectivity. Fisheries 15:67-68.
- Marsden, J. E. 1987. Return of lake trout to Lake Ontario. The Conservationist. May-June issue.

## **SCIENTIFIC PRESENTATIONS (first-author only)**

**CONFERENCES** 

- 2018 Marsden, J. E., and P. Wilkins. Growth and recruitment of juvenile lake char in Lake Champlain. Large Lakes Symposium, Evian, France
  - Marsden, J. E., and P. Wilkins. Growth and recruitment of juvenile lake char in Lake Champlain. Char Symposium, Dulith MN
  - Marsden, J.E., J Johnson, N. Dingledine, J. Adams. Long-term assessment of artificial reefs physical and biological aspects. American Fisheries Society annual conference, Atlantic City NJ.
  - Marsden, J. E. and M. N. Schumacher. Diet analysis of wild and stocked juvenile lake trout in Lake Champlain: Looking for clues that explain recruitment. Lake Champlain Research Conference, January 8<sup>th</sup>-9<sup>th</sup>, 2018
  - Marsden, J. E. Development of acoustic telemetry coverage and collaborative fish monitoring in Lake Champlain. GLATOS workshop, Ann Arbor, Feb. 2018
- 2017 Long-term assessment of the physical integrity and biotic colonization of artificial reefs. J. E. Marsden, N. Dingledine, J. Adams, J. Johnson. IAGLR conference, Detroit, MI
- 2016 Marsden, J. E., C.L. Kozel, B. Alger, L. Brown. Evidence of lake trout recruitment in Lake Champlain: Is this the beginning? NY chapter American Fisheries Society
- 2015 Use of acoustic telemetry to evaluate lake trout use of constructed reefs. J. E. Marsden, J. Johnson, T. Binder, N. Dingledine, J. Adams, C. C. Krueger. NY Chapter, American Fisheries Society, Lake Placid; International Conference on Fish Telemetry, Halifax, Canada; American Fisheries Society annual conference, Portland, OR
- 2013 Acing the interview symposium on Professional Skills.. J. E. Marsden. IAGLR Conference, Purdue University

- Artificial reefs in Thunder Bay, Lake Huron a restoration and research platform. Marsden, J. E., J. Johnson, and N. Dingledine. IAGLR Conference, Purdue University
- 2012 Artificial reefs in Thunder Bay, Lake Huron a restoration and research platform. Marsden, J. E., J. Johnson, and N. Dingledine. GLFC Native Fish Restoration workshop, Ann Arbor MI
  - Thiamine deficiency mitigated by early feeding of wild fry? Marsden, J. E., B. J. Ladago, and J. Rinchard. GLFC Thiamine Deficiency Workshop, Ann Arbor, MI
  - The Champlain Canal as an exotic species vector. Marsden, J. E. and B. J. Ladago. New York chapter American Fisheries Society annual conference, Lake Placid, NY
  - Tracking the natal origin of parasitic sea lamprey using statolith microchemistry. Lochet, A., J. E. Marsden, B. Fryer, S. Ludsin. Annual American Fisheries Society conference, St. Paul, MN
- 2011 Changes in lake trout egg thiamine levels during an alewife invasion in Lake Champlain. Marsden, J. E., K. Kelsey, D. Honeyfield, and S. Riley. IAGLR, Duluth, MN
  - A deep-water electroshocker for sampling small fishes and invertebrates from interstitial spaces. Marsden, J. E., J. W. Riley, N. F. Thompson, J. Janssen, and C. Houghton. American Fisheries Society annual conference, Seattle, WA
- 2010 The decline of fish populations and fisheries in Lake Champlain: an historic review, J. E. Marsden and R. Langdon. Lake Champlain Research Consortium conference, Burlington, VT
  - The decline of fish populations and fisheries in Lake Champlain: an historic review, J. E. Marsden and R. Langdon. American Fisheries Society annual conference, Pittsburgh, PA
- 2009 Techniques for remote evaluation of lake trout (*Salvelinus namaycush*) spawning in deep water J. E. Marsden, J. Janssen, and J. W. Riley, International Char Symposium, Stirling, Scotland
- 2008 Searching for lake whitefish in Lake Champlain, with S. Smith. Lake Champlain Research Consortium conference, Burlington, VT
  - Feasibility of a Champlain Canal AIS barrier. International Association of Great Lakes Research annual conference, Peterborough, Ont (given via teleconference)
  - Status of lake whitefish (*Coregonus clupeaformis*) in Lake Champlain, with S. Smith, and J. Hatt. American Fisheries Society annual conference, Ottawa, Ont
  - Investigations into age-0 mortality of lake trout in Lake Champlain. Lake Trout Age-1 Mortality Coordination workshop, E. Lansing, MI
- 2007 Deep-water techniques for evaluating lake trout spawning. With J. Janssen and J. W. Riley. International Association of Great Lakes Research annual conference. State College, PA
- 2006 Panel discussion on sea lamprey control in Lake Champlain, Northeastern Division American Fisheries Society conference, Burlington VT, April 2006
  - Predictive morphometric relationships for estimating fecundity of sea lamprey from Lake Champlain and other landlocked populations. with S. J Smith, International Association of Great Lakes Researchers annual conference, Windsor, Ont.
  - Tributary contributions to the parasitic and spawning adult population of sea lamprey (*Petromyzon marinus*) in Lake Champlain using elemental signatures. With Howe, E. A., S. A. Ludsin, C. H. Hand, and B. J. Fryer. International Association of Great Lakes Researchers annual conference, Windsor, Ont.
  - Fate of post-emergent lake trout fry in Lake Champlain. With J. W. Riley. Reintroduction of Native Fishes Research Coordination Workshop, Great Lakes Fishery Commission, Ypsilanti, MI
- 2005 A comparison of lake trout spawning and fry emergence in lakes Michigan, Huron, and Champlain. with B. J. Ellrott, J. D. Fitzsimons, R. M. Claramunt and J. L. Jonas. New York Chapter American Fisheries Society Conference, Liverpool NY.
- 2004 Lake trout egg deposition, fry hatch, and predation in Lake Michigan, Parry Sound (Lake Huron), and Lake Champlain with R. Claramunt, J. D. Fitzsimons, J. Jonas, & B. Ellrott. Native Fish Restoration Workshop, GLFC, Ann Arbor MI
  - Sea lamprey control in the Great Lakes and Lake Champlain. Invited presentation to the NE Aquatic Nuisance Species Panel, Saratoga Springs, NY

2003 Aquatic invaders in Lake Champlain - sources, vectors, and potential solutions. with M. Hauser, and M. Malchoff, Northeast Fish and Wildlife Conference, Providence RI

- Field trials to test behavioral response of migratory phase sea lamprey to larval pheromone within tributary systems. Great Lakes Fishery Commission Sea Lamprey Research Workshop, Detroit
- The Champlain Canal: a conduit for exotic species, with M. Hauser and M. Malchoff, 12<sup>th</sup> International Aquatic Invasive Species Conference, Windsor, Ont.
- Estimating population size of sea lamprey larvae in streams, with E. Howe, P. Sullivan, and Mark Malchoff. American Fisheries Society, Quebec, QUE
- 2002 Lake trout reproduction in Lake Champlain, with Brian Ellrott, Northeast Fish and Wildlife Conference, Portland, ME
  - The impact of zebra mussel colonization of soft sediments on foraging efficiency of benthic fish, with M. Beekey, and D. McCabe, American Fisheries Society Annual Conference, Baltimore, MD
  - A comparison of lake trout fry emergence in lakes Michigan, Huron, and Champlain, with B. Ellrott, J. Fitzsimons, R. Claramunt, and J. Jonas. Great Lakes Fishery Commission workshop on lake trout, Ann Arbor
- 2001 Investigation of lake trout spawning on deep reefs, with B. Ellrott. International Assoc. of Great Lakes Researchers annual conference, Green Bay, WI
- 2000 Wetland substrates as unionid refugia from zebra mussels, with D. E. Hallac. 10<sup>Th</sup> International Zebra Mussel Conference, Toronto, Canada.
  - Wetland substrates as unionid refugia from zebra mussels, with D. E. Hallac. International Assoc. of Great Lakes Researchers, Cornwall, Ont.
- 1999 Assessment of rainbow smelt stocks during and eight-year experimental sea lamprey control program on Lake Champlain. First North American Workshop on Rainbow Smelt, Quebec City, Feb. 21-23 (presented for George LaBar)
- 1998 Ten years of egg, larval, YOY, and adult data for yellow perch in southwestern Lake Michigan, with S. Robillard, International Association of Great Lakes Research Conference, Hamilton Ont.
  - Zebra mussels impede lake trout reproductive success in Lake Michigan, with M. A. Chotkowski, 8<sup>th</sup> International Zebra Mussel and Aquatic Nonindigenous Nuisance Species Conference, March, Sacramento, CA
- 1997 Evidence of a yellow perch population decline in Lake Michigan: egg, larval, YOY, and adult data, with S. Robillard, Special Symposium on Yellow Perch, Midwest Fish and Wildlife Conference, Milwaukee
  - Fatal attraction: lake trout spawning on man-made spawning substrates. with M. A. Chotkowski. AIC chapter AFS Coldwater Workshop on Lake Trout, Jay Peak, VT
  - Zebra mussels impede lake trout reproductive success in Lake Michigan, w. M. A. Chotkowski. National Conference of the American Fisheries Society, Monterey, CA
  - Effects of round gobies in the Great Lakes and beyond. Northeast Conference on Nonindigenous Aquatic Species. Burlington VT
- 1996 Is the goby a bogy?, introduction to the Conference on the Round Goby, Chicago IL Status of the round goby in southwestern Lake Michigan, with K. Wolfe, C. Dolan, and M. Chotkowski. Conference on the Round Goby
  - 1995 Parental strain identification of wild lake trout fry collected in southern Lake Michigan, with B. May, Mid-West Fish and Wildlife Conference, Detroit MI
    - Distribution and population dynamics of the round goby in the Great Lakes, with M. Chotkowski, Mid-West Fish and Wildlife Conference, Detroit MI
  - 1994 Substrate characteristics that attract spawning lake trout, with D. L. Perkins and C. C. Krueger, Restoration of Lake Trout in the Great Lakes: a Critical Assessment. Ann Arbor, MI
  - 1993 Substrate preferences of newly settled zebra mussels, Third International Zebra Mussel Conference, Toronto, Ontario
    - Population dynamics and movement of yellow perch in south-western Lake Michigan, with W. Brofka, D. Makauskas, and W. H. Horns, 55th Midwest Fish and Wildlife Conference, St. Louis, MO

Evidence of lake trout egg deposition in southwestern Lake Michigan, with M. J. Keniry and W. Brofka. 54th Midwest Fish and Wildlife Conference, Toronto, Ontario

- Lake trout restoration in the Great Lakes: a research perspective, with Charles C. Krueger, David Perkins, and Bernie May, World Fisheries Congress, Athens, Greece
- Integrated pest management in freshwater systems lessons from the zebra mussel invasion in North America, Theme 3 symposium, World Fisheries Congress, Athens, Greece
- Zebra mussel settlement behavior, Joint Illinois-Wisconsin chapters meeting of the American Fisheries Society, Waukegan IL
- Standardized zebra mussel monitoring protocols, presented by Lois Deacon, Second International Zebra Mussel Conference, Toronto, Ontario
- 1991 Genetic polymorphism among disjunct populations of zebra mussels in the Great Lakes, co-authored with B. May, Second International Zebra Mussel Research Conference. Rochester, NY
  - Status of zebra mussels in Lake Michigan temporal and spatial distribution of veligers and adults, presented with L. Bardygula, Second International Zebra Mussel Research Conference, Rochester, NY.
  - Zebra mussel monitoring in Lake Michigan, 1991 techniques and results, Electric Power and Research Institute Zebra Mussel Conference, Itasca, IL
  - Natural reproduction by stocked lake trout in Lake Ontario: prospects for Lake Michigan, Illinois American Fisheries Society meeting, Urbana, IL
- 1990 Development and use of standardized zebra mussel monitoring guidelines, First International Zebra Mussel Research Conference, Columbus, OH
  - Lake trout egg deposition, fertilization rate, and overwinter survival in Lake Ontario, National American Fisheries Society, Pittsburgh, PA
  - Stocked lake trout deposit eggs non-randomly with respect to substrate type, International Association of Great Lakes Researchers, Windsor, Ont.
  - Stocked lake trout deposit eggs non-randomly with respect to substrate type, New York Chapter of the American Fisheries Society, Owego, NY
- 1989 Reproductive success of lake trout strains stocked in Lake Ontario: comparisons among years, among life stages, and between hatchery-raised and wild fry, National American Fisheries Society, Anchorage, AK
- 1988 Preliminary observations on lake trout egg deposition in Lake Ontario, New York Chapter of the American Fisheries Society, Binghamton, NY
- 1987 Parental origins of naturally-produced lake trout fry in Lake Ontario, New York Chapter of the American Fisheries Society, Rome, NY
- 1986 Parental origins of naturally-produced lake trout fry in Lake Ontario, National American Fisheries Society, Providence, RI
  - Two new isozyme loci in salmonids, with application to lake trout rehabilitation in lake Ontario, New York Chapter of the American Fisheries Society, Rome, NY
- 1985 Distribution of genetic variation within and among hatchery strains of lake trout (*Salvelinus namaycush*), New York Chapter of the American Fisheries Society, Rome, NY
- 1980 A computer simulation of trans-Atlantic bird migration, Migration, Orientation and Homing Symposium, Milbrook, NY

## POSTER PRESENTATIONS

- 2019 The importance of personality in individual fish movements. Gordon Research Conference on Movement Ecology of Animals, Lucca, Italy
- 2018 Visual display of complex, multidimensional spatial data from acoustic telemetry. J. E. Griffin and J. E. Marsden. GLATOS workshop, Ann Arbor MI
- 2009 Evaluation of calcein for marking lake trout fry, and estimation of fry abundance on a spawning reef. J. E. Marsden, J. Hatt, and J. W. Riley. International Charr Symposium, Stirling, Scotland

2008 Effects of egg and fry predators on lake trout recruitment in Lake Michigan. J. D. Fitzsimons, J. E. Marsden, J. L. Jonas, and R. M. Claramunt. Great Lakes Fishery Trust 10-yr anniversary, MI

- 2006 A life cycle approach to modeling sea lamprey in the Lake Champlain basin. Howe, E. A., J. E. Marsden, T. M. Donovan, R. H. Lamberson. American Fisheries Society annual conference, Lake Placid, NY
- 2004 Development of a matrix-based population viability model to manage a population for extinction. Howe, E. A., J. E. Marsden, T. M. Donovan, R. H. Lamberson, T. Tear. World Fisheries Conference, Vancouver, WA.
- 1999 Lake Champlain Basin Native Mussel Research, M. Lyttle, D. Hallac, J. E. Marsden, S. Fiske, C. Eliopoulus, P. Stangel, R. Levey. Champlain Research Consortium Symposium, NY and New England Association of Environmental Biologists, VT.
- 1997 A substrate to which zebra mussel will not attach, with P. Charlebois, Northeast Conference on Nonindigenous Aquatic Species. Burlington VT
- 1993 Species-specific confinement and containment protocols, with D. Reid, L. Johnson, J. Bidwell, J. Carlson, and J. Nichols. Third International Zebra Mussel Conference, Toronto
- 1992 Zebra mussel monitoring, Joint Illinois and Wisconsin American Fisheries Society meeting, Waukegan, IL
- 1991 Standard protocols for sampling and monitoring zebra mussels, Illinois American Fisheries Society annual meeting, Urbana, IL
- 1987 Single locus inheritance in a tetraploid amphibian: an analysis of expected progeny ratios in tetraploid organisms, Genetics Society of America, San Francisco, CA
- 1985 Distribution of genetic variation within and among hatchery strains of lake trout (*Salvelinus namaycush*) 3rd Annual Genetics in Aquaculture Symposium, Davis, CA

## INVITED PRESENTATIONS, SEMINARS AND COLLOQUIA

- 2015 Keynote speaker, Ohio State University, Lake Erie-Inland Waters Annual Research Review Seminar speaker, Department of Environmental Sciences, University of Toledo, Use of acoustic telemetry to define lake trout spawning sites and behavior
  - Invited speaker, Sea Grant Great Lakes Network annual meeting in Burlington, VT; a retrospective on 25 years of aquatic invasive species research.
- 2014 Lake Champlain Basin Program workshop on global warming: Implications of global warming for aquatic invasions.
  - Seminar speaker, Carleton University, Ottawa, Ont. Artificial reefs for lake trout spawning if we build it, will they like it?
- 2012 Non-indigenous fish species: past mistakes, future solutions? EEEF Conference Plenary speaker, Windsor, Ontario
- 2008 Keynote speaker, Federation of Vermont Lakes and Ponds Vermont Lake Seminar 2009, Shelburne, VT
  - Lake trout in Lake Champlain. Invited seminar at Green Mountain College, VT
- 2007 Invited seminar, University of Maine, Orono. Lake trout restoration: what 50 years of (mostly) failure have taught us
- 2006 Invited seminar, Queens University, Kingston, Ont. Aquatic exotic species: the good (?), the bad (!), and the ugly
- 2005 Invited panelist for Lake Champlain Basin Program's State of the Lake workshop, Plattsburgh, NY
- 2004 UVM Alumni Speaker Series, Small mussels, big muscles: how zebra mussels wreak havoc on the lives of fishes
- 2002 Invited seminar, Dept. of Biology, Notre Dame University; Substrate alteration by zebra mussels: physical and biological consequences
  - Seminar on sea lamprey control, Queens University, Belfast, Northern Ireland
  - Departmental seminar on lake trout research, Biology Department, University of Vermont
  - Panel speaker on Global Climate Change, Vermont Watershed Symposium

2000 Exotic species in Lake Champlain, National Aquatic Nuisance Species Task Force meeting, Burlington VT

- Panel speaker, Aiken Lecture Series on Vermont Watersheds, Burlington VT
- 1999 Effect of zebra mussels on native mussels and lake trout. Invited seminar speaker, SUNY Buffalo Restoration of Lake Trout in the Great Lakes, Conservation Biology seminar series, University of Vermont
  - Yellow perch decline in Lake Michigan: an inter-jurisdictional management problem, Invited seminar series, Cornell University
  - Lake trout, zebra mussels, and artificial reefs. Invited informal seminar, Cornell Biological Field Station
- 1998 Lake trout restoration, invited seminar, Laval University, Quebec
  - The elements of an effective zebra mussel monitoring program. Invited presentation at the Conference on Zebra Mussels in Ireland; Galway, Ireland
  - Ecological effects of zebra mussels. Invited presentation at the Conference on Zebra Mussels in Ireland; Galway, Ireland
- 1997 Aquatic Invaders and Ecosystem Change in the Great Lakes, invited presentation at Biological Invasions: Consequences and Ecological Restoration A Watson Armour III Spring Symposium at the Field Museum of Natural History, Chicago
  - Lake trout in Lake Michigan: past, present, future, invited seminar, U. Wisconsin-Milwaukee
- 1996 Yellow perch research on Lake Michigan, School of Natural Resources, University of Vermont Round gobies, National Sea Grant media briefing on aquatic exotics and their impacts. Chicago IL Summary of research on round gobies, research symposium organized by the Great Lakes Panel on Exotic Species, Ann Arbor MI
  - The Great Lakes: molded by exotic species, managed for exotic species, plenary session, Illinois Chapter of the AFS Meetings, Chicago, IL
- 1995 Genetics and taxonomy of *Dreissena* in North America, with A. P. Spidle and B. May. American Society of Zoologists, symposium on zebra mussels, St. Louis
  - Potential causes of the decline of yellow perch in Lake Michigan, Illinois constituents meeting hosted by IL Dept. of Conservation, Des. Plaines, IL
  - Zebra mussels and exotic species in Lake Michigan, Dept. of Forestry and Natural Resources, Purdue U.
- 1994 seminar on lake trout ecology, Lake Forest College
  - seminar on lake trout restoration, Virginia student chapter AFS, Virginia Polytechnic Institute seminar on zebra mussels, Virginia Polytechnic Institute
  - Potential causes of the decline of yellow perch in Lake Michigan, Lakewide Perch Conference, Kenosha WI
  - Stock identification and mixed stock analysis: biochemical and analytic tools for fisheries conservation, restoration, and management, IAGLR Conference, Windsor, Ontario
- 1993 Genetic aspects of species restoration in the Great Lakes, guest lecture, Illinois student chapter of the American Fisheries Society, Champaign, IL
  - Overview of research related to lake trout restoration in the Great Lakes, guest lecturer, Stone Biological Laboratory, Ohio State University
  - Settling preferences of zebra mussels, Army Corps of Engineers Conference, Chicago, IL
  - Refinements in the monitoring of veligers and newly settled adults. Michigan Sea Grant Conference Zebra Mussels in Michigan, E. Lansing, MI
  - Genetic effects of hatchery rearing on stocked fish, Fish Ecology course, Stone Biological Laboratory, Ohio State University
  - Studying lake trout reproduction with genetics and SCUBA, Department of Biology, Illinois-Wesleyan University, Bloomington IL
- 1992 Redesigning the Great Lakes ecosystem with the introduction of exotic species. Illinois Natural History Survey seminar, Champaign, IL

Lake trout restoration in the Great Lakes, Loyola University, Department of Biology, Chicago, IL. Ecology of Lake Michigan. US Environmental Protection Agency, Chicago, IL

Laboratory analysis of zebra mussels. Illinois Department of Public Works, Springfield, IL.

Lab analysis of zebra mussels, Illinois section of the American Water Works Assoc., Arlington Heights, IL

Impacts of accidental introductions, National Audubon Society workshop on Native Fish, Introduced Fish, and Genetically Engineered Fish, Washington, DC

Monitoring techniques for zebra mussels, Zebra Mussel Workshop '92 held by the US Army Corps of Engineers and the Tennessee Valley Authority, Nashville, TN

Standardized methods for zebra mussel monitoring, Michigan Sea Grant Zebra Mussel Workshop, E. Lansing, MI

Zebra mussel biology, Illinois River Basin Zebra Mussel Workshop, Clinton, IL

Update on zebra mussels in the Great Lakes, Nature of Illinois Foundation Board of Trustees meeting, Chicago, IL

1991 Overview of the zebra mussel invasion: biology, impacts, and projected spread, Governor's Conference on the Management of the Illinois River System, Peoria, IL

Standardized zebra mussel monitoring protocols, Ontario Ministry of Natural Resources Zebra Mussel Workshop, Toronto, Ont.

Monitoring protocols, Ohio River Basin Commission and the Upper Mississippi River Basin Association meeting, Ft. Mitchell, KY

What are zebra mussels - why are they a problem?, Calumet Regional Industrial Zebra Mussel Conference, Merriville, IN

Lake trout restoration in the Great Lakes, University of Wisconsin colloquium, Milwaukee, WI Zebra mussels, Lake Forest College, Department of Biology seminar series, Lake Forest, IL

Lake trout restoration in the Great Lakes, University of Illinois at Chicago, Dept. of Ecology and Evolution

1990 The formation and decline of the Great Lakes ecosystem Chicago Academy of Sciences, Chicago,

1989 Rehabilitation of lake trout in Lake Ontario, University of Rochester, Department of Physics, Rochester, NY

## **OUTREACH ACTIVITIES**

PUBLIC PRESENTATIONS AND WORKSHOPS

- 2019 Presentation to Lake Champlain Trout Unlimited, Plattsburgh NY
- 2018 Moderator and panelist, "The Lake Between/Le Lac qui nous unit" conference, Burlington, VT
- 2017 Talk on Lake Champlain history and research, Wake Robin, VT
- 2016 Keynote speaker, World Water Day Celebration, Champlain Basin Education Initiative, Burlington VT

Fish ecology talk, Fisheries Leadership Institute (a Lake Champlain Sea Grant initiative); Crown Point NY

Progress toward lake trout restoration, Central Vermont Trout Unlimited, Burlington, VT

- 2015 Lake trout suppression in Yellowstone Lake. Central Vermont Trout Unlimited, Burlington VT Tracking lake trout with acoustic telemetry. Angler's Forum Workshop, Burlington VT
- 2014 ROVs, AUVs, and Acoustic Telemetry Studying Fish with Modern Technology, invited presentation at ECHO Science Center, Burlington, VT

Invited talk on Champ to the Visiting Nurses Association, Burlington, VT

From Cat(o)s to Fleas – Updates from Lake Champlain and Beyond, New York chapter of Trout Unlimited, Plattsburgh NY

Familiar Issues, Emerging Issues, Lake Champlain Committee Annual meeting, Burlington, VT Fish Response to Reef Restoration in Thunder Bay, Thunder Bay National Marine Sanctuary, Alpena, MI

2013 Lake trout suppression in Yellowstone Lake. Central Vermont Trout Unlimited, guest speaker

- 2011 Reef Restoration in Thunder Bay, Lake Huron outreach day, Alpena, MI
- 2009 Presentation to New York chapter of Trout Unlimited, Plattsburgh, NY
- 2007 Presentation on research to Central Vermont Chapter, Trout Unlimited
- 2005 Lake trout restoration: searching the deeps for fish eggs, Lake Champlain Basin Program Love the Lake program, Grand Isle VT
  - The not-so silent deeps: how fishes communicate, ECHO Center, Burlington VT
- 2004 Fish lectures presented to ECHO Center volunteers for training Presentation to Lake Champlain Kayaker's Club, North Hero, VT
- 2003 Fish lectures presented to ECHO Center volunteers for training
  - Presentations on lamprey and lake trout research to Lake Champlain Trout Unlimited, Plattsburgh NY, and Vermont Central chapter of Trout Unlimited, Burlington VT
- 2002 Research on lake trout and sea lamprey, invited talk to the Central Vermont Chapter of Trout Unlimited, Burlington, March 5, 2002
  - Changing Habitats aquatic nuisance species, Lake Champlain Basin Initiative Summit 2002: Explore the diversity of the Lake Champlain Basin, Shelburne Farms, May 15.
- 2001 Invited lecturer on fish hatchery genetics for aquaculture course given by Vermont State personnel for New England culturists; Feb 27, 2001
  - Lake trout and sea lamprey research on Lake Champlain, invited talk to Trout Unlimited, Plattsburgh NY
  - Funky fish facts, Center for Lake Champlain 4<sup>th</sup> annual Wednesday speaker series, Burlington VT Fishes of Lake Champlain, Lake Champlain Basin Science Center teacher training workshop Invited lecturer on fish hatchery genetics for aquaculture course given by Vermont State personnel for New England culturists; Feb 27, 2001
  - Zebra mussel effects on lake ecosystems and cycles, 3-hr lecture as part of Earth, Water, Sky, a series of teacher training workshops organized by Horace Puglisi, Essex School District
- 2000 Biology of a Large Lake, presentation to EcoPeers II, a teacher training event at the Lake Champlain Basin Science Center
  - Skulls, a public presentation at the Lake Champlain Basin Science Center (with Mark Freeman) Exotic species in Lake Champlain, Summit 2000, Basin Harbor Club
- 1999 Lake Champlain Fish Ecology, to Lake Champlain Basin Science Center volunteers, Burlington VT Round gobies and other invaders on the horizon, public meeting on fish invaders convened by the Lake Champlain Committee, Plattsburgh NY
- 1998 Presentation on Lake Champlain fishes, to Lake Champlain Science Center volunteers, Burlington VT
  - Diving and fisheries research, Waterfront Diving Center, Burlington VT
  - Biological invasion of the lakes; Framin' the Basin Summer Institute (middle school teacher training workshop)
- 1997 Invaders on the horizon, presented at The Lake Invaders, a public meeting convened by the Lake Champlain Committee, Plattsburgh NY
  - Native freshwater fishes, presentation to the Tropical Fish Club of Burlington, VT
- 1996 Presentation on lake trout, Oak Brook Trout Unlimited chapter, Oak Brook IL
  - Presentation on Lake Michigan yellow perch, Sport Fishing Convention, Rosemont IL
  - Exotic species in our lakes: more than just zebra mussels, Illinois Lake Management Association Annual Conference, Lisle IL
  - Lake Michigan Ecology, banquet presentation at the Abbott Labs chapter of Sigma Xi, Grayslake IL
- 1995 The changing Lake Michigan fishery. Illinois Steelheaders, Wheeling IL
  - Research diving talk to West Shore Aquasports dive club, Beach Park IL
  - Zebra mussel talk to Chicago Water Reclamation District, IL
- 1994 Status of yellow perch and lake trout in southern Lake Michigan, Ad Hoc Fishing Council, Chicago IL

- Informal lunch discussion to the Zion Exchange Club, IL
- Update on yellow perch in Lake Michigan, Ad Hoc Fishing Council, Chicago IL
- 1993 Zebra mussels in Lake Michigan, Great Lakes Naval Base Yacht Club, IL
  - Fisheries research on Lake Michigan, North Point Marina, IL, sponsored by Illinois Beach State Park, IL
  - Participant, information acquisition session for CNN, coordinated by AFS Fisheries Action Network, Chicago
  - presentation on INHS Lake Michigan research to the Lake Michigan Federation, Chicago IL Zebra mussel identification and monitoring techniques, workshop held at the Lake Michigan Biological Station for Nalco Chemical Co. personnel
  - Zebra mussel identification and monitoring techniques, workshop held at the Lake Michigan Biological Station for Martin Marietta personnel
  - Focus on Lake Michigan Native life, at Science Connections, a conference sponsored by the Chicago Botanic Garden, Glencoe IL
  - Zebra mussels in Lake Michigan: where they are, what they're doing, and who they affect. Lake Michigan Water Analysts 1993 Winter Conference. Mundelein, IL
- 1992 Lake trout restoration, Oak Brook Chapter of Trout Unlimited, Oak Brook, IL Presentation to the Illinois Chapter of Salmon Unlimited about lake trout research, Elmwood, IL Research at the Lake Michigan Biological Station, Wisconsin Science Writers, Milwaukee, WI
- 1991 Zebra mussel biology, Underwater Archeological Society of Chicago, Chicago IL Discussion on zebra mussels, Illinois Outdoor Writer's Conference, Alton IL Lake trout research in Lake Michigan, Indiana chapter of Salmon Unlimited, Gary, IN Update on zebra mussel sightings, West Shore Water Producers Association summer meeting, Glencoe, IL
- 1990 Update on the Lake Trout Propagation in Lake Ontario, Lake Ontario Charter Boat Association, Buffalo, NY
- 1989 Cornell Summer College, Explorations in Biology and the Health Professions, Ithaca, NY
- 1988 Lake trout spawning in Lake Ontario, Niagara County Fish Advisory Board, Olcott, NY The Future of Lake Trout, Lake Ontario Charter Boat Association, Buffalo, NY
- 1987 Careers in Fisheries, 4-H leaders in-service training presentation, Ithaca, NY Lake trout restoration, Cortland chapter of Trout Unlimited, Cortland, NY

## NEWS AND MEDIA

- 2022 Burlington Free Press interview on reduced ice on Champlain; Cat Viglienzoni, WCAX about effect of less ice on Champlain; Dana Homlund, Adirondack explorer, about L. Champlain power line project; underwater footage used by Sarah Pagura for Detroit Public TV's series <a href="Great Lakes Now">Great Lakes Now</a>; graduate project highlighted in blog for Global Underwater Explorers; panelist on VPR Morning Edition with Mikaela Lefrak on invasives and blue-green algae blooms
- 2021 Article by Andrew Blok for 30-yr retrospective on discovery of zebra and quagga mussels in North America, for Great Lakes Now; Kelly House, Environment Reporter, Bridge Michigan; article on lake trout stocking cuts, Adirondack Explorer; live radio interview about lake trout stocking cuts, Ric Cengeri, WDEV Waterbury; WCAX Wildlife Watch segment on lake trout restoration; underwater footage of lake trout used by Discovery Channel; underwater footage of lake trout used by Green Bag Entertainment for 'Planet Snoop'
- 2020 Ry Rivard, Adirondack Explorer (Champlain Canal barrier)
- 2019 Vermont Edition with Jane Lindholm (exotic species issues)
- 2018 Axios Science News; WPTZ, WCAX (lake trout restoration)
- 2017 Vermont Edition with Jane Lindholm (lake trout restoration); Brian MacQuarrie, Boston Globe (lake trout restoration); WCAX Vermont Public TV; Alpena News; Discovery Channel; Comcast News; Ted Williams for The Nature Conservancy; Adirondack Explorer; UVM communications video; Tom Messner on NBC News Plattsburgh

2015 Candy Page, Burlington Free Press (Lake Champlain fishes); Wilson Ring, Associated Press (IAGLR conference); Vermont Edition, Jane Lindholm, VPR (IAGLR conference)

- 2013 WPTZ Conservation Correspondent; Peter Payette, Michigan Radio (Thunder Bay artificial reef project)
- 2012 Vermont Public Television; WCAX: 30 (segment on spiny water flea invasion with Jason Stockwell); Burlington Free Press article (spiny water flea); Channel 3 interviews; channel 11 News Alpena, MI (Reef Restoration project in Thunder Bay, Lake Huron); VPR interview on spiny water flea; VT Public Television interviews on lake research; Burlington Free Press article on spiny water flea invasion; VTDigger; WBKB news Channel 11, Alpena, MI; Alpena News, National Geographic Animal Planet program on Champ; UVM Today article on lake trout field research; VPR Vermont Edition with Jane Lindholm
- 2011 National Geographic segment on lake monsters; Channel 3 VT; channel 11 news Alpena, MI
- 2008 Victor Guadagno, Emerging Science TV Program with Vermont Public Television and VT EPSCoR, on aquatic food webs
  David Filipov, Boston Globe sea lamprey
- 2007 Michelle Nijhuis, High Country News, CO interview about quagga mussel invasion in Lake Mead
- 2006 Tamarack Media provided material for a Lake Champlain documentary for Sea Grant Burlington Free Press; History Channel,; Travel Channel
- 2005 National Wildlife Magazine; Mountain Lake PBS, Plattsburgh NY; Travel Channel; Voice of America radio, NY; New York Times
- 2004 WAMC Public Radio Plattsburgh; Plattsburgh Press-Republican.
- 2003 Northern Sky News; Rutland Times-Argus; Across the Fence (local public television); Food for Thought (local public radio, 4 broadcasts); Champlain 2000 Channel 5 News Plattsburgh (3 segments); Channel 3 News (2 segments); Burlington Free Press; Rutland Herald (2 articles); AP article in Burlington Free Press; Fox TV News, Boston; Saint Michael's College on-line newspaper; Seven Days (local Burlington paper).
- 2002 Plattsburgh Press-Republican; Burlington Free Press; Lake Champlain Weekly; Colchester Chronicle; Plattsburgh Republican; Champlain 2000 Channel 5 News Plattsburgh (3 segments); Seven Days (Burlington local paper); CBC TV.
- 2001 Champlain 2000 Channel 5 News Plattsburgh
- 2000 Steve Swanson, Chicago Tribune; Madeleine Bouton, Rutland Herald; freelance writer for the Lake Champlain Committee
- 1999 Pat Bradley, WAMC Public Radio Plattsburgh; Julie Becker, UVM extension radio program Food for Thought (4 segments); Jeff Meyers, Press Republican VT; Nina Keck, Vermont Public Radio
- 1998 John Raby, Minnesota Public Radio; Steve Swanson, Chicago Tribune; Pat Bradley, WAMC radio Plattsburgh NY; Sheryl Gaster, Wisconsin Public Radio, call-in talk show; Leah Hansen, CKLW radio, Windsor, Ontario; Vermont Quarterly magazine; Shane Tritsch, Chicago Tribune; Madeleine Bodun, Rutland Herald
- 1997 Julie Becker, UVM Extension radio program Food for Thought; Channel 5 news, Plattsburgh NY
- 1996 Ann Witner, Peoria Star; WXFM Mt. Zion, Decatur, IL; Alan Krashesky, Eyewitness News, Channel 7 Chicago; Lee Ann Spencer, Chicago Tribune; Judy Wang, CLTV News Chicago; Aaron Freeman on the Moira Tapp program, WBEZ Chicago Public Radio; Caroly Waller, Daily Herald, Vernon Hills IL; LeeAnn Spencer, Chicago Tribune; John Husar, Chicago Tribune; Peter Kendall, Chicago Tribune; Kevin Carmondy, IN Southtown News; Peter Kendall, Chicago Tribune; Chicago Reader; John Husar, Chicago Tribune; invited participant in media briefing organized by National Sea Grant Alien Invaders, Ecological Threats
- 1995 Dave Mall, Field and Stream; Guy Meadows, Illinois radio station; Mara Tapp and David Slafsky, WBEZ Chicago Public Radio; Tim Zorn, Chicago Post-Tribune; Mr. Whitt, Hammond IN Times; Susan Degrane, Chicago Reader; Celeste Bush, Chicago Sun-Times; Dean Rebuffoni, Minneapolis Star-Tribune; Don Johnson, North American Fisherman Magazine.

1994 Kathy Anderson, Channel 7 News Chicago; Paul Smith, Journal Times Racine; Tom Bolbot, Illinois Outdoor News Network; Steve Swanson, Chicago Tribune; WDNR (use of zebra mussel slide for public leaflet); Voice of America, Chicago; John Husar, Chicago Tribune;

- 1993 Peter Fredericci, Chicago Tribune; Joel Oppemeir, North-Western University journalism student; Lee Ann Spencer, Chicago Tribune; Chuck Stultz, Detroit News Herald; Mike McKeefer, Michigan City News Dispatch; S. Botts, freelance for Chicago Reader; John Husar, Chicago Tribune; reporter, Atlantic Constitution; reporter, Northwestern University; Randy Hess, Lakeland Boating Magazine; Neal Singer, Champaign-Urbana News Bureau; Mike Matulis, State Journal Register; Springfield IL; Laune Guering, Chicago Tribune; Cindy Humphries, Carbondale IL newspaper; Lieter Cloutier, CBC French Radio, Toronto; Steve Swanson, Chicago Tribune.
- 1992 WNIJ Public Radio, Rockford IL; Mark Etkind, "Scientific American Frontiers" Public TV; Jay Kumar, Bass Times; Vicki Urbenick Chesterton Tribune; Tom Apple, Waterways Magazine; Guy Campanile, "Down to Earch" series, WBBN Chicago; Kathy Anderson, Channel 7; Tome Spears, Ottawa Citizen; Amy Hanson, Port Huron, MI; Linda Yu, WLS TV Chicago; Peter Gurie, Toronto Star; Jack Grazier, Erie Daily Times; Giselle Owenvill, CBS; Patty Sisson, "Soundings"; RayTyson, USA Today; Peter Fredericci, Chicago Reader; LeeAnn Spencer, Chicago Tribune.
- 1991 North Shore Tonight, Illinois local TV news program; Simeon Moss, Ithaca Journal; Chris Taylor, Watertown Times; Jill Zelichson, Rochester Times Union; WSKG; NY Times; AMICAS (National Defense Council); St. Louis Waterways (weekly magazine); "compass" magazine; Steve Swanson, Chicago Tribune; Belleville News Democrat; WMAX II; Lake Michigan Federation; Post-Tribune, Gary IL; DuPage College radio; WI Sea Grant Institute; WLS-TV, channel 7

# Video footage/video interviews

StoryHouse Productions for National Geographic special on lake monsters, 2012

River Monsters episode on sea lampreys, 2012

Chasing Discovery video, 2008

America's Loch Ness Monster, Discovery Channel, 2006

Inventions and Invasions: the Great Lakes Ballast Technology Project. 2001

No More Free Rides - Aquatic Nuisance Species and the Vermont Transport Law. VT Dept. of Environmental Conservation, Water Quality Division. 2001

Boston Productions videotape for Lake Champlain Science Center, 2000

## Photographs published in:

University of Bristol web page, Feb. 2008

Science News, Feb. 13, 2008

Swaminathan, N. Scientific American, Feb 13, 2008

Prothero, D. R. 2007. Evolution: What the Fossils Say and Why it Matters, Columbia University Press

Vallero, D. A. 2006. Paradigms Lost: Learning from Environmental Mistakes, Mishaps, and Misdeeds. Butterworth-Heinemann

Ellers, O. 1997. Bivalvia. In: McGraw-Hill 1998 Yearbook of Science and Technology.

Murphy, J. C. 1997. Amphibians and Reptiles of Trinidad and Tobago. Krieger Publishing Co.

Lesinski, J. M. 1996. Exotic Invaders. Walker and Co., NY

Mattison, C. 1986. Snakes of the World. Blandford Press, Poole, UK.

Various Sea Grant publications

## Training and certifications

NAUI Open water scuba diver 1978; Scientific diver 1979

PADI Rescue diver, Divemaster 1985

NAUI High-altitude dive certification, drysuit certification 2013

Wilderness First Aid, 2014

USGS certified diver, 2015