

ABIGAIL JULIA LYNCH

Michigan State University
Department of Fisheries and Wildlife
Center for Systems Integration and Sustainability
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EDUCATION

Michigan State University.

Ph.D. candidate in Fisheries and Wildlife; Ecology, Evolutionary Biology, and Behavior dual major; Environmental Science and Public Policy doctoral specialization.

Current

Virginia Institute of Marine Science, College of William & Mary.

M.S. Marine Science. A molecular analysis of Atlantic menhaden (*Brevoortia tyrannus*) stock structure.

January 2009

University of Virginia.

B.A. English. B.S. Biology. Genetic analysis of margined madtom (*Noturus insignis*) to determine the conservation status of the spotted morph.

May 2005

PROFESSIONAL EXPERIENCE

Michigan State University, Doctoral Student; University Distinguished Fellow

Current

- **Climate Change Assistant to the Director of the Michigan Department of Natural Resources:** helps the Director's Office implement recommendations from the Governor's Climate Change Action Council.
- **Book Editor:** coordinates communication with authors and reviewers and provides editorial input on two independent book projects.
- **Student Career Experience Program:** serves on the editorial staff of the U.S. Fish & Wildlife Service's Fisheries magazine, *Eddies*, and maintains online outreach materials.

U.S. Fish & Wildlife Service, Fish Biologist; John A. Knauss Sea Grant Fellow

Feb. 08 – Jan. 09

- **National Fish Habitat Action Plan (NFHAP):** member of the NFHAP communications team, staffed senior NFHAP Board members and Federal Caucus representatives, and ushered the USFWS NFHAP manual chapter through to the Director.
- **National Fish Passage Program (NFPP):** answered requests from Partners about NFPP project information, compiled NFPP accomplishments into a repository database, staffed NFPP briefings, and produced NFPP outreach material.
- **Fish and Wildlife Conservation Office (FWCO) communications:** developed the FWCO communications strategy, produced 12 factsheets and other outreach material, overhauled the FWCO website, and participated in outreach activities.
- **National Fish and Wildlife Foundation (NFWF) grant applicant reviewer:** participated on the project proposal review teams for two NFWF grant programs (Bring Back the Natives and the MORE Fish Campaign).
- **Department of the Interior Ocean, Coastal, and Great Lakes Program:** participated on DOI Ocean, Coastal, and Great Lakes Teams, produced department-wide presentation and outreach material, and staffed senior managers at DOI Ocean and Coastal Program retreat.
- **FWCO field work:** designated the "good will ambassador to the field," contributed to multiple field season projects.

PUBLICATIONS

Taylor, W. W., **A. J. Lynch**, N. J. Leonard, eds. Great Lakes Fisheries Policy and Management: A Binational Perspective (Second Edition). MSU Press. *In Preparation*.

- Taylor, W. W., **A. J. Lynch**, M. G. Schechter, eds. Sustainable Fisheries: Multilevel Approaches to a Global Problem. AFS Press. *In Press*.
- Lynch, A.J.**, C.M. Zuccarino-Crowe, W.W. Taylor, E.A. Puchala. Sustainable Fisheries: An Overview Addressing a Global Problem. *In* W.W. Taylor, **A. J. Lynch**, M. G. Schechter, eds. Sustainable Fisheries: Multilevel Approaches to a Global Problem. AFS Press. *In Press*.
- Lynch, A. J.**, W. W. Taylor, and K. D. Smith. The Influence of Changing Climate on the Ecology and Management of Great Lakes Fisheries. *Journal of Fish Biology*. *EarlyView DOI: 10.1111/j.1095-8649.2010.02759.x*
- Taylor, W. W., **A. J. Lynch**, and M. G. Schechter. 2010. Unsustainable Global Fisheries Need a Unified Call for a UN Conference. *Fisheries*. 35: 84-85.
- Lynch, A. J.** and W. W. Taylor. 2010. Evaluating a science-based decision support tool used to prioritize brook charr conservation project proposals in the eastern United States. *Hydrobiologia*. 650: 233-241.
- Lynch, A. J.**, J. R. McDowell, and J. E. Graves. 2010. A genetic assessment of the potential for local depletion of Atlantic menhaden (*Brevoortia tyrannus*) within Chesapeake Bay. *Fishery Bulletin*. 108: 87-97.
- Kopeny, M. T., J. Grady, W. Matthews, S. R. Keller, and **A. J. Lynch**. June 2008. Conservation Status of the Spotted Form of the Margined Madtom, *Noturus insignis*: A Genetic, Morphological and Distributional Investigation. Final Report to Virginia Department of Inland Game and Fisheries.

PRESENTATIONS

- Lynch, A. J.**, W. W. Taylor, and K. D. Smith. The Influence of Changing Climate on the Ecology and Management of Great Lakes Fisheries. Department of Fisheries and Wildlife Graduate Student Symposium: East Lansing, MI. Feb. 2010; Fisheries Society of the British Isles Annual Meeting: Belfast, Ireland. Jul. 2010; American Fisheries Society Annual Meeting: Pittsburgh, PA. Sept. 2010.
- Lynch, A. J.**, W. W. Taylor, and M. G. Schechter. Sustainable Fisheries: Multi-level Approaches to a Global Problem. *Oral Presentation*. Canadian Studies Brown Bag Seminar: East Lansing, MI. Feb. 2010.
- Lynch, A. J.**, W. W. Taylor. Evaluating a science-based decision support tool to prioritize regionally-driven, community-based projects for enhancing brook charr populations in the eastern United States. *Oral Presentation*. Eastern Brook Trout Joint Venture All Partners Meeting: Berkeley Springs, WV. Nov. 2009.
- Lynch, A. J.**, W. W. Taylor, K. D. Smith, and D. B. Hayes. Managing Great Lakes Fisheries Resources in the Face of Climate Change. *Oral Presentation*. Michigan Tribal Environmental Meeting: East Lansing, MI. Nov. 2009.
- Lynch, A. J.**, W. W. Taylor, K. D. Smith, and D. B. Hayes. Managing Great Lakes Fisheries Resources in the Face of Climate Change. *Oral Presentation*. American Fisheries Society Annual Meeting: Nashville, TN. Sept. 2009.
- Lynch, A. J.**, W. W. Taylor. Evaluating a science-based decision support tool to prioritize regionally-driven, community-based projects for enhancing brook charr populations in the eastern United States. *Oral Presentation*. International Charr Symposium: Stirling, Scotland. June 2009.
- Lynch, A. J.**, J. R. McDowell, and J. E. Graves. A molecular analysis of Atlantic menhaden (*Brevoortia tyrannus*) stock structure. *Oral Presentation*. American Fisheries Society Annual Meeting: Ottawa, Ontario, Canada. Aug. 2008.
- Lynch, A. J.**, J. R. McDowell, and J. E. Graves. A genetic assessment of the potential for local depletion of Atlantic menhaden (*Brevoortia tyrannus*) within Chesapeake Bay. *Oral Presentation*. American Fisheries Society, Tidewater Chapter Annual Meeting: Gloucester Point, VA. March 2008. **2nd Place, Oral Paper**.
- Lynch, A. J.**, M. T. Kopeny, and J. Grady. Genetic analysis of margined madtom (*Norurus insignis*) to Lynch, Abigail Julia

determine the conservation status of the spotted morph. *Poster*. American Society of Ichthyologists and Herpetologists Annual Meeting: Tampa Bay, FL. July 2005.

FIELDWORK EXPERIENCE

Backpack electroshocking, beach seining, cast netting, purse seining, trawling (bottom and mid-water), longlining, pound nets, gill nets, SAV sampling, patent tonging, minnow traps, float survey, *NAUI open water certified diver*.

ANALYTICAL/ GRAPHICAL PROGRAMS

Expertise: Sequencher, Macvector, PAUP, Arlequin, Genepop, MSA, Genemarker, FSTAT, Fluxus, DnaSP, Mr. Bayes, Modeltest, Genetix, MEGA, Sequin, USFWS FIS, SAS, ArcGIS, Adobe InDesign, Illustrator, Photoshop, R. *Experience:* AD Model Builder, Minitab, Matlab.

RELEVANT COURSEWORK

Climate change and society, health and science journalism, conservation ethics, human dimensions research in fisheries and wildlife, global issues in fisheries and wildlife, applications of GIS to natural resource management, structured decision making, advocacy in the natural resource arena, physical oceanography, chemical oceanography, geological oceanography, biological oceanography, marine science laboratory methods, marine fisheries science, coastal and estuarine processes and issues, fundamentals of statistical analysis, multivariate analysis, ichthyology, marine population genetics, techniques in marine molecular genetics, early life of marine fishes, fisheries population dynamics, environmental policy, molecular genetics data analysis, deep sea biology, fishery data management analysis, fundamentals of ecology, beaches, coasts, and rivers, macroevolution, principles of physics and lab, marine environments and organisms, ecology and conservation of stream fishes, general chemistry and lab, organic chemistry and lab, ornithology, field biology, animal physiology, genetics and evolution, cell and molecular biology. Introduction to Geographical Information Systems, Fisheries Information System (USFWS), Project Design and Management (NOAA), Public Issues and Conflict Management (NOAA); Introduction to AD Model Builder.

AWARDS AND HONORS

Clark Hubbs Research Assistance Award. Travel award from the American Institute of Fishery Research Biologists to attend the American Fisheries Society Annual Meeting in Pittsburg, PA. 2010.

Department of Fisheries and Wildlife Retention Award. Award from the Departmental Chair for graduate service to the Department. 2010.

Graduate School; Ecology, Evolutionary Biology, and Behavior Program; International Studies Program; College of Agriculture and Natural Resources; and Fisheries and Wildlife Graduate Student Organization Travel Awards. Travel award from Michigan State University to attend the Fisheries Society of the British Isles Annual Meeting in Belfast, Ireland. 2010.

Theodore (Teddy) Roosevelt Conservation and Environmental Leadership Fellowship. Award from Michigan State University to provide an opportunity for graduate students to achieve a level of professional and personal growth that will prepare them for leadership roles in natural resource and conservation based organizations and agencies. 2009-2010.

Graduate School Research Enhancement Award. Travel award from Michigan State University to attend a competitively enrolled graduate climate change course at Lund University, Sweden. 2009.

University Distinguished Fellow. Recruiting doctoral fellowship from Michigan State University. 2009.

Janice Lee Fenske Excellence in Fisheries Management Fellow. Competitive American Fisheries Society Michigan Chapter fellowship; recipient is jointly advised by a university and a fisheries management agency mentor. 2009.

John A. Knauss Fellow. Competitive marine policy fellowship; graduate students are matched with host offices in the legislative and executive branches of the Federal government. February 2008 – January 2009.

2nd Place, Oral Paper. American Fisheries Society, Tidewater Chapter Annual Meeting award: A genetic assessment of the potential for local depletion of Atlantic menhaden (*Brevoortia tyrannus*) within Chesapeake Bay. March 2008.

Virginia Saltwater Recreational Fishing Development Fund. Graves, J. McDowell, R. Latour and **A. Lynch**. A

genetic assessment of the potential for local depletion of Atlantic menhaden (*Brevoortia tyrannus*) within Chesapeake Bay. Virginia Recreational Fishing Advisory Board. \$48,620. Start 1 January 2007, end 31 December 2007.

School of Marine Science Assistantship. Academically-based assistantship; full year of tuition and stipend at the Virginia Institute of Marine Science, College of William & Mary. Sept. 05 – Aug. 06.

University of Virginia Dean's List. 3.4 semester GPA or better with an approved course load of 12 or more graded credits. 2003 –2005.

Sigma Tau Delta. English Honor Society member. 2003 – present.

University of Virginia Athletic Honor Roll, Atlantic Coast Conference Honor Roll. 3.0 semester GPA or better with an approved course load of 12 or more graded credits. 2001 –2005.

Echols Scholar. Highly selective undergraduate program for “academic leaders and intellectual risk-takers” awarded by the University of Virginia Office of Admissions. 2001-2005.

Howard Hughes Student Fellowship. Nomination selection fellowship for undergraduates in the laboratory sciences; students complete extended research projects, including oral and poster presentations: *Histone deacetylase inhibition and regulation of epidermal growth factor receptor expression*, Center for Cancer Research, National Cancer Institute, NIH. 2001, 2002.

Valedictorian; International Baccalaureate Diploma. J.E.B. Stuart High School, Falls Church, Virginia. 2001.

PROFESSIONAL SOCIETIES AND COMMITTEES

American Fisheries Society, American Institute of Fishery Research Biologists, Sea Grant Climate Change Network, American Association for the Advancement of Science, International Association for Great Lakes Research, Midwest Association of Fish and Wildlife Agencies' Climate Change Committee, Michigan State University Canadian Studies Center Associate.

ACTIVITIES

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| Graduate Student Organization Research Symposium Planning Committee | 2010 – present |
| <ul style="list-style-type: none">plans and executes annual graduate research symposium for the Department of Fisheries and Wildlife | |
| Graduate Student Organization Community Outreach Committee | 2009 – present |
| <ul style="list-style-type: none">Coordinates community outreach for the Department of Fisheries and Wildlife | |
| Graduate Student Association Magazine Editorial and Design Team | 2009 – present |
| <ul style="list-style-type: none">Provides editorial input on magazine submissions and oversees layout and production of student-run publication | |
| Graduate Student Association Vice President | 2006 - 2008 |
| <ul style="list-style-type: none">Coordinated with GSA President for VIMS GSA meetings and acts as the primary liaison for issues concerning graduate students at VIMS | |
| Blue Crab Bowl Official | 2006 - 2008 |
| <ul style="list-style-type: none">Volunteer for the regional National Ocean Science Bowl high school competition | |
| Marine Science Day Assistant | 2006 - 2007 |
| <ul style="list-style-type: none">Volunteer for the annual VIMS open house to the public | |
| Outlook on Ocean Science Instructor | 2005 - 2007 |
| <ul style="list-style-type: none">In-classroom experience presenting marine science topics to high school students | |
| University of Virginia Varsity Women's Rowing Team | 2001 - 2005 |
| <ul style="list-style-type: none">NCAA Division I athlete; ACC Rowing Champion (2002-2005);
NCAA 2nd place Rowing Team (2005) | |
| University of Virginia Cavalier Daily Production Staff | 2001 – 2005 |
| <ul style="list-style-type: none">Assistant Production Editor of the daily student-run publication (2002-2005) | |