CURRICULUM VITAE - DR. DOUGLAS R. PEARSALL

SENIOR CONSERVATION SCIENTIST, THE NATURE CONSERVANCY, MIDWEST DIVISION

ADJUNCT ASSOCIATE PROFESSOR, THE UNIVERSITY OF MICHIGAN SCHOOL FOR ENVIRONMENT AND SUSTAINABILITY

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PROFESSIONAL EXPERIENCE

Senior Conservation Scientist, The Nature Conservancy, Midwest Division, October 2023 – Present. Guide Midwest Division strategy teams in developing and updating strategic plans to equitably address challenges to biodiversity and climate crises. Support strategy implementation through spatial analysis and mapping.

Senior Conservation Scientist, The Nature Conservancy in Michigan, November 2006 – October 2023. Manage the Michigan Science Team and provide leadership and support for strategy development and conservation planning in Michigan and the Great Lakes region.

East Michigan Science and Planning Director, The Nature Conservancy in Michigan, January 2004 – November 2006. Coordinate conservation planning for priority areas statewide.

Director of Conservation Science, The Nature Conservancy in Michigan, March 2001 – January 2004. Manage the Science Team and provide leadership and support for strategy development and conservation planning in Michigan and the Great Lakes region.

Conservation Planning Coordinator, The Nature Conservancy in Michigan, June 1995 – March 2001. Coordinated site conservation planning in Michigan.

Caretaker, Stinchfield Woods, University of Michigan School of Natural Resources and Environment forest property, August 1989 – August 1995.

Research Assistant, National Park Service Central Park Service Unit, St. Paul, Minnesota, January – February 1993.

Graduate Assistant and Intern, Nichols Arboretum of the University of Michigan, Ann Arbor, MI, January 1989 – December 1990.

Teaching Assistant, Woody Plants, University of Michigan School of Natural Resources, September 1989 – December 1990.

Tree Crew Member, University of Michigan, January – April 1990.

Assistant Arborist, Cayuga Tree Service, Elbridge, NY February – December 1988.

Science Teacher, Gouverneur Central Schools, Gouverneur, NY September 1987 – January 1988.

Interpretive Trail Construction Team Member, Adirondack Park Agency, Newcombe, NY May – September 1987.

Lab Assistant, Dendrology, State University of New York, College of Environmental Science and Forestry, Syracuse, NY September 1986 – May 1987.

EDUCATION

University of Michigan, School of Natural Resources and Environment

Ph.D., Resource Ecology and Management (Forest Ecology), 1995 M.S., Resource Ecology and Management (Arboretum Management), 1990

State University of New York, College of Environmental Science and Forestry B.S., Forest Biology, 1987

PROFESSIONAL AND RESEARCH INTERESTS

- Large-scale conservation planning and spatial optimization
- Collaborative adaptive management
- Measures of ecological condition and restoration success
- Incorporation of equity and human well-being into conservation planning and practice

PUBLICATIONS

- Jurjonas, M., May, C.A., Cardinale, B., Kyriakakis, S., **Pearsall, D.R.**, & Doran, P.J. (2023). The perceived ecological and human well-being benefits of ecosystem restoration. People and Nature. https://doi.org/10.1002/PAN3.10558
- Jurjonas, M., May, C. A., Cardinale, B. J., **Pearsall, D.**, & Doran, P. (2022). A Synthesis of the Great Lakes Restoration Initiative According to the Open Standards for the Practice of Conservation. Journal of Great Lakes Research, In press (January). https://doi.org/10.1016/j.jglr.2022.01.008
- Liberati, M., Sowa, S., May, C., Doran, P., Kyriakakis, S., **Pearsall, D**. (2022). Planning for people and nature: Identifying quality-of-life indicators to inform conservation programs for agricultural soil health, Great Lakes coastal wetlands, and urban green infrastructure. Conservation Science and Practice. In review (February).
- Sullivan-Stack, J., Aburto-Oropeza, O., Brooks, C. M., Cabral, R. B., Caselle, J. E., Chan, F., Duffy, J. E., Dunn, D. C., Friedlander, A. M., Fulton-Bennett, H. K., Gaines, S. D., Gerber, L. R., Hines, E., Leslie, H. M., Lester, S. E., MacCarthy, J. M. C., Maxwell, S. M., Mayorga, J., McCauley, D., ... Pearsall, D.R., ... Grorud-Colvert, K. (2022). A Scientific Synthesis of Marine Protected Areas in the United States: Status and Recommendations. Frontiers in Marine Science, 9(May), 1–23. https://doi.org/10.3389/fmars.2022.849927
- Weinstein, C. B., Bourgeau-Chavez, L. L., Martin, S. L., Currie, W. S., Grantham, K., Hamlin, Q. F., Hyndman, D. W., Kowalski, K. P., Martina, J. P., & **Pearsall, D**. (2021). Enhancing Great Lakes coastal ecosystems research by initiating engagement between scientists and decision-makers. Journal of Great Lakes Research, 47(4), 1235–1240. https://doi.org/10.1016/j.jglr.2021.04.018
- Lishawa, S. C., Dunton, E. M., **Pearsall, D. R.**, Monks, A. M., Himmler, K. B., Carson, B. D., Loges, B., & Albert, D. A. (2020). Wetland Waterbird Food Resources Increased by Harvesting Invasive Cattails. The Journal of Wildlife Management, 1–12. https://doi.org/10.1002/jwmg.21912
- Barton, E. M., **Pearsall, D. R**., & Currie, W. S. (2020). Human appropriated net primary productivity as a metric for land use planning: a case study in the US Great Lakes region. Landscape Ecology, 35(6), 1323–1339. https://doi.org/10.1007/s10980-020-01017-5
- Ricart, R.D., **Pearsall, D.R.**, & Curtis, P.S. (2019). Multi-decadal shifts in forest plant diversity and community composition across glacial landforms in northern lower Michigan, USA. Canadian Journal of Forest Research, 135(November 2019), 126–135. https://doi.org/10.1139/cjfr-2019-0138
- **Pearsall, D.R.** 2019. Review of The Death and Life of the Great Lakes, by Dan Egan. Michigan Historical Review. 45(1):129-131, Spring 2019. https://www-jstor-
- org.proxy.lib.umich.edu/stable/10.5342/michhistrevi.45.1.0129?seq=1#page_scan_tab_contents **Pearsall, D.R.** 2017. Review of Saving Arcadia: A Story of Conservation and Community in the Great Lakes, by Heather Shumaker. Michigan Historical Review. 43(2):104-105, Fall 2017.
 - http://www.jstor.org.proxy.lib.umich.edu/stable/10.5342/michhistrevi.43.2.0104

- Allan, J.D., N.F. Manning, S.D.P. Smith, C.E. Dickinson, C.A. Joseph, and **D.R. Pearsall.** 2017. Ecosystem services of Lake Erie: Spatial distribution and concordance of multiple services. J. Great Lakes Res. (2017) http://dx.doi.org/10.1016/j.jglr.2017.06.001
- Annis, G.M., **D.R. Pearsall**, K.J. Kahl, P.J. Doran, C. May, E. Washburn, R.F. Taylor, J. Cole, and E. Game. 2017. Designing coastal conservation to deliver ecosystem and human well-being benefits. PLoS ONE 12(2): e0172458. doi:10.1371/journal.pone.0172458
- Albert, D.A., M. Lapin, and **D.R. Pearsall**. 2016. Knowing the territory: landscape ecosystem classification and mapping. Michigan Botanist 54:34-41.
- Paskus, J.J., **D R. Pearsall**, and J.A. Ross. 2016. Facilitating the Effectiveness of State Wildlife Action Plans at Multiple Scales in the Upper Midwest/Great Lakes LCC: Findings and Recommendations. Report to the US Fish and Wildlife Service, Upper Midwest Great Lakes Landscape Conservation Cooperative. East Lansing, MI. Report number MNFI 2016-02, 56 pp. + appendices.
- **Pearsall, D.R.**, K. Hall, B. Robertson, C. Swanston, C. Hall, S. Hamilton, S. Handler, M. Hannon, K. Hart, K. Jones, and B. Shulaker. 2015. Toward outcome-oriented forest conservation: Building capacity and momentum for collaborative management in the Northwoods. Report to the US Fish and Wildlife Service, Upper Midwest and Great Lakes Landscape Conservation Cooperative, East Lansing, MI. 78 pp. + appendices.
- Cross, M. D., K. V. Root, C. J. Mehne, J. McGowan-Stinski, and **D. R. Pearsall**. 2015. Multi-scale responses of eastern Massasauga rattlesnakes (Sistrurus catenatus) to prescribed fire. Am. Midl. Nat. 173:346-362.
- **Pearsall, D.R.**, M.L. Khoury, J. Paskus, D. Kraus, P.J. Doran, S.P. Sowa, R. Franks Taylor, and L.K. Elbing. 2013. ENVIRONMENTAL REVIEWS AND CASE STUDIES: "Make No Little Plans": Developing Biodiversity Conservation Strategies for the Great Lakes. Env. Practice 15(4):462-480.
- Pearsall, D., P. Carton de Grammont, C. Cavalieri, P. Doran., L. Elbing, D. Ewert., K. Hall, M. Herbert, M. Khoury., S. Mysorekar, S. Neville., J. Paskus., and A. Sasson. (2012). Michigami: Great Water. Lake Michigan Biodiversity Conservation Strategy. Technical Report. A joint publication of The Nature Conservancy and Michigan Natural Features Inventory. Lansing, Michigan. 309 pp. with Appendices.
- **Pearsall, D.**, P. Carton de Grammont, C. Cavalieri, C. Chu, P. Doran, L. Elbing, D. Ewert, K. Hall, M. Herbert, M. Khoury, D. Kraus, S. Mysorekar, J. Paskus and A. Sasson. (2012). Returning to a Healthy Lake: Lake Erie Biodiversity Conservation Strategy. Technical Report. A joint publication of The Nature Conservancy, Nature Conservancy of Canada, and Michigan Natural Features Inventory. Lansing, Michigan. 340 pp. with Appendices.
- Landis, D.A., A.K. Fiedler, C.A. Hamm, D.L. Cuthrell, E.H. Schools, **D.R. Pearsall**, M.E. Herbert, P.J. Doran. 2011. Insect conservation in Michigan prairie fen: addressing the challenge of global change. J Insect Conserv. 16:1:131-142 DOI: 10.1007/s10841-011-9398-3
- Franks Taylor, R., A.L. Derosier, K. Dinse, P.J. Doran, D.N. Ewert, K.R. Hall, M.E. Herbert, M.L. Khoury, D.T. Kraus, A. Lapenna, G. Mayne, **D.R. Pearsall**, J. Read, and B. Schroeder. 2010. The Sweetwater Sea: An International Biodiversity Conservation Strategy for Lake Huron Technical Report. A joint publication of The Nature Conservancy, Environment Canada, Ontario Ministry of Natural Resources, Michigan Department of Natural Resources and Environment, Michigan Natural Features Inventory Michigan Sea Grant, and The Nature Conservancy of Canada. 217 pp.
- **Pearsall, D.R.**, S.S. Woods, and P.J. Doran. 2006. Book Review: Invasive Plants of the Upper Midwest: An Illustrated Guide to Their Identification and Control. Ecological Restoration 24:132-133.
- The North Central Ecoregional Planning Team (**D.R. Pearsall** as lead). 2003. The North Central Tillplain Ecoregion: A conservation plan. The Nature Conservancy. 209 pp + appendices.
- **Pearsall, D.R.**, 1995. Landscape ecosystems of the University of Michigan Biological Station: ecosystem diversity and ground cover diversity. Ph.D. dissertation. University of Michigan, Ann Arbor.
- **Pearsall, D.R.** 1990. A newly discovered population of swamp cottonwood (Populus heterophylla) in southeastern Washtenaw County, Michigan. Mich. Bot. 29:75-76.
- Koehler, D. and D.R. Pearsall. **1988.** Hardwood swamps in winter: recognizing common trees and shrubs. The Conservationist. 42:16-21

GRANTS AND AWARDS

2023: Conservationist of the Year 2023, awarded by the Michigan Natural Features Inventory for "...enduring commitment to Michigan's native biodiversity and for steadfast fostering of the partnership between The Nature Conservancy and the Michigan Natural Features Inventory." East Lansing, Michigan.

2017, USDA Natural Resources Conservation Service, Michigan Conservation Innovation Grants Program. *Recycling Watershed Nutrients by Using Wetland Invasive Plants to Improve Crop Soil Health and Fertility While Reducing Downstream Nutrient Loads.* PI, with sub-award to Loyola University Chicago. \$74,976.

2013, USFWS Upper Midwest and Great Lakes Landscape Conservation Cooperative: Facilitating the Effectiveness of State Wildlife Action Plans at Multiple Scales in the Upper Midwest/Great Lakes LCC. Co-PI with John Paskus of the Michigan Natural Features Inventory. \$140,825

2010, US EPA Great Lakes Restoration Initiative: Blueprints for Conservation of Biodiversity. \$600,000

2008, State Acres for Wildlife Enhancement (NRCS CP38-SAFE), Michigan Proposal: Southern Michigan Diverse Grassland Creation. Co-PI with MDNR Wildlife Division and Pheasants Forever. \$9,825,000

2006, National Fish and Wildlife Foundation, Great Lakes Watershed Restoration Program. *Southeast Michigan Headwaters Restoration Collaborative*. \$75,000

2005, US Fish and Wildlife Service, Private Stewardship Grants Program. \$100,000

2003, US Fish and Wildlife Service, Private Stewardship Grants Program. \$117,047

RECENT COMMITTEES, MEMBERSHIPS AND SERVICE

Obtawaing Biosphere Region, Steering Committee member, 2022 – Present. Obtawaing Biosphere Region – Obtawaing Biosphere Region

Saginaw Bay Monitoring Consortium, co-manager, 2018 – December 2024. <u>Tracking Water Quality in the Saginaw Bay Watershed (arcgis.com)</u>

Great Lakes Coastal Assembly, member, March 2019 – December 2024. <u>Great Lakes Coastal Assembly - Great Lakes Coastal Assembly</u>

Conservation Coaches Network, North America Regional Network, board member, May 2016 – Present. <u>About CCNet - Conservation Coaches Network (ccnetglobal.com)</u>

Mid-Michigan Land Conservancy, Board Member, 2019 - Present. <u>Mid-Michigan Land Conservancy</u> (midmilandcons.org)

National Estuarine Research Reserve System (NERRS) Science Collaborative, 2018 Collaborative Science Catalyst Grants; Reviewer 2018

Upper Midwest and Great Lakes Landscape Conservation Cooperative, Forest Conservation Work Group, September 2014 – 2017; Values sub-team Co-chair, September 2015 – 2017

Conserving the Stage: Identifying Resilient Landscapes in the Great Lakes & Great Plains Region; Steering Committee, June 2015 – June 2018

Lake Erie Partnership, Work Group - Observer, 2015 - Present

Lake Erie Partnership, Lake Ecosystem Objective Work Group, July 2015 – June 2017

The Nature Conservancy, Invasive Species Advisory Committee, January 2012 – September 2015

International Association for Great Lakes Research, Member and Peer reviewer, 2015 - Present

Great Lakes Fish and Wildlife Restoration Act, Peer reviewer, 2016

Great Lakes Environmental Assessment and Mapping Project, Lake-Scale Planning for Lake Erie, Steering Committee, July 2014 – February 2016

PRESENTATIONS, POSTERS, INVITED PANEL APPEARANCES, SESSION LEADERSHIP:

- Pearsall, D.R, D.S. Karpovich, and S.L. Martin, co-moderators. *Watershed-Scale Collaboration to Understand and Address Water Quality Challenges in Saginaw Bay*. Conference Symposium, May 11, 2023. International Association of Great Lakes Research, Annual Meeting, Toronto, ON. (program book: 2023 program.pdf)
- Pearsall, DR, DS Karpovich, SL Martin, and A McGowan. Funding and governance models for watershed-scale water quality monitoring: Exploring options for Saginaw Bay. Oral presentation, May 11, 2023. International Association of Great Lakes Research, Annual Meeting, Toronto, ON (program book: 2023 program.pdf)
- Pearsall, D.R., D. A. Albert, E. Dunton, W. Fink, M. E. Herbert, S. Lishawa, C. May, A. Monks, J. Ross, and A Verdeja. *Improving wetlands, soil health and water quality through invasive plant harvest and biomass use.*Oral presentation, May 20, 2021, International Association of Great Lakes Research, Annual Meeting (Virtual: http://iaglr.org/iaglr2021)
- Liberati M., and D.R. Pearsall, co-moderators: *Social-ecological benefits of Great Lakes coastal wetlands*. Conference Session, June 11, 2020, International Association of Great Lakes Research, Annual Meeting (Virtual: http://iaglr.org/iaglr2020/)
- Pearsall, D.R., M. Liberati, S. Hickel, K. Robinson, S. Simowski, and G. Annis. *Restoring coastal wetlands to benefit people: Patterns from the Blue Accounting database.* Oral presentation, June 11, 2020, International Association of Great Lakes Research, Annual Meeting (Virtual: http://iaglr.org/iaglr2020/)
- Mengerink, K., J.E. Duffy, K. Grorud-Colvert, V. Kingeekuk Metcalf, and D.R. Pearsall. *Defining Priorities for Meaningful Protection*. Panel discussion, Capitol Hill Ocean Week 2020, June 9, 2020 (Virtual). https://marinesanctuary.org/event/capitol-hill-ocean-week-2020/
- Pearsall, D.R, Blue Accounting: Selecting Socioeconomic Metrics for the Coastal Wetlands Issue Guest lecture, EAS 517 Great Lakes Science and Management, School for Environment and Sustainability, University of Michigan, Ann Arbor, MI, March 31, 2020.
- Pearsall, D.R, S. Hickel, K. Robinson, G. Annis, M. Liberati, and S. Simowski. Coastal Wetland Restoration in the Great Lakes: Do We Make the Case for Benefits to People, and Does it Matter? Invited oral presentation, International Ecological Restoration Quality Committee Monthly Webinar Series, February 27, 2020 (https://register.gotowebinar.com/recording/5254745694738575362)
- Gannon, J., J. Serran, A. Demaria, D. Pearsall, and R. Burns. *Habitat discussion*. Panel discussion, State of the Strait Conference, November 19, 2019, Windsor, ON.
- Pearsall, D.R, *Blue Accounting: Are we making progress towards ecological goals and a Blue Economy?* Oral presentation, State of the Strait Conference, November 19, 2019, Windsor, ON.
- Pearsall, D.R. E. Dunton, S. Lishawa, M. E. Herbert, A. Monks, C. May, B. Carson, B. Wickerham, M. Fales and J. Lemunyon. 2019. *Cattail biomass: a new soil amendment to improve soil health and reduce wind erosion* (poster). Embracing the Digital Environment, 2019 ASA-CSSA-SSSA International Annual Meeting, Nov. 10-13, San Antonio, Texas.
- Pearsall, D.R, *Pursuing a coordinated tributary and nearshore monitoring initiative for the Saginaw Bay Watershed*. Oral presentation State of the Lake Huron Conference, October 9, 2019, Saginaw, MI.
- Pearsall, D.R, Blue Accounting: Tracking investments and progress on key Great Lakes issues, with a focus on coastal wetlands. Oral presentation, State of the Lake Huron Conference, October 9, 2019, Saginaw, MI.
- Pearsall, D.R, *Climate Resilient Lands in the Great Lakes Region*. Invited oral presentation, 2019 Bailey Fall Conference, October 5, 2019, South Haven, MI.
- Pearsall, D.R, *Planning for a Future Coordinated Water Quality Monitoring Initiative*. Oral presentation, State of the Bay 2019 Conference, September 26, 2019, Bay City, MI.
- Pearsall, D.R. Conserving Nature's Stage: Climate Resilient Lands in the Great Lakes and Great Plains. Invited oral presentation at Michigan Natural Features Inventory, Lansing, MI, April 9, 2018.

- Pearsall, D.R. Conservation by Design 2.0: Overview and focus on strategy mapping. Guest lecture in EAS 517 Conservation Biology, School of the Environment and Sustainability, University of Michigan, Ann Arbor, MI. March 26, 2018.
- Pearsall, D.R. *Blue Accounting Coastal Wetland Pilot Issue, Overview*. Oral presentation, NY Department of Environmental Conservation Coastal Wetland Atlas Workshop, Albany, NY. March 23, 2018.
- Pearsall, D.R. *Conservation Planning: History, Challenges, and Recent Advances*. Guest Lecture at the University of Michigan Dearborn, BIOL 422 (Conservation Biology). March 16, 2017.
- J. Schaeffer, D.R. Pearsall, and R. Norton, Co-chairs. *Blue Communities: Integrating Ecology, Urban Planning, Design, and Social Science to Revitalize Coastal Communities*. Session, June 8, 2016, International Association for Great Lakes Research Annual Meeting, Guelph, ON
- Pearsall, D.R, K. Kahl, K. Johnson, A.Whelchel, and G. Annis. *Coastal Restoration in Western Lake Erie: Improving Nature and Resilience in Coastal Communities*. Oral presentation, June 8, 2016, International Association for Great Lakes Research Annual Meeting, Guelph, ON
- Pearsall, D.R, K. Kahl, G. Annis, P. Doran, C. May, and D. Ewert. *Developing a Shared Vision for Coastal Conservation in Western Lake Erie*. Oral presentation, December 9, 2015, State of the Strait, Ypsilanti, MI
- Pearsall, D.R, K. Kahl, G. Annis, P. Doran, E. Game, and E. Washburn. *Conservation for People: Integrating Human Wellbeing into Coastal Conservation for Western Lake Erie.* Oral presentation, May 26, 2015, International Association for Great Lakes Research Annual Meeting, Burlington, VT
- Kahl, K., D.R. Pearsall, and G. Annis. *Creating a Shared Vision for Coastal Conservation in Western Lake Erie.*Oral presentation, April 28, 2015, Biodiversity Without Boundaries, NatureServe Annual Conference, Traverse City, MI
- Pearsall, D.R, C. Hall, and J. Fosgitt. *Climate-smart forest management: Testing Harvest Practices To Improve Forest Diversity And Resilience In The Two Hearted River Forest Reserve*. Oral presentation, March 27, 2015, Michigan Chapter of the Wildlife Society Annual Conference, Clare, MI
- Pearsall, D.R. Saginaw Bay Optimization Decision Tool: Linking Management Actions to Multiple Ecological Benefits via Integrated Modeling. Oral presentation, May 12, 2015, Lake Huron Restoration Regional Meeting, Port Huron, MI
- Paskus, J. and D.R. Pearsall. Facilitating the Effectiveness of State Wildlife Action Plans in the Upper Midwest/Great Lakes LCC. Oral presentation, February 9, 2015, Midwest Fish and Wildlife Association Annual Meeting, Indianapolis, IN

GRADUATE STUDENTS ADVISED:

Masters student committee membership

Erin Barton, 2017-2018. Thesis title: A Case Study Examining the Relationship Between Human Appropriation of Net Primary Productivity and Landscape Variables Along a Socioecological Gradient

Masters project guidance (as client representative):

With Professor Bill Currie as faculty advisor: Kate Keeley, 2016-2017 Elliot Kurtz, 2016-2017 Luxian Li, 2016-2017 Ed Waisanen, 2016-2017 Yu Xin, 2016-2017 Fan Zhang, 2016-2017

With Professor J. David Allan as faculty advisor:

Robyn Harris, 2008-2009 Brad Kinder, 2008-2009 Adrienne Marino, 2008-2009 Vanessa Parker-Geisman, 2008-2009 Tamatha Patterson, 2008-2009

With Professor Burton V. Barnes as faculty advisor:

Jennifer Muladore, 2005-2006 Stephanie Pendergrass, 2005-2006 Rebecca Schillo, 2005-2006