

# Resume of Paul W. Seelbach

May 2018

School for Environment and Sustainability, University of Michigan, Ann Arbor

Email: [seelbach@umich.edu](mailto:seelbach@umich.edu)

## **Education**

1986. Ph.D., Fisheries Science, University of Michigan, School of Natural Resources and Environment

1980. M.S., Aquatic Ecology, Bucknell University

1979. B.S., Biology, Bucknell University

## **Positions Held**

2017-Present. Professor of Practice, School for Environment and Sustainability, University of Michigan, Ann Arbor.

2017-Present. Senior Fellow, Office of the Great Lakes, Michigan Department of Natural Resources, Lansing.

2010-2017. Coastal Ecosystems Branch Chief, Great Lakes Science Center, U.S. Geological Survey, Ann Arbor.

2014 (5 mo). Senior Science Advisor, Great Lakes Commission, Ann Arbor.

1986-1999 & 2008-2010. Research Ecologist, Institute for Fisheries Research, Michigan Department of Natural Resources, Ann Arbor.

2000-2008. Fisheries Research Program Manager, Michigan Department of Natural Resources, Ann Arbor.

1988-2015. Adjunct Professor, School of Natural Resources and Environment, University of Michigan, Ann Arbor.

1988-2015. Adjunct Associate Professor, Department of Fisheries and Wildlife, Michigan State University, East Lansing.

2004 (6 mo). Fisheries Assistant Chief, Michigan Department of Natural Resources.

## **Advisory and Service Roles**

2018. Co-lead for Water@Michigan campus-wide event.

2015-2018. Review Panel Member, NOAA National NERRs Annual RFP.

2010-Present. Coastal Advisory Committee Member, Upper Midwest and Great Lakes LCC.

2016. USGS representative to DOI, National Ocean Policy implementation workshop.

2016. Ecosystems Lead on USGS national environmental flows workshop planning.

2011-2013. Chair, Technical Advisory Committee, Great Lakes Fish Habitat Partnership.

2010. Fellow, Collaborative Governance Workshop, Michigan State University

2003-2008. State Water Resources Conservation Advisory Council Representative, Michigan Department of Natural Resources. Statewide Council Co-Chair for final 2 years.

### **Research and Engagement Initiatives**

2017-2019. Factors influencing effectiveness and durability of Public Advisory Councils serving Michigan's Areas of Concern Program. Funded by Michigan Office of the Great Lakes, \$250,000.

2017-2019. Technically and environmentally smart stormwater management for the Clinton River. Funded by Michigan Office of the Great Lakes, \$325,000. CO-PIs: Dr. Branko Kervec and Dr. Valeriy Ivanov, University of Michigan.

2014 (5 mo). Design of comprehensive regional water monitoring framework. Charged by Great Lakes governors and premiers. Co-PIs: Dr. J. Read, University of Michigan; K. Buckner, Council of Great Lakes Industries; T. Eder, Great Lakes Commission.

2010-2013. Structure and function of Great Lakes rivermouths; lead regional collaboratory to develop and highlight this key ecosystem. Funded by USGS (GLRI), \$300,000. Co-PI: Dr. B. Richardson, USGS.

2006-2008. Design of a statewide water withdrawal assessment tool. Funded by state legislature, \$500,000. Co-PIs: D. Hamilton, Michigan Department of Environmental Quality; J. Nicholas, U.S. Geological Survey. Earned 3 national policy innovation awards.

2002-2007. Implementation plan for an aquatic GAP analysis project in the Great Lakes Region, 2002-05. Funded by US Geological Survey, \$560,000. PI is J. Stewart, US Geological Survey [I was one of many Cooperating Scientists across Great Lakes Basin]. Funding included \$60,000 for a University of Michigan graduate student.

2003-2006. Ecological classification of rivers for environmental assessment: demonstration, validation, and application to regional risk assessment across Illinois, Michigan, and Wisconsin. Funded by USEPA STAR Program, \$842,000. Co-PIs: Dr. M. Wiley and Dr. D. Allan, University of Michigan; Dr. B. Pijanowski and Dr. J. Stevenson, Michigan State University; Dr. J. Lyons and Dr. L. Wang, Wisconsin Department of Natural Resources; Dr. D. Austen, Illinois Department of Natural Resources.

2001-2006. A Collaborative Approach to Understanding the Dynamics of the Muskegon Watershed: A Comprehensive Model, Risk Assessment, and Tools for Use in Management. Funded by Great Lakes Fishery Trust, \$1,200,000. Co-PIs: J. Koches, Grand Valley State University; Dr. B. Pijanowski, Michigan State University; Dr. M. Wiley, University of Michigan.

### **Teaching**

2017-2018. Fluvial Ecosystems and their Management.

2018. Great Lakes Ecosystems and their Management.

2018. The Role of Public Advisory Councils in revitalizing Michigan's Areas of Concern.

### **Graduate Student Theses and Project Committees** (major advisory role in bold)

**Voglesong-Zejnati, A. Present. Factors influencing effectiveness and durability of Public Advisory Councils serving Michigan's Areas of Concern Program. University of Michigan. Co-Advisory Dr. Julia Wondelleck.**

**Knauss, C., J. Lisuk, J., and B. Pollins. Present. Sustaining momentum through and beyond Delisting of Michigan's Areas of Concern. University of Michigan.**

Sparks-Jackson, B. 2014. Defining and testing the concept of river valley segments. University of Michigan.

Lacy, S. 2013. Integration of science into development of state water policy. University of Michigan.

Mueller, K. 2011. Implications of sense of place for recovery of Atlantic salmon and other imperiled fishes. Michigan State University.

Steen, P. 2008. Modeling fish distributions in Michigan rivers for Aquatic GAP conservation planning. Ph.D. Dissertation, University of Michigan.

**Merkey, D.H. 2005. Developing a map-based Hydro GeoMorphic method for classification of depressional wetlands. Ph.D. Dissertation, University of Michigan.**

Swank, D.R. 2005. Life history variation among steelhead in the Great Lakes. Ph.D. Dissertation, University of Michigan.

**Sherman-Mulcrone, R. 2004. Patterns and models of freshwater mussels (Bivalvia: Unionidae) with fish hosts within the Lake Erie drainage, Michigan. Ph.D. Dissertation, University of Michigan.**

**Chadwick, D., M. Hearne, M. Schuller, and J. Short. 2003. Shiatown Dam assessment: guiding a community decision for action. M.S. Project, University of Michigan.**

**Zorn, T.G. 2003. Factors affecting patterns in the distribution and abundance of stream fishes in lower Michigan. Ph.D. Dissertation, University of Michigan.**

Creque, S.M. 2002. Using landscape-scale habitat models to predict potential abundance of potamodromous fishes above dams on Great Lakes Tributaries. M.S. Thesis, University of Michigan.

**Baker, M.E. 2002. Ecosystem structure and function at the land-water interface on Michigan rivers. Ph.D. Dissertation, University of Michigan.**

Horne, B.D. 2001. Simulating effects of hydro-dam alteration on thermal regime and wild steelhead recruitment in the Manistee river, Michigan. M.S. Thesis, University of Michigan.

Infante, D. 2001. Effects of channel morphology on fish community attributes in southern Michigan streams. M.S. Thesis, University of Michigan.

**Bowler, S.P. 1999. Influences of habitat and channel shape on stream insect diversity in a watershed context. M.S. Thesis, University of Michigan.**

**Wehrly, K. E. 1999. Influence of thermal regime on the distribution and abundance of stream fishes in Michigan. Ph.D. Dissertation, University of Michigan.**

**Aponte-Clarke, G.P., J.R. Batres-Marroquin, B.L. Braden, H. Kato, and A.M. Perot, Jr. 1998. Feasibility assessment for rehabilitating the Dowagiac River system in southwestern Michigan; a watershed analysis of potential changes to the ecology and community. M.S. Project, University of Michigan.**

Newcomb, T. 1998. Productive capacity of the Betsie River watershed for steelhead smolts. Ph.D. Dissertation, Michigan State University.

Kotanchik, J. 1997. Large-scale distribution of river otters in Michigan's lower peninsula. M.S. Thesis, University of Michigan.

Abel, R. 1996. Landscape and streamside effects on summer water temperatures in the River Raisin. M.S. Thesis, University of Michigan.

- Norman, J.E. 1996. Invertebrate drift and fish microhabitat use in warmwater streams of the River Raisin, Michigan. M.S. Thesis, University of Michigan.
- Kleiman, R. 1995. Modeling water quality in Michigan rivers from landscape variables. M.S. Thesis, University of Michigan.
- Prasad, S. 1994. GIS-based watershed integrated water quality modeling. Ph.D. Dissertation, University of Michigan.**
- Roth, N.E. 1994. Land use, riparian vegetation, and stream ecosystem integrity in an agricultural watershed. M.S. Thesis, University of Michigan.
- Mendelson, M.A., and P. Monks. 1994. Modeling stormwater flows for Honey Creek, Michigan. M.S. Thesis, University of Michigan.**
- Majewski, D.M., L.J. Manor, C.W. Radcliffe, T.M. Tompkins, and W.W. Whipps. 1993. The upper Tittabawassee River wetlands: impacts on regional hydrology, water quality and avian biodiversity. M.S. Thesis, U. of Michigan.
- Berry, T. 1992. Land use and stream discharge in Michigan's cold water streams. M.S. Thesis, University of Michigan.
- Cornejo, C.R.T. 1992. Regional characteristics of longitudinal patterns in stream fish biodiversity. M.S. Thesis, University of Michigan.
- Zafft, D.J. 1992. Migration of wild chinook and coho smolts from the Pere Marquette River, Michigan. M.S. Thesis, Michigan State University.
- Flaherty, M.J. 1990. Diet, habitat use, and growth of smallmouth bass and catostomid fishes in two warmwater rivers. M.S. Thesis, Michigan State University.**
- Fielder, D.G. 1987. An assessment of the introduction of summer steelhead into Michigan. M.S. Thesis, University of Michigan.**

## **Publications**

- McKenna, J.E., H.W. Reeves, and **P.W. Seelbach**. 2018. Measuring and evaluating ecological flows from streams to regions: Steps towards national coverage. *Freshwater Biology* 00:1–17. <https://doi.org/10.1111/fwb.13086>
- Many Authors; **P.W. Seelbach** was member of the Writing Team. 2016. The Great Lakes Nearshore Framework. Environment and Climate Change Canada and U.S. Environmental Protection Agency.
- Pebbles, V., E.C. Lillard, **P.W. Seelbach**, and L.R. Fogarty. 2015. Practitioner's views of science needs for the Great Lakes coastal ecosystem. Great Lakes Commission, Ann Arbor, Michigan.
- Nineteen authors including **P.W. Seelbach**. 2015. White Paper: Protection aquatic life from adverse effects of alteration to hydrologic conditions. US EPA and US Geological Survey, Washington DC.
- Seelbach, P.W.**, J.G. Read, K.A. Buckner, T. Eder, and C. Manninen. 2014. Great Lakes Blue Accounting: empowering decisions to realize regional water values. Great Lakes Commission, Report to the Council of Great Lakes Governors, Chicago, Illinois.
- Seelbach, P.W.**, L.R. Fogarty, D.B. Bunnell, S.K. Haack, and M.W. Rogers. 2013. A conceptual framework for Lake Michigan coastal/nearshore ecosystems, with application to Lake Michigan Lakewide Management Plan (LaMP) objectives. USGS Open-File Report: 2013-1138, Reston, Virginia.

- Larson J.H., A.S. Trebitz, A.D. Steinman, M.J. Wiley, M.C. Mazur, V. Pebbles, H.A. Braun, and **P.W. Seelbach**. 2013. Great Lakes rivermouth ecosystems: Scientific synthesis and management implications. *Journal of Great Lakes Research* 39:513-524.
- Zorn, T.G., **P.W. Seelbach**, and E.S. Rutherford. 2012. A regional-scale habitat suitability model to assess the effects of flow reduction on fish assemblages in Michigan streams. *Journal of the American Water Resources Association* 1-25.
- Zorn, T.G., **P.W. Seelbach**, and M.J. Wiley. 2011. Developing user-friendly habitat suitability tools from regional stream fish survey data. *North American Journal of Fisheries Management* 31:41-55.
- Seelbach, P.W.**, L Hinz, M.J. Wiley, and A.R. Cooper. 2011. Use of multiple linear regression to estimate flow regimes for all rivers across Illinois, Michigan, and Wisconsin. Michigan Department of Natural Resources, Fisheries Research Report 2095, Ann Arbor.
- Hamilton, D.A., and **P.W. Seelbach**. 2011. Michigan's Water Withdrawal Assessment Process and Internet Screening Tool. Michigan Department of Natural Resources, Fisheries Special Report 55, Ann Arbor.
- Steinman, A.D., J.R. Nicholas, **P.W. Seelbach**, J.W. Allan, and F. Ruswick. 2010. Science as a fundamental framework for shaping policy discussions regarding the use of groundwater in the State of Michigan: A Case Study. *Water Policy* 13:69-86.
- Ruswick, F., J. Allan, D. Hamilton, and **P. Seelbach**. 2010. The Michigan Water Withdrawal Assessment Process: science and collaboration in sustaining renewable natural resources. *Renewable Resources Journal* 26:13-18.
- Riseng, C., M.J. Wiley, **P.W. Seelbach**, J. Stevenson, and B. Pijanowski. 2010. An ecological assessment of Great Lakes tributaries in the Michigan Peninsulas. *Journal of Great Lakes Research* 36:505-519.
- Hamilton, D.A., and **P.W. Seelbach**. 2010. Determining environmental limits to streamflow depletion across Michigan. *The Book of the States* 534-537.
- Reeves, H.W., D.A. Hamilton, **P.W. Seelbach**, and A.J. Asher. 2009. Ground-water-withdrawal component of the Michigan water-withdrawal screening tool. U.S. Geological Survey, Scientific Investigations Report 2009-5003, Reston, Virginia.
- Lyons, J., T.G. Zorn, J. Stewart, **P.W. Seelbach**, K.E. Wehrly, and L. Wang. 2009. Defining and characterizing coolwater streams and their fish assemblages in Michigan and Wisconsin, USA. *North American Journal of Fisheries Management* 29:1130-1151.
- Brenden, T.O., L. Wang, and **P.W. Seelbach**. 2008. A river valley segment classification of Michigan rivers and streams based on fish and physical attributes. *Transactions of the American Fisheries Society* 137:1621-1636.
- Brenden, T.O., L. Wang, **P.W. Seelbach**, R.D. Clark, Jr., M.J. Wiley, and B. Sparks-Jackson. 2008. A spatially constrained clustering program for river valley segment delineation from GIS digital river networks. *Environmental Modeling and Software* 23:638-649.
- Steen, P., T.G. Zorn, **P.W. Seelbach**, and J. Schaeffer. 2008. Classification tree models for predicting distributions of Michigan stream fish from landscape variables. *Transactions of the American Fisheries Society* 137:976-996.
- Wang, L., T. Brenden, **P. Seelbach**, A. Cooper, D. Allan, R. Clark Jr., and M. Wiley. 2008. Landscape based identification of human disturbance gradients and reference condition for Michigan streams. *Environmental Monitoring and Assessment* 141:1-17.

- Wiley, M.J., B.C. Pijanowdki, R.J. Stevenson, **P.W. Seelbach**, P. Richards, C.M. Riseng, D.W. Hyndman, and J.K. Koches. 2008. Integrated modeling of the Muskegon River: tools for ecological risk assessment in a Great Lakes watershed. Pages 247-258 In W. Ji, Editor. Wetland and water resource modeling and assessment: a watershed perspective. Taylor & Francis, London.
- Brenden, T.O., L. Wang, R.D. Clark, Jr., and **P.W. Seelbach**. 2007. Comparison between model-predicted and field-measured habitat features for evaluating fish assemblage-habitat relationships. Transactions of the American Fisheries Society 136:580-592.
- Brenden, T.O., R.D. Clark, Jr., A. Cooper, **P.W. Seelbach**, L. Wang, S. Aichele, E. Bissell, and J. Stewart. 2006. A GIS framework for collecting, managing, and analyzing multi-scale landscape variables across large regions for river conservation and management. Pages 49-74 In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Hughes, R., L. Wang, and **P.W. Seelbach**, Editors. 2006. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Infante, D., M.J. Wiley, and **P.W. Seelbach**. 2006. Relationships between channel shape, watershed characteristics, and fish assemblage structure in lower Michigan. Pages 339-357 In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Riseng, C., M.J. Wiley, J. Stevenson, T.G. Zorn, and **P.W. Seelbach**. 2006. Comparison of coarse versus fine scale sampling on statistical modeling of landscape effects and assessment of fish assemblages of the Muskegon River. Pages 512-533 In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Seelbach, P.W.**, M.J. Wiley, M.E. Baker, and K.E. Wehrly. 2006. Landscape-based identification and classification of ecological river segments: concepts, approach, and application across Michigan's Lower Peninsula. Pages 25-48 In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Wang, L., **P.W. Seelbach**, and J. Lyons. 2006. Effects of levels of human disturbance on the influence of watershed, riparian, and reach scale factors on fish assemblages. Pages 199-219 In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Wang, L., **P.W. Seelbach**, and R. Hughes. 2006. Viewing and measuring river ecosystems within a landscape context: A rapidly emerging science. Pages 1-23 In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.
- Wang, L., T. Brenden, **P.W. Seelbach**, A.R. Cooper, D. Allan, R.D. Clark, Jr., and M.J. Wiley. 2006. Landscape Based Identification of Human Disturbance Gradients and Reference Conditions for Streams in Michigan. Environmental Monitoring and Assessment, Online First.
- Wehrly, K.E., M.J. Wiley, and **P.W. Seelbach**. 2006. Influence of landscape features on summer water temperatures in lower Michigan streams. Pages In R. Hughes, L. Wang, and P.W. Seelbach, editors. Landscape influences on stream habitats and biological communities. American Fisheries Society, Symposium 48.

- Baker, E.A., K.E. Wehrly, **P.W. Seelbach**, L. Wang, M.J. Wiley, and T. Simon. 2005. A multimetric assessment of stream condition in the Northern Lakes and Forests Ecoregion using spatially explicit statistical modeling and regional normalization. *Transactions of the American Fisheries Society* 134:697-710.
- Seelbach, P.W.**, and M. J. Wiley. 2005. An initial, landscape-based information system for ecological assessment of Lake Michigan tributaries. Pages 559-581 In T. Edsall and M. Munowar, Editors. *The state of Lake Michigan: ecology, health, and management*. Aquatic Ecosystem Health and Management Society, Ecovision World Monograph Series.
- Allan, J.D., and L. Hinz (with E. Rutherford, **P.W. Seelbach**, and M.J. Wiley). 2004. An Assessment of flows for rivers of the Great Lakes basin. Final Report to the Great Lakes Protection Fund, Chicago, Illinois.
- Wiley, M.J., B.C. Pijanowski, P. Richards, C. Riseng, D. Hyndman, **P.W. Seelbach**, and R.J. Stevenson. 2004. Combining valley segment classification with neural net modeling of landscape change: A new approach to integrated risk assessment for river ecosystems. *Proceedings of WEF 2004 Specialty Conference Series: Watershed 2004*, Dearborn, Michigan. Water Environment Federation.
- Zorn, T.G., **P.W. Seelbach**, and M.J. Wiley. 2004. Utility of species-specific, multiple linear regression models for prediction of fish assemblages in rivers of Michigan's lower peninsula. Michigan Department of Natural Resources, Fisheries Research Report 2072, Ann Arbor.
- Baker, M.E., M.J. Wiley, **P.W. Seelbach**, and M.L. Carlson. 2003. A GIS-based index of groundwater potential for aquatic resource inventory, assessment, and environmental management. *Environmental Management* 32:706-719.
- Hayes, D, and many others including **P.W. Seelbach**. 2003. Developing a standardized sampling program: The Michigan experience. *Fisheries* 28:18-25.
- Wang, L., J. Lyons, P. Rasmussen, **P.W. Seelbach**, T. Simon, M. Wiley, P. Kanehl, E. Baker, S. Niemela, and P.M. Stewart. 2003. Watershed, riparian, and reach influences on stream fish assemblages in the Northern Lakes and Forests Ecoregion, USA. *Canadian Journal of Fisheries and Aquatic Sciences* 60:491-505.
- Wehrly, K.E., M.J. Wiley, and **P.W. Seelbach**. 2003. Classifying regional variation in thermal regime based on stream fish community patterns. *Transactions of the American Fisheries Society* 132:18-38.
- Wiley, M.J., **P.W. Seelbach**, and K.E. Wehrly. 2002. Regional ecological normalization using linear models: a meta-method for scaling stream assessment indicators. Pages 201-223 In T. Simon, Editor. *Biological Response Signatures: Patterns in biological integrity for assessment of freshwater aquatic assemblages*. CRC Press, Boca Raton, Florida.
- Zorn, T.G., **P.W. Seelbach** and M.J. Wiley. 2002. Patterns in the Distributions of Stream Fishes in Michigan's Lower Peninsula. *Transactions of the American Fisheries Society* 131:70-85. Nominated for Best Paper of 2002 (N=6).
- Baker, M.E., M.J. Wiley, and **P.W. Seelbach**. 2001. GIS-based hydrologic modeling of riparian areas: implications for stream water quality. *Journal of the American Water Resources Association* 37:1615-1628 .
- Seelbach, P.W.**, M.J. Wiley, P. Soranno, and M. Bremigan. 2001. Aquatic conservation planning: predicting ecological reference ranges for specific waters across a region from landscape maps. Chapter 26 in K. Gutzwiller, Editor. *Concepts and applications of landscape ecology in biological conservation*. Springer-Verlag, New York.
- Seelbach, P.W.**, and M.J. Wiley. 1997. The Michigan Rivers Inventory: Project Description. Michigan Department of Natural Resources, Fisheries Technical Report 97-3, Ann Arbor.

- Seelbach, P. W.**, M. J. Wiley, J. C. Kotanchik and M. E. Baker. 1997. A landscape-based ecological classification system for river valley segments in lower Michigan (MI-VSEC version 1.0). Michigan Department of Natural Resources, Fisheries Research Report 2036, Ann Arbor.
- Wiley, M.J., and **P.W. Seelbach**. 1997. An introduction to rivers. Michigan Department of Natural Resources, Fisheries Special Report 20, Ann Arbor.
- Wiley, M.J., S. L. Kohler, **P.W. Seelbach**, and R.D. Clark. 1997. Reconciling landscape and local views of aquatic communities: lessons from Michigan trout streams. *Freshwater Biology* 37:133-148.
- Zorn, T.G., and **P.W. Seelbach**. 1995. The relation between habitat availability and the short-term carrying capacity of a stream reach for smallmouth bass. *North American Journal of Fisheries Management* 15:773-783.
- Hay-Chmielewski, **P.W. Seelbach**, G.E. Whelan, and D.B. Jester. 1995. Huron River Assessment. Michigan. Department of Natural Resources, Fisheries Special Report 16, Ann Arbor.
- Seelbach, P.W.**, J. Dexter, and N.D. Ledet. 1994. Performance of steelhead smolts stocked in southern Michigan warmwater rivers. Michigan Department of Natural Resources, Fisheries Research Report 2003, Ann Arbor.
- Seelbach, P.W.**, R.N. Lockwood, and J.R. Ryckman. 1994. Efficiency of sampling river fishes with rotenone. Michigan Department of Natural Resources, Fisheries Research Report 2009, Ann Arbor
- Seelbach, P.W.**, and B.R. Miller. 1993. Dynamics in Lake Superior of hatchery and wild steelhead emigrating from the Huron River, Michigan. Michigan Department of Natural Resources, Fisheries Research Report 1993, Ann Arbor.
- Rand, P.S., D.J. Stewart, **P.W. Seelbach**, M.L. Jones, and L.R. Wedge. 1993. Modeling steelhead population energetics in Lakes Michigan and Ontario. *Transactions of the American Fisheries Society* 122:977-1001.
- Seelbach, P.W.** 1993. Population biology of steelhead in a stable-flow, low-gradient tributary of Lake Michigan. *Transactions of the American Fisheries Society* 122:179-198.
- Zorn, T.G., and **P.W. Seelbach**. 1992. A historical perspective of the Clinton River watershed and its fish communities. Michigan Department of Natural Resources, Fisheries Technical Report 92-10, Ann Arbor.
- Seelbach, P.W.** 1989. Characteristics of adult steelhead populations, including returns of hatchery yearlings, in the St. Joseph and Grand rivers, Michigan, 1979-85. Michigan Department of Natural Resources, Fisheries Technical Report 89-3, Ann Arbor.
- Seelbach, P.W.** 1988. Considerations regarding the introduction of muskellunge into southern Michigan Rivers. Michigan Department of Natural Resources, Fisheries Technical Report 88-5, Ann Arbor.
- Seelbach, P.W.**, and G.E. Whelan. 1988. Identification and contribution of wild and hatchery steelhead stocks in Lake Michigan tributaries. *Transactions of the American Fisheries Society* 117:444-451.
- Seelbach, P.W.** 1987. Effect of winter severity on steelhead smolt yield in Michigan: an example of the importance of environmental factors in determining smolt yield. *American Fisheries Society Symposium* 1:441-450.
- Seelbach, P.W.** 1987. Smolting success of hatchery-raised steelhead planted in a Michigan tributary of Lake Michigan. *North American Journal of Fisheries Management* 7:223-231.
- Seelbach, P.W.**, R.N. Lockwood, and G.R. Alexander. 1985. A modified inclined-screen trap for catching salmonid smolts in large rivers. *North American Journal of Fisheries Management* 5:494-498.



**Seelbach, P.W.** 1985. Smolt migration of wild and hatchery-raised coho and chinook salmon in a tributary of northern Lake Michigan. Michigan Department of Natural Resources, Fisheries Research Report 1935, Ann Arbor.

Apfelbaum, S.I., and **P. Seelbach**. 1983. Nest tree, habitat selection and productivity of seven North American raptor species based on the Cornell University nest record card program. Raptor Research 17:97-113.

**Seelbach, P.W.,** and W.F. McDiffett. 1983. Distribution and abundance of zooplankton in an alkaline freshwater marsh in Northumberland County, Pennsylvania. International Revue gesampten Hydrobiologie 68:379-395.

**Presentations to:**

Council of Great Lakes Governors, Great Lakes Commission, American Fisheries Society-- Parent Society, North-Central Division, State Chapter; American Water Resources Association, Michigan State Section; Michigan Water Environment Association; International Association of Landscape Ecologists; International Association of Great Lakes Research; North American Benthological Society; Southeast Aquatic Resource Partnership; Assn of Fish and Wildlife Agencies; USDA Forest Service, Regional workshop stream classification; USEPA Mid-Continent Ecology Lab- Duluth; USEPA Great Lakes R3 workshop; USEPA Areas of Concern workshop; The Nature Conservancy, Great Lakes Program flow modeling workshop; USGS Great Lakes Aquatic GAP Analysis workshop; USGS Lake Erie NAQUA Annual review; USGS & TNC Environmental Flows workshop; USGS Ecosystems Mission Area; Ontario Ministry of Natural Resources, Riverine Research Program workshop; Wisconsin Department of Natural Resources; Huron, Clinton, Rouge, Pere Marquette, Dowagiac river watershed councils; Michigan United Conservation Club;

Michigan Department of Environmental Quality, Surface Water Quality Division; Michigan Office of the Great Lakes; Michigan Senate Committee on Environment; Michigan Natural Resources Commission; Southeast Michigan Council of Governments, Water Quality Board; Michigan Association of Drain Commissioners; Michigan Manufacturers Association; Michigan Farm Bureau; Michigan State Extension Service

Albion College; Au Sable Institute; Calvin College; Eastern Michigan University; Michigan State University; Oakland University; Grand Valley State University; University of Michigan; Penn State University

**Awards:** Water Conservationist of the Year. 2007. Michigan United Conservation Clubs.