

Roger F. Thoma
Cleveland Museum of Natural History
440/655-1200

Education:

- 1070-1975 Ohio State University, B.S.
- 1977-1982 Ohio State University, M.S. program (incomplete)

Experience:

- **Sept 2008 – present. Midwest Biodiversity Institute**, Columbus, Ohio **Position** – Senior Research Associate **Duties** – conduct and direct research into aquatic ecosystems with emphasis on crayfish and fish communities and their habitat requirements.
- **May 2004 – Sept. 2008. Ohio University**, Athens, Ohio **Position** – Research Associate **Duties** – conduct and direct research into aquatic ecosystems with emphasis on crayfish and fish communities and their habitat requirements.
- **July 1997 – 2012. Ohio State University**, Columbus, Ohio **Position** - Adjunct Assistant Professor **Duties** - Curate OSU Museum of Biological Diversity crayfish collection;
- **June 1982 – April 2004. Ohio Environmental Protection Agency**, Columbus, Ohio **Position** - Environmental Specialist II. **Duties** - Field collection and identification of fish and fisheries data, supervision, analysis of data and report preparation.
- **January 1991 - October 1991. U.S. Environmental Protection Agency** Washington D.C. **Position** - Biological Expert **Duties** - Work with the Assessment and Watershed Protection Division of the Office of Wetlands, Oceans, and Watersheds as biological expert.
- **January 1978 - June 1982. Ohio State University**, Columbus Ohio **Position** - Graduate Teaching Assistant **Duties** - assist with instruction of undergraduate classes.
- **June 1977 - December 1977. Center for Lake Erie Area Research (CLEAR)**, Columbus, Ohio **Position** – Research Assistant **Duties** – coordinate lab. work, fieldwork, identification of larval fish samples.
- **May 1976 - May 1977. Nuclear Utility Service (NUS) Corp.**, Pittsburgh, PA **Position** – Technician **Duties** - field collection of bio. & chem. data, analyze and id. larval fish.
- **June 1975 - May 1976. Center for Lake Erie Area Research (CLEAR)**, Columbus, Ohio **Position** – Technician **Duties** - collect bio. & chem.. data, analyze and id. larval fish.
- **June 1971 - September 1973. Volunteer assistant to Ray F. Jezerinac (OSU)** Collect & id. fish and crayfish in the Licking River basin, Licking County, Ohio.

Professional Affiliations:

Sigma Xi, Bio. Soc. of Washington, The Crustacean Soc., International Assoc. of Astacologist, Ohio Acad. of Sci., Amer. Fish. Soc., Ohio Chap. Amer. Fish. Soc., Steam management Committee Chair 1987 -1990, Endanger Species: Freshwater Crayfish Subcommittee member, Wildlife Soc. - OSU chapter President 1973-74

Recent Publications:

- J.H. Hartig, D.P. Dodge, D. Jester, J. Atkinson, **R. Thoma**, and K. Cullis. **1996.** *Toward integrating remedial action planning and fishery management planning in Great Lakes Areas of Concern.* Fisheries 21(2): 6-13.
- **R. F. Thoma** and Chris O. Yoder. **1998.** *Ohio's Lake Erie and lacustrine monitoring program.* In Biological Habitat Quality: Indicators for Essential Fish Habitat: Workshop Proceedings, 14-15 July, 1997, Charleston, SC. S.I. Hartwell (ed.). NOAA Technical Memorandum NMFS-F/SPO-32, NOAA/NMFS, Silver Spring, MD. 125pp.
- **R. F. Thoma** and Chris O. Yoder. **1998.** *The Ohio Environmental Protection Agency's biological monitoring program, IBI measures and their possible application to estuarine environments.* In Biological Habitat Quality: Indicators for Essential Fish Habitat: Workshop Proceedings, 14-15 July, 1997, Charleston, SC. S.I. Hartwell (ed.). NOAA Technical Memorandum NMFS-F/SPO-32, NOAA/NMFS, Silver Spring, MD. 125pp.
- **R.F.Thoma. 1998.** *Biological Monitoring and an Index of Biotic Integrity for Lake Erie's Nearshore Waters.* In Assessing the Sustainability and Biological Integrity of Water Resources Using Fish Communities. Thomas P. Simon ed. CRC Press. Pp. 417-461. 35 figs.
- **R. F. Thoma** and Raymond F. Jezerinac. **1999.** *The Taxonomic Status and zoogeography of Cambarus bartonii carinirostris Hay, 1914 (Crustacea: Decapoda: Cambaridae).* Proceedings of the Biological Society of Washington. 112(1):97-105.
- **R.F.Thoma. 2000.** *Cambarus (Jugicambarus) jezerinaci (Crustacea: Decapoda: Cambaridae) a new species of crayfish from the Powell River drainage of Tennessee and Virginia.* Proceedings of the Biological Society of

Washington. 113(3):731-738.

- **R. F. Thoma** and Raymond F. Jezerinac. **2001**. *Ohio crayfish and shrimp Atlas*. Ohio Biological Survey Miscellaneous Contribution No. 7. iv+28p. 25 figs.
- **R. F. Thoma** and Thomas P. Simon. **2002**. *Correlation between Nutrient Stimulation and Presence of Omnivorous Fish along the Lake Erie Nearshore*. In Biological Response Signatures Indicator Patterns Using Aquatic Communities. Thomas P. Simon ed. CRC Press. Pp. 187-199. 4 figs.
- Simon, T.P. and **R. F. Thoma**. **2003**. Distribution patterns of freshwater shrimp and crayfish (Decapoda: Cambaridae) in the Patoka River basin of Indiana. *Proceedings of the Indiana Academy of Science* 112(2):175-185.
- **R. F. Thoma**. **2004**. Methods of Assessing Habitat in Lake Erie Shoreline Waters Using the Qualitative Habitat Evaluation Index (QHEI) Approach. Ohio Environmental Protection Agency, Division of Surface Water, 401 Section, Columbus, Ohio.
- **R. F. Thoma**, R. F. Jezerinac and T.P. Simon. **2005**. *Cambarus (Tubericambarus) polychromatus (Decapoda: Cambaridae), a new species of crayfish from the United States*. *Proceedings of the Biological Society of Washington*. 118(2):326-336.
- **R. F. Thoma**. **2005**. *Cambarus (Cambarus) eeseehensis (Decapoda: Cambaridae), a new species of crayfish from the Linville River of North Carolina and its Bearing on Understanding the Evolution of the Subgenus Cambarus*. *Proceedings of the Biological Society of Washington*. 118(4):794-802.
- Yoder, C. O., E. T. Rankin, M. A. Smith, B. C. Alsdorf, D. J. Altwater, C. E. Boucher, R. J. Milotner, D. E. Mishne, R. E. Sanders, **R. F. Thoma**. **2005**. *Changes in Fish Assemblage Status in Ohio's Nonwadeable Rivers and Streams over Two Decades*. American Fisheries Society Symposium. 45:399-429.
- Simon, T.P. and **R. F. Thoma**. **2006**. *Conservation of Imperiled Crayfish – Orconectes (Faxonius) indianensis Hay (Decapoda: Cambaridae)*. *Journal of Crustacean Biology*, 26(3):436-440.
- Simon, T.P. and **R. F. Thoma**. **2006**. *Native and Alien Distributions of Crayfish Assemblages in Drowned River Mouth Coastal Wetlands of Lake Michigan, in Coastal Wetlands of the Laurentian Great Lakes: Health, Habitat, and Indicators*. T.P. Simon & P.A. Stewart eds. Author House, Bloomington, IN. Pp 375-382..
- **R. F. Thoma**. **2006**. *Development and assessment of a Qualitative Habitat Evaluation Index for Application in Coastal Wetlands of the Great Lakes*. In Coastal Wetlands of the Laurentian Great Lakes: Health, Habitat, and Indicators. T.P. Simon & P.A. Stewart eds. Author House, Bloomington, IN. Pp 171-194.
- T.P. Simon, R.L. Dufour, **R.F. Thoma**, & D. Carlson. **2006**. *Classification of Freshwater Fish Species of the Great Lakes Basin for use in the Development of Indices of Biological Integrity for Coastal Wetlands*. in Coastal Wetlands of the Laurentian Great Lakes: Health, Habitat, and Indicators. T.P. Simon & P.A. Stewart eds. Author House, Bloomington, IN. Pp 297-317.
- P.M. Stewart, M.M. Pilarczyk, **R.F. Thoma**, & T.P. Simon. **2006**. *Development of a Preliminary D-net Macroinvertebrate Index of Biotic Integrity for Lake Erie Drwned River Mouth Coastal Wetlands*. in Coastal Wetlands of the Laurentian Great Lakes: Health, Habitat, and Indicators. T.P. Simon & P.A. Stewart eds. Author House, Bloomington, IN. Pp 363-374.
- T.P. Simon, **R.F. Thoma**, P.M. Stewart, D.M. Carlson, F. Stone, A. Bowen, & M. Hoff. **2006**. *Fish Communities as Indicators of Condition in Great Lakes Coastal Wetlands with Emphasis on Development of an Index of Biotic Integrity*. In Coastal Wetlands of the Laurentian Great Lakes: Health, Habitat, and Indicators. T.P. Simon & P.A. Stewart eds. Author House, Bloomington, IN. Pp 385-395.
- T.P. Simon, **R.F. Thoma**, P.M. Stewart. **2006**. *Validation of an Index of Biotic Integrity for Fish Assemblages in Drowned River Mouth Wetlands of Lake Erie*. in Coastal Wetlands of the Laurentian Great Lakes: Health, Habitat, and Indicators. T.P. Simon & P.A. Stewart eds. Author House, Bloomington, IN. Pp 461-473.
- Taylor, C. A., G. A. Schuster, J. E. Cooper, R. J. DiStefano, A. G. Eversole, P. Hamr, H. H. Hobbs III, H. W. Robison, C. E. Skelton, **R. F. Thoma**. **2007**. *A Reassessment of the Conservation Status of Crayfishes of the United States and Canada after 10+ Years of Increased Awareness*. *Fisheries* 32(8):372-389.
- **R.F. Thoma**. **2007**. Post-dredging Habitat Enhancement Plan Report for the Lower Ashtabula River, Ashtabula, Ohio. MBI Technical Report, MBI/08-04-2
- **R.F. Thoma** and G.W. Stocker. **2009**. *Orconectes (Procericambarus) raymondi (Decapoda: Cambaridae) a new species of crayfish from unglaciated southern Ohio*. *Proceedings of the Biological Society of Washington*. 122(4): 405-413.
- **R.F. Thoma**. **2011**. *Cambarus (Tubericambarus) stockeri (Decapoda: Cambaridae) a new species of plesiomorphic Cambarus from Georgia and Tennessee with Zoogeographic affinities to Cambarus (Depressicambarus) cymatilis*. The Proceedings of the Biological Society of Washington. 124(4):318-325.
- **R.F. Thoma**, Z.J. Loughman, and J.W. Fetzner. IN REVIEW. *Cambarus (Puncticambarus) callainus*, a new species of crayfish (Decapoda: Cambaridae) from the Big Sandy River basin in Kentucky, Virginia, and West

Virginia, USA. Submitted to ZooKeys on line journal August, 2014.

- Richman NI et al . 2015. Multiple drivers of decline in the global status of freshwater crayfish (Decapoda: Astacidea). Phil. Trans. R. Soc. B 370 : 20140060. <http://dx.doi.org/10.1098/rstb.2014.0060>
- **R.F. Thoma** and J.W. Fetzner. **2015**. *Cambarus* (*Jugicambarus*) *magerae* (Decapoda: Cambaridae) a new species of crayfish from Virginia. Proceedings of the Biological Society of Washington. 128(1):000–000.
- **R.F. Thoma**. The crayfish fauna of Canada and The United States (North America). **2015**. *In* Freshwater Crayfish: Global Review. Eds. T. Kawai, Z. Faulkes, and G. Scholtz. Science Publishers.
- **R.F. Thoma**, Z.J. Loughman, and J.W. Fetzner. **2014**. *Cambarus* (*Puncticambarus*) *callainus*, a new species of crayfish (Decapoda: Cambaridae) from the Big Sandy River basin in Kentucky, Virginia, and West Virginia, USA. Zootaxa 3900 (4): 541–554.
- Z.J. Loughman, S.A. Welsh, J.W. Fetzner Jr., and **R.F. Thoma**. **2015**. Conservation of imperiled crayfish, *Cambarus veteranus* (Decapoda: Reptania: Cambaridae). Journal of Crustacean Biology, 00(0), 1-11, 2015

Submitted Manuscripts:

Submitted Book Chapters:

- **R.F. Thoma**. A key to the crayfish of the North American genus *Cambarus*. *In Thorp and Covich's Freshwater Invertebrates, Fourth Edition* Volume II – Keys to Nearctic Fauna. Eds. J.H. Thorp and D.C. Rogers. Elsevier Publishing Co.

Video interviews:

- **Burrowing Crayfish**. Tennessee's Wild Side, Episode 1403. 2007
www.tnwildside.org/stories.asp?Story=718
- **The Return of the Cuyahoga**. Florentine Films/Hott Productions Inc. 2008.
http://www.florentinefilms.org/thefilms/04_cuy.htm
-

Awards:

- Public Service Award - Ohio Chapter, The Nature Conservancy 1993.
- Environmental Service Award - Ashtabula River Partnership 1998.
- Outstanding Service Award - Ohio Environmental Protection Agency 2001.

Professional References:

Mr. Chris Yoder

Research Director
Midwest Biodiversity Institute
Ph: 740/707-5969
Cell: 740/597-1755

Dr. Chris Taylor

Curator of Crustaceans
Illinois Natural History Survey
1816 S. Oak Street
Champaign, IL 61802
Ph: 217-244-2153

Dr. Paul Baumann

Adjunct Professor EEOB
USGS Field Station Leader
Ohio State University
2021 Coffey Rd.
Columbus, OH 43210
Ph: 614/469-5701