

Curriculum Vitae: James H. Thorp

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Synopsis of Curriculum Vitae

Current Position: Professor Dept. of Ecology and Evolutionary Biology; Senior Scientist, Kansas Biological Survey, University of Kansas, Lawrence, KS (2001 to present).

Education: Ph.D. & Masters: North Carolina State (1975 & 1973); B.A.: Univ. of Kansas (1970).

Teaching Experience: community ecology, environmental science, general biology, invertebrate zoology, large river ecosystems, limnology, marine biology, physiological ecology, principles of ecology, stream ecology, tropical ecology, and tropical marine biology.

Administrative Experience: Dean of Science, Department Chair, Director of research institutes at Clarkson, Louisville and Fordham, Director of Educ. Programs at SREL.; Senior Co-Chair 2 national science meetings; and Chair, Division of Science and Mathematics at the Univ. of Louisville. President of the International Society for River Science (2006 - Present)

Publications: 89 refereed chapters, books, and research publications in journals (including *Ecology*, *Oecologia*, *Oikos*, *Freshwater Biology*, *River Research and Applications*, and *Can. J. Fish. Aquatic Sci.*); senior author of *The Riverine Ecosystem Synthesis* (2008) and senior editor of two books (*Ecology and Classification of North American Freshwater Invertebrates*, 1991, 2001, 2009; *Energy and Environmental Stress in Aquatic Systems*, 1978).

Grants: Research, education, and equipment support from NSF, EPA, DOE, U.S.A.C.E., Amer. Water Works Assoc. Res. Fdn., and Great Lakes Res. Consort., and various corporate sponsors.

Editorial Experience: Editorial Board, *River Research and Applications*; Editor-in-chief *Aquatic Ecology* (book series for Elsevier); former Assoc. Editor of *Freshwater Invertebrate Biology* (now *JNABS*), manuscripts reviewed in last 10 years for 15-20 journals, 3 books, and 4 publishers; grants reviewed for NSF, DOE, EPA, and the Research Corp; NSF and EPA panel member.

Research Interests: Structural and functional ecosystem responses to hydrogeomorphic variation in rivers, especially in regard to climate change; food web ecology of rivers and lakes, carbon cycling, regulation of benthic and planktonic communities of invertebrates and fish; rehabilitation and management of aquatic systems; experimental studies of the effects of natural and anthropogenic disturbances.

Education:

Ph.D. Program: 1975; Zoology Dept., North Carolina State, Raleigh, North Carolina. Dissertation: "Mechanisms of coexistence between two sympatric species of the grass shrimp *Palaemonetes* (Decapoda: Palaemonidae)." Advisors: Thomas Wolcott and Donald Hoss.
Masters Program: 1973; Zoology Dept. (minor in ecology); NCSU. Thesis: "Effect of crowding on growth rate and symbiosis in green hydra." Advisor: George T. Barthalmus.
B.A. Program: 1970; Zoology Department, University of Kansas, Lawrence, Kansas.

Employment History - Research and Education:

Professor and Senior Scientist, Univ. of Kansas (2001- present)
Bayard and Virginia Clarkson Distinguished Professor of Biology, Clarkson Univ. (1999-2001).
Professor, Biology Department, Univ. of Louisville (1988-97).
Associate Professor, Dept. of Biological Sciences, Fordham Univ. (1985-88).
Visiting Assoc. Prof., Cornell Univ., Ecology & Systematics and Dept. Nat. Resources (1983-1985).
Ecologist at the University of Georgia's Savannah River Ecology Laboratory (1975-1982).

Teaching Experience:

Environmental sciences, freshwater invertebrates, general biology, invertebrate zoology, large river ecosystems, limnology, marine biology, physiological ecology, population and community ecology, principles of ecology, stream ecology, tropical ecology

Administrative Responsibilities:

Assoc. Director, Center for Environmental Management, Clarkson Univ. (1999-2001).
Dean, School of Science, Clarkson University (1997-1999).
Chair, Dept. of Biology, University of Louisville (1993-97).
Director, Water Resources Lab., Univ. of Louisville (1988-93).
Director, Calder Conservation and Ecology Center (field campus) of Fordham Univ. (1985-88).
Director, Education Programs at the Savannah River Ecology Lab, U. of Georgia (1979-81).

Additional Professional Experiences:

President of the International Society for River Science (2006 - present)
Editor-in-chief of *Aquatic Ecology*, a professional book series on freshwater (primarily) communities and ecosystems; first publication was in 1994.
Associate Editor: *River Research and Management* (editor for the *Arenas* section): 2004 - present.
Associate Editor, *Freshwater Invertebrate Biology* (1982-83) [The journal was adopted in 1985 by the N. Am. Benthol. Soc. and became *JNABS*, with a complete change in editorial board.]
Sigma Xi (Officer: President, 1996-97, Univ. of Louisville)
Prominent university or college committees: faculty senate (elected); graduate Council (elected); athletics board; university budget and planning committee; decanal review committee (for VP for Research and Dean of the Graduate School); Southern Association of Colleges and Schools (SACS) and Middle States Association accreditation committees; Ph.D. in urban and public affairs review committee; committee in A&S to examine concepts of scholastic tracks for faculty and post-tenure review; honors committee; gender issues committee.
American Institute of Architects, Regional/Urban Design Assistance Team, Fargo, ND and

Moorhead, MN, 1989: member of a team planning urban development and environmental protection for the Red River corridor in those two cities.
Organizer and Program Senior Co-Chair for the 40th annual meeting of the North American Benthological Society in Louisville, KY (May 1992).
Program Chairman and Senior Editor for "Energy and Environmental Stress in Aquatic Systems," D.O.E. Symposium Series (CONF-771114), Nov. 1977 (publ. 1978).
International organizing committee for aquatic meetings in Russia (June 2001) and the Netherlands (fall 2003).
Society Committees: elections and places (N.A.B.S. 1995-98); nominations (Aquat. Ecol. Sect., E.S.A., 1980-1981); journal operations committee (J-NABS, 1987-1991).

Scientific Societies:

American Society of Limnology and Oceanography
International Society for River Science
Missouri River Basin Consortium
North American Benthological Society
Societas Internationalis Limnologiae

Grant Support From Agencies and Foundations:

Research Grants (Last 10 Years):

Huggins, D., J. Thorp, A. Dzialowski, and D. Baker. Procurement of field and analytical support for the EMAP-Great Rivers reference condition research on the Missouri River in Kansas. U.S. EPA (\$98,000; 2006-2007).

Delong, M.D., **J.H. Thorp**, and J.R. Anderson. Determination of ecological thresholds through an historical perspective of trophic dynamics. EPA STAR(\$297,543; 2005-2007; \$90,044 to KU) (RD-83244201).

Thorp, J.H., S.J. Randtke, F. deNoyelles, and K.B. Gido. Requirements for specialized research transportation equipment: a unique airboat to study shallow reservoirs and rivers of the Great Plains. NSF EPS-0236913 (\$34,850; 2004-2005).

Thorp, J.H. Evaluation of freshwater mussel populations in the Cottonwood River, Elk River, Marmaton River, Pottawatomie Creek, Verdigris River, and Walnut River of Kansas. KS Dept. of Wildlife and Parks (\$150,000; 2004).

E. Martinko, **J. Thorp**, M. Jakubauskas, D. Huggins, J. Whistler, F. deNoyelles, J. Dobson, P. Liechti, and K. Price. Development of watershed classification systems for diagnosis of biological impairment in watersheds and their receiving water bodies. EPA-STAR (\$1,149,266; 2003-2006) (RD-83059701). [The first \$900K of this grant was written entirely by Thorp and Jakubauskas.]

Prato, A. and Co-PIs at 15 academic and research institutions [including **J. H. Thorp**, representing KU]. Upper and Middle Mississippi Valley Cooperative Ecosystems Studies Unit. Department of the Interior and other federal agencies. Undetermined budget [To be negotiated in future between

KU and those federal agencies on individual grants.] 2003-2008.

Thorp, J.H., T.B. Mihuc., and J.D. Wehr. Influence of nutrient source on food webs - implications for management of water levels in the St. Lawrence River and Lake Ontario. NY Great Lakes Research Consortium (\$19,636; 2000-2001).

Thorp, J.H., A.F. Casper, S.P. Davies, and D. L. Courtemanch. Rehabilitation of impounded rivers: effects of removal of a Kennebec River dam on food webs. NSF-SGER (\$40,553; 1999-2000). DEB-9909717.

Thorp, J.H. and A.F. Casper. Development of a great river potamocorral and applications for determining ecosystem metabolism and community interactions among potamoplankton. NSF-SGER (\$60,000; 1998-99). DEB-9818273.

Thorp, J.H., T.W. Sellers, D.L. Vaughn, R.W. Koch, R.B. Summers, J.M. Shostell, and J.D. Jack. Effects of a major flood on secondary production of zooplankton and carbon sources in the Ohio River: implications for ecosystem theory and river management. NSF-SGER (\$29,186; 1997-98); DEB-9796335.

Jack, J.D. and **J.H. Thorp**. Biotic regulation of Ohio River zooplankton. NSF-EPSCoR (\$21,756; NSF: \$15,000; State of Kentucky: \$6,756; 1997-98).

Thorp, J.H., M. D. Delong, J. D. Wehr, and M. C. Miller. Impacts of a catastrophic flood on nutrient sources and organic processing in large river ecosystems. NSF-SGER (\$49,990; 1993-1994), DEB-9320303.

Thorp, J.H. and A. R. Black. Potamoplankton ecology: experimental manipulation of the Ohio River plankton. NSF-SGER (\$49,989; 1993-1994) DEB-9307225.

Thorp, J.H., A.R. Black, J.E. Alexander, Jr., K.H. Haag, D. Howarth, and R.W. Bosserman. Experimental analog and sensitivity modeling studies predicting influences of global climate change on introduced species. EPA-Duluth (#CR821989-01; \$199,891; 1993-1995).

Thorp, J.H. Field experimental analysis of factors regulating the potential distribution, abundance, and community impact of zebra mussels in large rivers. U.S. EPA - Duluth (#CR820263-01-0) (\$498,723; 1992-1996); Co-PIs last (extension) year: P. Bukaveckas, R. Stevenson, and J. Jack.

Thorp, J.H. and M. D. Delong. Invertebrate secondary production in snag and cobble habitats of the Ohio River. Marcia Athey Fund (Kentucky Academy of Science) (\$1,615; 1992).

Thorp, J.H. Impact of a biofouler on water companies located along large rivers: Part I. Studies of survival, growth, and reproduction of the zebra mussel, *Dreissena polymorpha*, in a riverine mesocosm. American Water Works Association Research Foundation (#733-91)

- \$146,329 in 1991-1993 (Co-P.I.: K. H. Haag and J. C. Smith)

- \$ 20,000 in 1994-1995 (Co-P.I.: J. E. Alexander and J. C. Smith)

Education and Facilities Grants (1993-):

Thorp, J.H. 2002. Travel grant from the Cooperative Research Centers for Freshwater Ecology (CRCFE) in Australia to visit the country, collaborate on research proposal development, and present research seminars. (Maximum \$10,000 Australian dollars, or ~\$5,860 in U.S. dollars).

Thorp, J.H. Planning activities: development of the Ohio River Environmental Station. NSF (\$22,600; 1996).

Cohn, L.H. and **J.H. Thorp**. Assessing the potential for establishing a Center for Environmental Studies at the University of Louisville. Ford Motor Company (\$49,080; 1990).

Corporate Contracts to University (1995-):

None; however I had \$110,545 in the early 1990s with the Louisville Water Company and Public Service Indiana.

Development Funds (1995-):

Donation of ~\$9,000,000 from the NY Power Authority for construction, equipping, and endowing the Great Rivers Center (on the St. Lawrence River); I conceived the project, wrote the entire proposal, and participated in state negotiations (along with the President and VPAA of Clarkson); the GRC is to be built around 2004-05.

Donation of aluminum from Alcoa for development of potamocorrals (\$6,125 wholesale; 1999).

Donations for outing club and development of a new rowing club at Clarkson University. Various donations from university trustees (\$25,000; 1998).

Grant Proposals Reviewed (Representative):

Department of Energy: Research

EPA/NSF Water and Watersheds research proposal panel (1995; EPA/NSF/USDA: 1998)

Leopold Center for Sustainable Agriculture (Iowa)

National Environmental Research Council (England)

National Oceanographic and Atmospheric Administration: Research

NSF: Research (Divisions of Environmental Biology, Biological Oceanography, Hydrological Sciences, Psychobiology, and SBIR)

NSF: Education (Undergraduate Science Education: equipment proposals; panel member)

CRCFE (Australia) Research Proposal (2003)

Editorial Boards:

- Editor-in-Chief, Aquatic Ecology book series, Academic Press (Elsevier)
- Member Editorial Board : River Research and Applications (editor for *Arenas* section)
- Former Associate Editor for Freshwater Invertebrate Biology (now JNABS)
- Special Editorial Issue: Buijse, A.D., F. Klijn, R.S.E.W. Leuven, H. Middelkoop, F. Schiemer, **J.H. Thorp** and H.P. Wolfert (eds.) 2005. Rehabilitating large regulated rivers. Archiv für Hydrobiologie, Supplement 155 (Large Rivers 15). E. Schweizerbart'sche Verlagsbuchhandlung, Stuttgart. 738 pp.

Manuscripts Reviewed (~ last ten years):

National Journals and Books:

American Naturalist, Am. Midl. Nat., Ecological Indicators, Ecology, Ecology of Freshwater Fish, Estuaries, J. Amer. Water Resources Assoc., J. Environ. Quality, J. Fish Biology, J. Freshwat. Environ. Monitoring and Assessment, Ecology, J. Molluscan Studies, J. North Am. Benthol. Soc., Limnology and Oceanography, Quarterly Review of Biology, Trans. Am. Fish. Soc.

Foreign Journals:

Aquatic Ecology, Aquatic Sciences, Archiv für Hydrobiologie, Can. J. Fish. & Aquat. Sci., Can. J. Zool., Freshwater Biology, Hydrobiologia, J. Molluscan Studies, Marine and Freshwater Research, Oecologia, Oikos, Proc. Royal Society - Biology, River Research and Applications.

Textbook Publishers: Academic Press (Elsevier), John Wiley & Sons, Princeton University Press.

Seminars/Posters Presented (*=Invited Talk outside of N. America other than society meetings):

Australia

- *Univ. of Adelaide & Canberra, Griffith Univ., and 3 CRCFE labs: June-July 2002
- *9th Internat. Conf. on River Res.& Applic., keynote address (Albury, N.S.W.): July 2003
- *Australian Soc. Limnology (Albury; keynote address) & River-Floodplain Workshop (Canberra): Sept. 2006

Austria

- 1st International Conf. on the Ecology of Large Rivers (Krems, Austria): June 1995
- *Univ. of Vienna, Institute of Ecology and Conservation, Dept. of Limnology: April 2003
- *Kerner von Marilaun workshop on long term ecological research [in Fluvial Ecology]; Vienna and Lunz am See, Austria: November 2003.

Canada

- * St. Lawrence River Symposium, ~ May 1998 (plenary talk also scheduled for 2008)
- *Université du Québec à Trois-Rivières (Trois-Rivières, Quebec): Sept. 2006

China

- *Institute of Hydroecology, Wuhan, China: Sept-Oct. 2007

Denmark

ASLO (Copenhagen): June 2000

France

8th International Symposium on Regulated Streams (Toulouse): July 2000

Israel

International Ecological Society (Jerusalem): ca. 1978

Italy

*Three lectures to the Faculty (Athenaeum) and Department of Biology, University of Ferrara, Ferrara, Italy: March 2005

Netherlands

*Lowland River Rehabilitation Meeting (Wageningen), keynote address: Sept. 2003

Russia

*Russian Academy of Sciences, Ural Department (Perm, Russia): Sept. 1995
Aquatic Ecosystems & Organisms Conference, Moscow State University: June 2002

Scotland

*TISORS international rivers conference (Sterling; plenary address): Aug. 2006

Switzerland

*EAWAG/ETH (Zurich): September 2003

United States (Last 10 Years):

Am. Soc. Limnol. & Oceanogr. (ASLO)	1998, 2000-01, '06
Ecological Society of America	2005
Internat. Assoc. Great Lakes Research	2000
National EMAP Conference*	2002
N. Am. Benthol. Soc. (NABS)	1998- 99, 01, 04-07

*Universities in the North America (21st Century)** Southwest Missouri State Univ. (2003), *Kansas State Univ. (2003), *Univ. of Kansas (2001), *Université du Québec à Trois-Rivières (2006).

Research Publications in Review by Refereed Scientific Journals:

Roach, K.A., **J.H. Thorp**, and M.D. DeLong. Food webs, hydrologic connectivity, and flow pulses in a large floodplain river. (Awaiting decision on minor revision to *Oecologia*)
Sluss, T.D., G.A. Cobbs, and **J.H. Thorp**. Impact of turbulence on riverine zooplankton: a mesocosm experiment. (Awaiting decision on minor revision to *Freshwater Biology*)
Sluss, T.D., J.D. Jack, and **J.H. Thorp**. Sampling methods for riverine zooplankton. (Submitted to *Limnology and Oceanography: Methods*)

Research Publications Accepted or Published in Refereed Scientific Journals (70):

Moore, S.L. and **J.H. Thorp**. 2008. Coping with hydrogeomorphic variations in a prairie river: resiliency in young-of-the-year fishes. *River Research and Applications* (Published on line in December 2007; print version in early 2008)
Casper, A.F. and **J.H. Thorp**. 2007. Diel and lateral patterns of zooplankton distribution in the St. Lawrence River. *River Research and Applications* 23(1):73-86.
Jack, J.D. W. Fang, and **J.H. Thorp**. 2006. Vertical, lateral and longitudinal movement of zooplankton in a large river. *Freshwater Biology* 51:1646-1654.
Casper, A.F., **J.H. Thorp**, S.P. Davies, and D.L. Courtemanch. 2006. Ecological responses of zoobenthos to dam removal on the Kennebec River, Maine, USA. *Archiv für Hydrobiologie*,

- Large Rivers Vol 16 (4):541-555.
- Thorp, J.H.**, M.C. Thoms, and M.D. DeLong. 2006. The riverine ecosystem synthesis: biocomplexity in river networks across space and time. *River Research and Applications* 22(2):123-147.
- DeLong, M. D. and **J. H. Thorp**. 2006. Significance of instream autotrophs in trophic dynamics of the Upper Mississippi River. *Oecologia* 147(1):76-85.
- Thorp, J.H.** and S. Mantovani. 2005. Zooplankton in turbid and hydrologically dynamic, prairie rivers. *Freshwater Biology* 50(9):1474-1491.
- Hein, T., W. Reckendorfer, **J. Thorp**, and F. Schiemer. 2005. The role of slackwater areas and the hydrologic exchange for biogeochemical processes in river corridors: examples from the Austrian Danube. *Archiv für Hydrobiologie, Suppl. Vol. 155 (Large Rivers Vol. 15): 425-442.*
- Buijse, A.D., F. Klijn, R.S.E.W. Leuven, H. Middelkoop, F.Schiemer, **J.H. Thorp**, H.P. Wolfert. 2005. Rehabilitation of large rivers: references, achievements and integration into river management. *Archiv für Hydrobiologie Suppl. Vol. 155 (Large Rivers Vol. 15): 715-738.*
- Thorp, J.H.** and A.F. Casper. 2003. Importance of biotic interactions in large rivers: an experiment with planktivorous fish, dreissenid mussels, and zooplankton in the St. Lawrence. *River Research and Applications* 19:265-279.
- Thorp, J.H.**, J.E. Alexander, Jr., and G. A. Cobbs. 2002. Coping with warmer, large rivers: a field experiment on potential range expansion of northern quagga mussels (*Dreissena bugensis*). *Freshwater Biology* 47(9):1779-1790.
- Thorp, J.H.** and M.D. DeLong. 2002. Dominance of autochthonous autotrophic carbon in food webs of heterotrophic rivers. *Oikos* 96(3):543-550.
- Jack, J.D. and **J.H. Thorp**. 2002. Impacts of fish predation on an Ohio River zooplankton community. *Journal of Plankton Research* 24(2):119-127.
- Thorp, J.H.** and A.F. Casper. 2002. Potential effects on zooplankton from species shifts in mussel planktivory: a field experiment in the St. Lawrence River. *Freshwater Biology* 47:107-119.
- Greenwood, K.S. and **J.H. Thorp**. 2001. Aspects of ecology and conservation of sympatric, prosobranch snails in a large river. *Hydrobiologia* 455:229-236.
- DeLong, M.D., **J.H. Thorp**, K.S. Greenwood, and M.C. Miller. 2001. Responses of consumers and food resources to a high magnitude, unpredicted flood in the upper Mississippi River basin. *Regulated Rivers: Research and Management* 17(3):217-232.
- Greenwood, K.S., **J.H. Thorp**, R.B. Summers, and D.L. Guelda. 2001. Effects of an exotic bivalve mollusc on benthic invertebrates and food quality in the Ohio River. *Hydrobiologia* 462:169-172.
- Bukaveckas, P.A., E. Jourdain, R. Koch, and **J.H. Thorp**. 2000. Longitudinal gradients in nutrients and phytoplankton in the Ohio River. *Verh. Internat. Verein. Limnol.* 27:3107-3110.
- Jack, J.D. and **J.H. Thorp**. 2000. Effects of the benthic suspension feeder *Dreissena polymorpha* on zooplankton in a large river. *Freshwater Biology* 44:569-579.
- Thorp, J.H.**, M.D. DeLong, K.S., Greenwood, and A.F. Casper. 1998. Isotopic analysis of three food web theories in constricted and floodplain regions of a large river. *Oecologia* 117:551-563.
- Brown, K.M., J.E. Alexander, and **J.H. Thorp**. 1998. Differences in the ecology and distribution of lotic pulmonate and prosobranch gastropods. *American Malacological Bulletin* 14(2): 91-101.

- Thorp, J.H.**, M.D. DeLong, and A.F. Casper. 1998. *In situ* experiments on predatory regulation of a bivalve mollusc (*Dreissena polymorpha*) in the Mississippi and Ohio Rivers. *Freshwater Biology* 39:649-661.
- Thorp, J.H.**, J.E. Alexander, Jr., B.L. Bukaveckas, G.A. Cobbs, and K.L. Bresko. 1998. Responses of Ohio River and Lake Erie dreissenid molluscs to changes in temperature and turbidity. *Can. J. Fish. Aquat. Sci.* 55(1):220-229.
- Wehr, J.D., S.P. Lonergan, and **J.H. Thorp**. 1997. Concentrations and controls of dissolved organic matter in a constricted-channel region of the Ohio River. *Biogeochemistry* 38:41-65.
- Wehr, J. D. and **J. H. Thorp**. 1997. Effects of navigation dams, tributaries, and littoral zones on phytoplankton of the Ohio River. *Can. J. Fish. Aquat. Sci.* 54:378-395.
- Summers, R.B., M.D. DeLong, and **J.H. Thorp**. 1997. Ontogenetic and temporal shifts in the diet of the amphipod *Gammarus fasciatus* in the Ohio River. *Amer. Midl. Nat.* 137(2):329-336.
- Summers, R.B., **J.H. Thorp**, J. E. Alexander, Jr., and R. D. Fell. 1996. Respiratory adjustment of dreissenid mussels (*Dreissena polymorpha* and *D. bugensis*) in response to chronic turbidity. *Can. J. Fish. Aquat. Sci.* 53(7):1626-1631.
- Thorp, J. H.**, A. R. Black, J.D. Jack, and A. F. Casper. 1996. Pelagic enclosures - modification and use for experimental study of riverine plankton. *Archiv. für Hydrobiologie, Supplement* 113, Large Rivers 10:583-589.
- Jack, J.D. and **J.H. Thorp**. 1995. *Daphnia lumholzi*: appearance and likely impacts of an exotic cladoceran in the Ohio River. *Trans. Kentucky Acad. Sci.* 56(3/4):101-103.
- Thorp, J. H.**, A. R. Black, K. H. Haag, and J. D. Wehr. 1994. Zooplankton assemblages in the Ohio River: seasonal, tributary, and navigation dam effects. *Can. J. Fish. Aquat. Sci.* 51:1634-1643.
- Thorp, J. H.**, J. E. Alexander, K. S. Greenwood, A. F. Casper, R. K. Kessler, A. R. Black, W. Fang, A. F. Westin, R. B. Summers, T. W. Sellers, and B. Lewis. 1994. Predicting the success of riverine populations of zebra mussels (*Dreissena polymorpha*) - a case history of early colonization and microhabitat distribution in the Ohio River. Pages 457-476 *in*: A. H. Miller (ed.), *Proceedings of the Fourth International Zebra Mussel Conference*, March 7-10, 1994, Madison, WI. University of Wisconsin System, Sea Grant Institute, 718 p.
- Thorp, J. H.** and M. D. DeLong. 1994. The riverine productivity model: an heuristic view of carbon sources and organic processing in large river ecosystems. *Oikos* 70(2):305-308.
- Alexander, J. E., Jr., **J. H. Thorp**, and R. D. Fell. 1994. Turbidity and temperature effects on oxygen consumption in zebra mussels (*Dreissena polymorpha*). *Can. J. Fish. Aquat. Sci.* 51(1):179-184.
- DeLong, M. D., R. B. Summers, and **J. H. Thorp**. 1993. Influence of food type on the growth of a riverine amphipod, *Gammarus fasciatus*. *Can. J. Fish. Aquat. Sci.* 50(9):1891-1896.
- DeLong, M.D., **J.H. Thorp**, and K. H. Haag. 1993. New device for sampling macroinvertebrates from woody debris (snags) in nearshore areas of aquatic systems. *Am. Midl. Nat.* 130(2):413-417.
- Kessler, R. K. and **J. H. Thorp**. 1993. Microhabitat segregation of the threatened spotted darter (*Etheostoma maculatum*) and closely related orangefin darter (*E. bellum*). *Can. J. Fish. Aquat. Sci.* 50(5):1084-1091.
- Thorp, J. H.** 1992. Linkage between islands and benthos in the Ohio River, with implications for riverine management. *Can. J. Fish. Aquatic Sci.* 49(9):1873-1882.

- Georgian, T. and **J. H. Thorp**. 1992. Effects of microhabitat selection on feeding rates of net-spinning caddisfly larvae. *Ecology* 73:229-240.
- Mellett, B. J., R. W. Bosserman, and **J. H. Thorp**. 1992. Use of fractal dimension to analyze meandering patterns in the Redbird River of eastern Kentucky. *Trans. Kentucky Acad. Sci.* 53(1-2):46-49.
- Haag, K. H. and **J. H. Thorp**. 1991. Cross-channel distribution patterns of invertebrate benthos in a regulated reach of the Tennessee River. *Regulated Rivers: Research and Management* 6:225-233.
- Thorp, J. H.**, L. D. Goldsmith, J. A. Polgreen, and L. M. Mayer. 1989. Foraging patterns of nesting and non-nesting sunfish (Centrarchidae: *Lepomis auritus* and *L. gibbosus*). *Can. J. Fish. Aquatic Sci.* 46:1342-1346.
- Mayack, D. T., **J. H. Thorp**, M. Cothran. 1989. Effects of burial and floodplain retention on stream processing of allochthonous litter. *Oikos* 54:378-388.
- Thorp, J. H.** 1988. Patches and the responses of lake benthos to sunfish nest-building. *Oecologia* 76(2):168-174.
- Thorp, J. H.**, J. B. Wallace, and T. J. Georgian, Jr. 1986. Untangling the web of caddisfly evolution and distribution. *Oikos* 47(2):253-256.
- Thorp, J. H.** 1986. Two distinct roles for predators in freshwater assemblages. *Oikos* 47(1): 75-82.
- Thorp, J. H.** and S. P. Gloss. 1986. Field and laboratory tests on acute toxicity of cadmium to freshwater crayfish. *Bull. Environ. Contam. & Toxicol.* 37:355-361.
- Thorp, J. H.**, E. M. McEwan, M. F. Flynn, and F. R. Hauer. 1985. Invertebrate colonization of submerged wood in a cypress-tupelo swamp and blackwater stream. *Amer. Midl. Nat.* 113:56-68.
- Cothran, M. L. and **J. H. Thorp**. 1985. Tests of prey preference and switching behavior of the dragonfly *Celithemis fasciata*. *Oikos* 44(2):350-355.
- Diggins, M. R. and **J. H. Thorp**. 1985. Winter-spring depth distribution of Chironomidae in a southeastern reservoir. *Freshwat. Invertebr. Biol.* 4(1):8-21.
- Thorp, J. H.** and M. L. Cothran. 1984. Regulation of freshwater community structure at multiple intensities of dragonfly predation. *Ecology* 65(5): 1546-1555.
- Thorp, J. H.** 1984. Evolutionary differentiation of caddisfly catchnets: perspectives on the roles of competition and predation. *Oikos* 43:121-125.
- Thorp, J. H.** 1984. Theory and practice in crayfish communication studies. *J. Chem. Ecol.* 10(8):1283-1288.
- Thorp, J. H.** 1983. An evaluation of hypotheses on the evolutionary differentiation of catchnets in net-spinning caddisflies (Trichoptera: Hydropsychidae). *Oikos* 40(2):308-312.
- Thorp, J. H.** and R. K. Chesser. 1983. Seasonal responses of lentic midge assemblages to environmental gradients. *Holarctic Ecology* 6(2):123-132.
- Cothran, M. L. and **J. H. Thorp**. 1982. Emergence and size variation of Odonata in a thermal reservoir. *Freshwat. Invertebr. Biol.* 1(4): 30-39.
- Gresens, S. E., M. L. Cothran and **J. H. Thorp**. 1982. The influence of temperature on the functional responses of the dragonfly *Celithemis fasciata* (Odonata: Libellulidae). *Oecologia* 53:281-284.
- Thorp, J. H.** and M. L. Cothran. 1982. Floating field microcosms for studying benthic communities. *Freshwater Invertebrate Biology* 1(1):44-49.

- Thorp, J. H.** and H. Itagaki. 1982. Verification versus falsification of existing theory: analysis of possible chemical communication in crayfish. *J. Chem. Ecol.* 8(7):1073-1077.
- Thorp, J. H.** and M. R. Diggins. 1982. Factors affecting depth distribution of dragonflies and other benthic insects in a thermally destabilized reservoir. *Hydrobiologia* 87:33-44.
- Thorp, J. H.** and E. A. Bergey. 1981. Field experiments on interactions between vertebrate predators and larval midges (Diptera: Chironomidae) in the littoral zone of a reservoir. *Oecologia* 50:285-290.
- Itagaki, H. and **J. H. Thorp**. 1981. Laboratory experiments to determine if crayfish can communicate in a flow-through system. *J. Chem. Ecol.* 7(1): 115-126.
- Thorp, J. H.** and E. A. Bergey. 1981. Field experiments on responses of a freshwater, benthic macroinvertebrate community to vertebrate predators. *Ecology* 62(2): 365-375.
- Thorp, J. H.** and S. A. Winewriter. 1981. Stress and growth response of juvenile crayfish to rhythmic and arrhythmic temperature fluctuations. *Arch. Environ. Contam. & Toxicol.* 10:69-77.
- Caldwell, J. P., **J. H. Thorp**, and T. O. Jervey. 1980. Predator-prey relationships among larval dragonflies, salamanders and frogs. *Oecologia* 46(3):285-289.
- Thorp, J. H.**, J. P. Giesy and S. A. Winewriter. 1979. Effects of chronic cadmium exposure on crayfish survival, growth, and tolerance to elevated temperature. *Arch. Environ. Contam. & Toxicol.* 8:449-456.
- Thorp, J. H.** 1978. Agonistic behavior in crayfish in relation to temperature and reproductive period. *Oecologia* 36(3):273-280.
- Thorp, J. H.** and K. S. Ammerman. 1978. Chemical communication and agonism in the crayfish *Procambarus a. acutus*. *Amer. Midl. Nat.* 100(2):471-474.
- Thorp, J. H.** 1976. Interference competition as a mechanism of coexistence between two sympatric species of the grass shrimp *Palaemonetes* (Decapoda: Palaemonidae). *J. Exp. Mar. Biol. & Ecol.* 25:19-35.
- Thorp, J. H.** and D. E. Hoss. 1975. Effects of salinity and cyclic temperature on survival of two sympatric species of grass shrimp (*Palaemonetes*) and their relationship to natural distributions. *J. Exp. Mar. Biol. and Ecol.* 18:19-28.
- Thorp, J. H.** and G. T. Barthalmus. 1975. Effects of crowding on growth rate and symbiosis in green hydra. *Ecology* 56:206-212.

Published Books (~5):

- Thorp, J.H.**, M.C. Thoms, and M.D. Delong. 2008. The riverine ecosystem synthesis. Academic Press (Elsevier), San Diego, CA, USA. [In Press for publication ~May. ~300-350 pages]
- Thorp, J.H.** and A.P. Covich (eds.). Ecology and classification of North American freshwater invertebrates. Academic Press, San Diego.
2009 (In Press)
2001: 1038 pages
1991: 911 pages
- Thorp, J. H.** and J. W. Gibbons. 1978. Energy and environmental stress in aquatic systems. D.O.E. Symposium Series (CONF-771114), Nat. Tech. Information Service, Springfield, Virginia. 854 p. [Given "Merit in Books" award from that society.]

Chapters in Books and Encyclopedias (~14):

- Thorp, J.H.** 2009? Models of ecological processes in riverine ecosystems. Pages xxx-xxx in: G.E. Likens (editor-in-chief), Encyclopedia of inland waters. Academic Press, San Diego, CA (In Press).
- Thorp, J.H.** Arthropoda and related groups. *in:* V.H. Resh and R.T. Cardé (eds.), Encyclopedia of insects. Academic Press, San Diego, CA.
2009? Second Edition. Pages xxx-xxx (In Press)
2003. First Edition. Pages 59-66.
- Thorp, J.H. and A.P. Covich (eds.). Chapters in: Ecology and classification of North American freshwater invertebrates. Academic Press, San Diego. 1st, 2nd, and 3rd editions:
2009 (In Press):
Thorp, J. H., A. P. Covich, and W.W. Dimmick. Chapter 1. Introduction to freshwater invertebrates. Pages x-xx.
Thorp, J. H. and A. P. Covich. Chapter 2. An overview of freshwater habitats. Pages xx-xx.
Covich, A. P., **J. H. Thorp**, and D. C. Rogers. Chapter 19. Introduction to the subphylum Crustacea. Pages xxx-xxx.
2001:
Thorp, J. H. and A. P. Covich. Chapter 1. Introduction to freshwater invertebrates. Pages 1-18.
Thorp, J. H. and A. P. Covich. Chapter 2. An overview of freshwater habitats. Pages 19-41.
Covich, A. P. and **J. H. Thorp**. Chapter 19. Introduction to the subphylum Crustacea. Pages 777-809.
1991:
Thorp, J. H. and A. P. Covich. Chapter 1. Introduction to freshwater invertebrates. Pages 1-15.
Thorp, J. H. and A. P. Covich. Chapter 2. An overview of freshwater habitats. Pages 17-36.
Covich, A. P. and **J. H. Thorp**. Chapter 18. Crustacea: Introduction and Peracarida.. Pages 665-689.
- Thorp, J.H.**, G.A. Lamberti, and A.F. Casper. 2005. Chapter. 21. St. Lawrence River. Pages 983-1028 *in:* A.C. Benke and C.E. Cushing (eds.), Rivers of North America. Academic Press, San Diego, CA.
- Thorp, J. H.** 1995. Invertebrates, freshwater. Pages 357-370 *in:* W. A. Nierenberg (ed.), Encyclopedia of environmental biology. Volume 2. Academic Press, San Diego, CA.

Reviews (2):

- Thorp, J.H.** 2001. Review of: R.T. Dillon, Jr. 2000. The ecology of freshwater molluscs. [Cambridge Univ. Press. 509 pp.] Quarterly Review of Biology 76(1):102.
- Thorp, J. H.** 1989. Review of: Complex interactions in lake communities. [S. R. Carpenter (editor), Springer-Verlag, New York.] J. North Am. Benthol. Soc. 8:370-371.

Other Publications (3):

- Thorp, J.H.**, J.A. Stanford, M.C. Thoms, and G.E. Petts. 2007. Editorial: Global partnerships and the International Society for River Science (ISRS). River Res. and Applications 23:1-5.
- Alexander, J.E., Jr., **J.H. Thorp**, and J.C. Smith. 1997. Biology and potential impact of zebra

mussels in large rivers. American Water Works Association Research Foundation 104 p.
Hobbs, H. H., III, **J.H. Thorp**, and G. E. Anderson. 1976. The freshwater decapod crustaceans (Palaemonidae, Cambaridae) of the Savannah River Plant, South Carolina. Public. of SR-Nat. Environ. Res. Park. 63 p.

Postdoctoral Fellows (P.F.) and Research Associates (R.A.) Who Have Worked in My Laboratory:
James E. Alexander, Jr. (P.F.), A. Ross Black (P.F.), Michael D. DeLong (P.F.), Maureen R. Diggins (R.A.), Kim H. Haag (R.A.), F. Richard Hauer (R.A.), Jeffrey D. Jack (P.F.), and Sara Mantovani (R.A.).

Graduate Students and Date of Degree:

Completed Graduate Students:

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University of Louisville: Kimberly S. Greenwood (1992), Richard K. Kessler (1992), Wei Fang (1993), R. Brent Summers (1995), and Timothy Sellers (1997)

University of Kansas: Teresa M. Carroll (2005), Obie Pennington (2005), Stephanie E. Moore (2006), Katherine A. Roach (2007), and Micaleila D. Desotelle (2008).

Doctoral (2):

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University of Louisville: Richard K. Kessler (1997).

University of Kansas:

Current Graduate Students (University of Kansas):

Masters: Brian O'Neill.

Doctoral: Teresa M. Carroll (completion expected spring 2008), Sarah J. Schmidt, and Bradley S. Williams.