

DANIEL J. HORNBACH
JOHN S. HOLL PROFESSOR OF ENVIRONMENTAL STUDIES

ADDRESS: Department of Environmental Studies
Macalester College
1600 Grand Ave.
St. Paul, MN 55105

TELEPHONE: Office - (651) 696-6101
Fax - (651) 696-6443

E-MAIL: Hornbach@Macalester.edu

EDUCATION: Ph.D.: Miami University, Oxford, Ohio. 1980. Major Zoology.
M.S.: University of Dayton, Dayton, Ohio. 1976. Major: Biology.
B.S.: University of Dayton, Dayton, Ohio. 1974. Major: Biology.

ACADEMIC EXPERIENCE:

- Faculty member, Department of Biology, Macalester College. Assistant Professor: September 1984 -August 1987; Associate Professor: September 1987 - August 1993; Full Professor: September 1993 - December 1997; DeWitt Wallace Professor: January 1998 – 2015; John S. Holl Professor: September 2015 - Present. Professor in Environmental Studies: 2006-present.
- Associate Editor, American Midland Naturalist. September 1995-2001.
- Assistant Professor, Department of Biology, University of Virginia. September 1980 - May 1984.
- Faculty, Mountain Lake Biological Station, University of Virginia. Summers of 1981, 1982, and 1984.

ADMINISTRATIVE EXPERIENCE:

- Environmental Studies Department, Chair, June 2006 - present
- **Dean of the Faculty and Provost, Macalester College. June 1999-July 2005.**
- Biology Department Chair. September 1996 - 1999.
- **Provost, Macalester College. August 1993 - August 1995.**
- Faculty Development Coordinator for the Science Division, Macalester College. Aid faculty in investigating and obtaining grant support for research and curriculum development. September 1988 - August 1993.
- Director, Katherine Ordway Natural History Study Area. Oversee the development of research projects, prairie restoration, and the educational

use of this 285-acre area owned by Macalester College. September 1986-September 1998.

- Other relevant administrative experience: I have chaired the following elected committees as a faculty member at Macalester - Personnel Committee, Faculty Advisory Council and Long Range Planning and Budget Committees, and been a member of the Resources and Planning Committee. I have served as a reviewer for a number of Biology and Environmental Studies departments including:
 - o Connecticut College – Environmental Studies - 2017
 - o University of Massachusetts, Boston – Environmental and Sustainability Studies - 2016
 - o Earlham College – Environmental Science/Studies - 2014
 - o Marist College – Environmental Science and Policy - 2013
 - o Ohio Wesleyan University – Environmental Studies – 2013
 - o Knox College – Environmental Studies – 2012
 - o Drake University – Environmental Studies – 2012
 - o St. Olaf College – Biology - 2010
 - o College of Wooster, OH- Consult on new ES minor - 2008
 - o Lake Forest College - Environmental Studies - 2008
 - o St. John's/St. Ben's University - MN - Environmental Studies - 2008
 - o Pitzer College -Environmental Studies - 2007
 - o Mt. Holyoke College - Environmental Studies - 2007
 - o Queen's University (Kingston, Ont.) - Environmental Studies - 2007
 - o Colorado College - Dept. Biology- 2006
 - o Wheeling Jesuit University - Dept Biology - 2005 - only reviewer
 - o Grinnell College -Education Dept. - 2003 - chair of team

HONORS AND AWARDS:

- Freshwater Mollusk Conservation Society Lifetime Achievement Award 2017.
- Midstates Consortium for Math and Science Janet Andersen Lecture Award, 2013
- Thomas Jefferson Service Award, Macalester College, March 2011.
- American Fisheries Society, MN Chapter, Best Poster Award, 38th Annual Meeting, March 2005.
- The Sir Charles Maurice Yonge Award, Malacological Society of London for a paper on Bivalvia that has made a significant contribution to the knowledge of this group (J. Moll. Stud. 67: 407-416 with S. M Baker). 2002.
- Named DeWitt Wallace Professor of Biology. November 1997.
- MN Governor's Certificate of Commendation for participation in the Zebra Mussel Task Force Partnership nominated for the MN Cooperative Public Service Award. 1994.
- Alumni Special Achievement Award - University of Dayton. October 1994.
- Blandin Faculty Fellowship Program. September 1990.

PROFESSIONAL AFFILIATIONS:

- American Institute of Biological Sciences
- Council for Environmental Deans and Directors
- Council on Undergraduate Research
- Ecological Society of America
- Freshwater Mollusk Conservation Society
- Malacological Society of London
- North American Benthological Society
- Higgins Eye Pearlymussel Recovery Team (USFWS)
- Journal of Freshwater Ecology – Editorial Board, 2011-present

GRANTS (HORNBAACH AS PI OR CO-PI):

- Legislative and Citizens Commission on MN Resources (2014-2018) - \$177,000**
- National Park Service (2012) - \$18,600
- National Park Service (2011) - \$7100
- National Park Service (2010-2011) - \$24,300
- NSF Field Station Planning Grant (2009-2010) - \$24,575
- Mellon Foundation (2007-2009) - \$300,000*
- National Park Service (2009-2010) - \$55,535
- National Park Service (2009-2011) - \$50,000
- National Park Service (2008-2010) - \$149,100
- National Park Service (2004-2007) - \$214,000
- National Park Service (2001-2004) - \$60,000
- National Park Service (2000-2002) - \$40,900
- Legislative Commission on MN Resources (1999-2001) - \$58,000
- National Park Service (1998) - \$4000
- National Park Service (1997) - \$6000
- Wisconsin Dept. Natural Resources (1997-98) \$6,000
- Legislative Commission on MN Resources (1997-98) - \$9400
- Army Corps of Engineers (1996) - \$5000
- US Fish & Wildlife Service (1994-1995) - \$34,000
- US National Park Service (1993-1996) - \$63,000
- US Environmental Protection Agency (1992-1996) \$505,000
- Wisconsin Dept. Natural Resources (1992) \$20,000
- Minnesota Dept. Natural Resources (1992-93) \$3000

- Minnesota Dept. Natural Resources (1990-91) \$3000
- Blandin Foundation (1990-91) - \$10,000
- NSF ILIP Grant (1988) - \$83,000
- US Army Corps of Engineers (1987-1990)- \$72,000
- NSF ILIP Grant (1987) - \$35,546
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*Grant to start the 3 Rivers Center at Macalester College

** Macalester portion of joint grant with Univ. Minnesota

SELECTED RECENT PRESENTATIONS – LAST 5 YEARS:

- The 65th Society for Freshwater Science Meeting, Raleigh, NC. 2017
- The St. Croix River Research Rendezvous, Sci. Museum of MN. 2017
- The 64th Society for Freshwater Science Meeting, Sacramento, CA. 2016.
- The St. Croix River Research Rendezvous, Sci. Museum of MN. 2015
- The 62nd Society for Freshwater Science Meeting, Portland, OR. 2014.
- The St. Croix River Research Rendezvous, Sci. Museum of MN. 2014
- The 61st Society for Freshwater Science Meeting, Jacksonville, FL. 2013.
- The St. Croix River Research Rendezvous, Sci. Museum of MN. 2013
- The 60th Society for Freshwater Science Meeting, Louisville, KY 2012
- The Ecological Research as Education Network, Raleigh, NC 2012
- The St. Croix River Research Rendezvous, Sci. Museum of MN. 2012

PUBLICATIONS – REFERRED PAPERS

Hornbach, D.J., D.C. Allen, M.C. Hove and K.R. MacGregor. 2018. Long-term decline of native freshwater mussel assemblages in a federally protected river. *Freshwater Biology* 63: 243-263 (DOI: 10.1111/fwb.13055)

Hornbach, D.J., M.C. Hove, M.W. Ensley-Field*, M.R. Glasenapp*, I.A. Goodbar*, J.D. Harman*, B.D. Huber*, E.A. Kangas*, K.X. Liu*, M. Stark-Ragsdale* and L.K. Tran*. 2017. Comparison of ecosystem processes in a woodland and prairie pond with different hydroperiods. *Journal of Freshwater Ecology*, 32:1, 675-695, DOI: 10.1080/02705060.2017.1393468.

Hansen, A.T., J. A. Czuba, J. Schwenk, A. Longjas, M. Danesh-Yazdi, D. J. Hornbach and E. Foufoula-Georgiou. 2016. Coupling freshwater mussel ecology and river dynamics using a simplified dynamic interaction model. *Freshwater Science* 35: 200–215.

Hove, M., B. Sietman, M. Berg, E. Frost, K. Wolf, T. Brady, S. Boyer and D. Hornbach. 2016. Early life history of the sheepsnose (*Plethobasus cyphus*) (Mollusca: Bivalvia: Unionoida). *Journal of Natural History* 50: 523-542.

- Hornbach, D., M Hove, M. Agata*, E. Arnold*, E. Cavazos*, C. Friedman*, K. Jay*, E. Johnson*, K. Johnson*, and A. Staudenmaier. 2016. Ecosystem Structure and Function in two branches of an eastern Minnesota trout stream. *Journal of Freshwater Ecology* 31: 487-507.
- Hornbach, D.J., R. Beckel*, E.N. Hustad*, D.P. McAdam*, I.M. Roen*, and A.J. Wareham*. 2015. The influence of riparian vegetation and season on stream metabolism of Valley Creek, Minnesota. *Journal of Freshwater Ecology* 30: 569-588.
- Hornbach, D.J. M.C. Hove, H. Liu*, F.R. Schenck*, D. Rubin* and B.J. Sansom*. 2014. The influence of two differently sized dams on mussel assemblages and growth. *Hydrobiologia* 724: 279-291.
- Simmons, J.A., M. Anderson, W. Dress, C. Hannac, D.J. Hornbach, A. Janmaat, F. Kuserk, J. G. March, T. Murray, J. Niedzwiecki, D. Panvini, B. Pohlad, C. Thomas, and L. Vasseurk. 2014. A comparison of the stream temperature regime under forested and non-forested riparian 4 zones at eleven sites across North America. *River Research and Applications* 31: 964-974. DOI: 10.1002/rra.2796.
- Sansom. B.J.*, D.J. Hornbach, M.C. Hove, and J.S. Kilgore. 2013. Effects of flow restoration on mussel growth in a Wild and Scenic River North American River. *Aquatic Biosystems* 9: 6 (11 pages).
- Szumowski*, S.C., S.L. Boyer, D.J. Hornbach and M.C. Hove. 2012. Genetic diversity of two common freshwater mussel species, *Lampsilis cardium* and *Quadrula pustulosa* (Bivalvia, Unionidae), in a large federally protected waterway (St. Croix River, Minnesota/Wisconsin, U.S.A.). *American Malacological Bulletin* 30: 1-14.
- Hove, M.C., M. T. Steingraeber, T. J. Newton, D. J. Heath, C. L. Nelson, J. A. Bury, J. E. Kurth, M. R. Bartsch, W. S. Thorpe, M. R. McGill, and D. J. Hornbach. 2012. Early life history of the winged mapleleaf mussel (*Quadrula fragosa*). *American Malacological Bulletin* 30: 47-57
- Hove, M.C., B.E. Sietman, J.E. Bakelaar, J.A. Bury, D.J. Heath, V.E. Pepi, J.E. Kurth, J.M. Davis, D.J. Hornbach and A. R. Kapuscinski. 2011. Early Life History and Distribution of Pistolgrip (*Tritogonia verrucosa* (Rafinesque, 1820)) in Minnesota and Wisconsin. *American Midland Naturalist* 165:338-354.
- Bowne, D.R., A.L. Downing, M.F. Hoopes, K. LoGiudice, C.L. Thomas, L.J. Anderson, T. Gartner, D.J. Hornbach, K.Kuers, J. Machado, B.R. Pohlad and K. L. Shea. 2011. Transforming ecological science at primarily undergraduate institutions through collaborative networks. *BioScience* 61:386-392.

- Panahbehagh, B., D.R. Smith, M. Salehi, D.J. Hornbach, and J.A. Brown. 2011. Multi-species attributes as the condition for adaptive sampling of rare species using two-stage sequential sampling with an auxiliary variable, pp. 2093-2099 *In* Chan, F., D. Marinova, and R.S. Anderssen (eds.) MODSIM2011, 19th International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, December 2011. (ISBN: 978-0-9872143-1-7)
- Hornbach, D.J., M.C. Hove, B. Dickinson*, K. MacGregor and J.R. Medland. 2010. Estimating population size and habitat associations of two federally endangered mussels in the St. Croix River, Minnesota and Wisconsin, USA. *Aquatic Conservation: Marine and Freshwater Ecosystems* 20: 250-260.
- Hornbach, D.J. V.J. Kurth*, and M.C. Hove. 2010. Variation in freshwater mussel shell sculpture and shape along a river gradient. *American Midland Naturalist* 164:22-36.
- Baker, S.M. and D.J. Hornbach. 2008. Zebra mussels (*Dreissena polymorpha*) attached to native mussels (Unionidae) or inanimate substrates: Comparison of physiological rates and biochemical composition. *American Midland Naturalist* 160:20-28.
- Allen,* D.C., M.C. Hove, B.E. Sietman, Mike Davis, D.E. Kelner, Jennifer E. Kurth, Jeffrey L. Weiss, and D.J. Hornbach. 2007. Aspects of reproductive biology and conservation status of *Venustaconcha ellipsiformis* (Bivalvia: Unionidae) in Minnesota. *American Midland Naturalist* 157: 74-91.
- Hornbach, D.J. 2007. Phylogeny and Classification: Electrophoretic Evidence, pp. 200-202. *IN* G.L. Mackie. *Biology of Freshwater Corbiculid and Sphaeriid Clams of North America*. Ohio Biological Survey Bulletin, New Series, Volume XV, Number 3. Columbus, Ohio.
- Hornbach, D.J. and C.M. Way. 2007. Ecology: Population Dynamics, Energetics and Production, pp. 126-128. *IN* G.L. Mackie. *Biology of Freshwater Corbiculid and Sphaeriid Clams of North America*. Ohio Biological Survey Bulletin, New Series, Volume XV, Number 3. Columbus, Ohio.
- Beekey, MA and D.J. Hornbach. 2004. The effect of size-limited brood size in a freshwater bivalve. *American Midland Naturalist* 151: 274-285.
- Cope, W.G., M.C. Hove, D.L. Waller, D.J. Hornbach, M.R. Bartsch, L.A. Cunningham*, H.L. Dunn and A.R. Kapuscinski. 2003. Evaluation of relocation of unionid mussels to *in situ* refugia. *Journal of Molluscan Studies* 69: 27-34.

- Hornbach, D.J. 2001. Macrohabitat factors influencing the distribution and abundance of najads in the St. Croix River, MN and WI, USA, pp. 213-230. *In* G. Bauer and W. Wachtler [eds] Ecology and Evolutionary Biology of the Freshwater Mussels Unionoidea. Ecological Studies Vol. 145. Springer-Verlag: Berlin.
- Baker, S. and D.J. Hornbach. 2001. Seasonal metabolism and biochemical composition of two unionid mussels, *Actinonaias ligamentia* and *Amblema plicata*. *Journal of Molluscan Studies* 67: 407-416.
- Baker, S. and D.J. Hornbach. 2000. Physiological status and biochemical composition of a natural population of unionid mussels (*Amblema plicata*) infested by zebra mussels (*Dreissena polymorpha*). *American Midland Naturalist* 143: 443-452.
- Tyrrell*, M. And D.J. Hornbach. 1998. Selective predation by muskrats on freshwater mussels in 2 Minnesota rivers. *Journal of North American Benthological Society* 17: 301-310.
- Baker, S. and D.J. Hornbach. 1997. Acute physiological effects of zebra mussel (*Dreissena polymorpha*) infestation on two unionid mussels, *Actinonaias ligamentina* and *Amblema plicata*. *Canadian Journal of Fisheries and Aquatic Sciences* 54: 512-597.
- Hornbach, D.J., T. Deneka, B.S. Payne and A.C. Miller. 1996. Shell morphometry and tissue condition of *Amblema plicata* in the upper Mississippi River. *Journal Freshwater Ecology* 11: 233-240.
- Hornbach, D.J., J.G. March*, T. Deneka*, N.H. Troelstrup and J.A. Perry. 1996. Factors influencing the distribution and abundance of the endangered winged mapleleaf mussel, *Quadrula fragosa* in the St. Croix River, Minnesota and Wisconsin. *American Midland Naturalist* 136: 278-286.
- Hornbach, D.J. and T. Deneka. 1996. A comparison of a qualitative and a quantitative collection method for examining freshwater mussel assemblages. *Journal of North American Benthological Society* 15: 587-596.
- Baker, P., S. Jennings and D.J. Hornbach. 1995. Can zebra mussels force a species to extinction? *Dreissena* 6(5): 1-4.
- Hornbach, D.J., T. Deneka*, M. Hu*, B.S. Payne and A. C. Miller. 1993. Temporal and spatial variability in midge assemblages from a backwater lake in Pool 2, Mississippi River. *Hydrobiologia* 252: 133-141.
- Hornbach, D.J., A.C. Miller and B.S. Payne. 1992. Species composition of the mussel assemblages in the upper Mississippi river. *Malacological Review* 25: 119-128.

- Hornbach, D.J., T. Deneka*, A. C. Miller and B. S Payne. 1991. Variations in the rate of sediment accumulation in a backwater lake, Pool 2, Mississippi River. *Journal of Freshwater Ecology* 6: 53-60.
- Hornbach, D.J., T. Wilcox*, L. Powers*, J. Layne* and T. Davis*. 1991. A method for assessing clearance rates in suspension-feeding organisms using a fiber-optic colorimeter. *Canadian Journal of Zoology* 69:2703-2706.
- Wilcox, T.* and D.J. Hornbach. 1991. Macroinvertebrate community response to carp (*Cyprinus carpio* L.) foraging. *Journal of Freshwater Ecology* 6: 171-183.
- Hornbach, D.J., T. Deneka* and R. Dado*. 1991. Life-cycle variation of *Musculium partumeium* (Bivalvia; Sphaeriidae) from a temporary and a permanent pond in Minnesota. *Canadian Journal of Zoology* 69: 2738-2744.
- Hornbach, D.J. 1991. The influence of oxygen availability on oxygen consumption in the freshwater clam *Musculium partumeium*. *American Malacological Bulletin* 9: 39-42.
- Hornbach, D.J. 1991. Life history traits of a riverine population of the Asian clam *Corbicula fluminea*. *American Midland Naturalist* 127:248-257.
- Hornbach, D.J. 1991. The influence of acclimatization, temperature and size on the oxygen consumption of the freshwater clam, *Musculium partumeium* (Say). *Comparative Biochemistry and Physiology* 101A: 345-349.
- Miller, A.C., B.S. Payne, D.J. Hornbach and D.V. Ragland. 1990. Physical effects of increased commercial navigation traffic on freshwater mussels in the Upper Mississippi River: Phase I Studies. Technical Report EL-90-3. National Technical Information Service: Springfield, VA. 116 pp.
- Way, C.M., D.J. Hornbach, C.A. Miller-Way, B.S. Payne and A.C. Miller. 1990. Dynamics of filter feeding in *Corbicula fluminea* (Bivalvia: Corbiculidae). *Canadian Journal of Zoology* 68: 115-120.
- Way, C.M. D.J. Hornbach, T. Deneka* and R.A. Whitehead. 1989. A description of the ultrastructure of the gills of freshwater bivalves, including a new structure, the frontal cirrus. *Canadian Journal of Zoology* 67: 357-362.
- Hornbach, D.J., T. Deneka*, B.S. Payne and A.C. Miller. 1989. Benthic macroinvertebrate community structure in a backwater lake of Pool 2, Upper Mississippi River. *Journal of Freshwater Ecology* 5: 131-138.
- Hornbach, D. J. and D. L. Childers*. 1987. The effects of acidification on life-history traits of the freshwater clam, *Musculium partumeium* (Say), 1822) (Bivalvia: Pisidiidae). *Canadian Journal of Zoology* 65: 113-121.

- Hornbach, D. J. and C. Cox*. 1987. Environmental influences on life history traits in *Pisidium casertanum* (Bivalvia: Pisidiidae): Field and laboratory experimentation. *American Malacological Bulletin* 5: 49-64.
- Hornbach, D. J. and D. L. Childers*. 1986. Life-history variation in a stream population of *Musculium partumeium* (Bivalvia: Pisidiidae). *Journal of the North American Benthological Society* 5: 263-271.
- Burky, A. J., D. J. Hornbach and C. M. Way. 1985. Comparative bioenergetics of permanent and temporary pond populations of the freshwater clam, *Musculium partumeium* (Say). *Hydrobiologia* 126:35-48.
- Hornbach, D. J. 1985. A review of metabolism in the Pisidiidae with new data on its relationship with life history traits in *Pisidium casertanum*. *American Malacological Bulletin* 3:187-200.
- Hornbach, D. J., C. M. Way, T. E. Wissing, and A. J. Burky. 1984. Effects of particle concentration and season on the filtration rates of the freshwater clam, *Sphaerium striatinum* Lamarck (Bivalvia: Pisidiidae) and their role in the nutrient dynamics of a woodland stream. *Hydrobiologia* 108:83-96.
- Hornbach, D. J., T. E. Wissing and A. J. Burky. 1984. Energy budget for a stream population of the freshwater clam, *Sphaerium striatinum* Lamarck. (Bivalvia: Pisidiidae). *Canadian Journal of Zoology* 62:2410-2417.
- Hornbach, D. J., T. E. Wissing and A. J. Burky. 1983. Seasonal variations in the metabolic rates and Q_{10} -values of the fingernail clam, *Sphaerium striatinum* Lamarck. *Comparative Biochemistry and Physiology* 76A:783-790.
- Hornbach, D. J., T. E. Wissing and A. J. Burky. 1982. Life-history characteristics of a stream population of the freshwater clam, *Sphaerium striatinum* Lamarck (Bivalvia: Pisidiidae). *Canadian Journal of Zoology* 60:249-260.
- Wissing, T. E., D. J. Hornbach, M. Smith, C. M. Way and J. Alexander. 1982. Caloric contents of Corbiculacean clams (Bivalvia: Heterodonta) from freshwater habitats in the United States and Canada. *Journal of Molluscan Studies* 49:80-83.
- Burky, A. J., D. J. Hornbach and C. M. Way. 1981. Growth of *Pisidium casertanum* (Poli) in West Central Ohio. *Ohio Journal of Science* 81:41-44.
- Way, C. M., D. J. Hornbach and A. J. Burky. 1981. Seasonal metabolism of the sphaeriid clam, *Musculium partumeium* (Say), from a permanent and a temporary pond. *Nautilus* 95:55-58.

- McLeod, M. J., D. J. Hornbach, S. I. Guttman, C. M. Way and A. J. Burky. 1981. Environmental heterogeneity, genetic polymorphism and reproductive strategies. *American Naturalist* 118:129-134.
- Hornbach, D. J., C. M. Way and A. J. Burky. 1980. Reproductive strategies in the freshwater sphaeriid clam, *Musculium partumeium* (Say), from a permanent and a temporary pond. *Oecologia* (Berlin) 44:164-170.
- Hornbach, D. J., M. J. McLeod and S. I. Guttman. 1980. On the validity of the genus *Musculium* (Bivalvia: Sphaeriidae): Electrophoretic evidence. *Canadian Journal of Zoology* 58:1703-1707.
- Hornbach, D. J., M. J. McLeod, S. I. Guttman and S. K. Seilkop. 1980. Genetic and morphological variation in the freshwater clam, *Sphaerium* (Bivalvia: Sphaeriidae). *Journal of Molluscan Studies* 46:158-170.
- Way, C. M., D. J. Hornbach and A. J. Burky. 1980. Comparative life history tactics of the sphaeriid clam, *Musculium partumeium* (Say), from a permanent and a temporary pond. *American Midland Naturalist* 104:319-327.
- Burky, A. J. and D. Hornbach. 1979. Comparison of carbon and nitrogen content of infected and uninfected snails, *Succinea ovalis*, and the trematode *Leucochloridium variae*. *Journal of Parasitology* 65:371-374.
- Burky, A. J., M. A. Benjamin, D. M. Catalano and D. J. Hornbach. 1979. The ratio of calcareous and organic shell components of freshwater sphaeriid clams in relation to water hardness and trophic conditions. *Journal of Molluscan Studies* 45:312-321.
- Hornbach, D. J. and R. Fitz. 1977. A qualitative model of the quality of rangeland in the sahelian ecosystem. pp 199-228. In F.H. Branin and K. Huseyin (ed.) *Problem Analysis in Science and Engineering*. Academic Press, New York.

NON-REFERRED PAPERS

- Hove, M., D. Larson, M. Berg, H. Jensen, C. Palmquist, J. Curtin, N. Larsen, N. Klemann, M. Duncan, H. Fiedler, A. Swenson, D. Hornbach and B. Sietman. 2016. Natural and suitable glochidial hosts for the creek heelsplitter (*Lasmigona compressa*). *Ellipsaria* 18(2): 18-22 [Newsletter of the Freshwater Mollusk Conservation Society]
- Hove, M, T. Pathoumthong, M. Berg, J. Curtin, C. Chenal, D. Hornbach, B. Jensen, M. Johnson, and E. Livingston. 2016. High school and university researchers study cylindrical papershell (*Anodontoidea ferussacianus*) host fishes. *Ellipsaria* 18(4): 20-23 [Newsletter of the Freshwater Mollusk Conservation Society]
- Leonard, P., M. Hove, B. Davis, E. Wanner, G. Van Susteren, B. Sietman, M. Berg, A. Handy, A. Thoreen, K. Rod, M. Hanson, R. Pochman, S. Nelson, W. LaMere, and D. Hornbach. 2014. Flutedshell (*Lasmigona costata*) natural hosts and glochidia release behavior. *Ellipsaria* 16(4): 29-32 [Newsletter of the Freshwater Mollusk Conservation Society]
- Hove, M., B. Sietman, M. Berg, D. Hornbach and S. Boyer. 2013. Chippewa River bed holds federally endangered *Plethobasus cyphus*. *Ellipsaria* 15(2): 21-23 [Newsletter of the Freshwater Mollusk Conservation Society]
- Hove, M., B. Sietman, M. Berg, S. Bump, M. Davis, H. Hansen, S. Keogh, C. Luebke, S. Marr, A. Maynard, K. Murphy, Z. Secrist and D. Hornbach. 2013. *Pleurobema sintoxia* Early Life History. *Ellipsaria* 15(3): 14-16 [Newsletter of the Freshwater Mollusk Conservation Society]
- Wolf, K., M. Hove, B. Sietman, S. Boyer, and D. Hornbach. 2012. Additional Minnows and Topminnow Identified as Suitable Hosts for the Sheepnose, *Plethobasus cyphus* (Rafinesque, 1820). *Ellipsaria* 14: 7-8 [Newsletter of the Freshwater Mollusk Conservation Society]
- Hove, M., J. Liu*, D. Rubin*, F. Schenk*, and D. Hornbach. 2012. Changes in the Sunrise River over the Last 16 years. *Ellipsaria* 14: 22-23 [Newsletter of the Freshwater Mollusk Conservation Society]
- Hove, M., A.F. Fulton, K. Wolf, B. Sietman, D. Hornbach, S. Boyer and N. Ward. 2011. Additional suitable hosts identified for rock pocketbook (*Arcidens confragosus*). *Ellipsaria* 13: 6-7 [Newsletter of the Freshwater Mollusk Conservation Society]
- Hornbach, D.J. 2004. Review of *A Guide to Sampling Freshwater Mussel Populations*, by David L. Strayer and David R. Smith. *Quarterly Review of Biology* 79: 92-93.
- Hornbach, D. 2011. Macalester College; A cross-cutting case study, in S. Pfirman [ed.] *Interdisciplinary Hiring and Career Development: Guidance for*

Individuals and Institutions. National Council for Science and the Environment
Washington D.C.

U.S. Fish and Wildlife Service [written by D.J. Hornbach]. 2004. Revised Higgins Eye Pearlymussel (*Lampsilis higginsii*) Recovery Plan. U.S. Fish and Wildlife Service, Ft. Snelling, Minnesota. 83 pp.

Hove, M.C., J.R. Medland, D.J. Hornbach, M.P. Cliff, M.G. Haas, A.R. Kapuscinski, R.K. Whaley, B.N. Karns, D.C. Allen*, R.S. Derhak*, K.M. Swensen*, and J.E. Thomas*. 2002. Federally endangered winged Mapleleaf mussel cultured and placed in the St. Croix River, Minnesota. *Endangered Species Update* 19: 3-4. [Technical note]

Hove, M.C., D. J. Heath, D.E. Kelner, D.C. Allen*, R.L. Benjamin, Mike Davis, R.S. Derhak*, K.M. Swensen*, J.E. Thomas*, and D. J. Hornbach. 2001. Winged mapleleaf once enjoyed a greater range in the St. Croix River. *Ellipsaria* 3: 9 [Newsletter of the Freshwater Mollusk Conservation Society]

SELECTED RECENT ABSTRACTS – LAST 5 YEARS:

Hornbach, D.J., M.C. Hove, K.R. MacGregor and J.L. Kozarek. 2017. The response of freshwater mussels to bedload transport: experimental stream studies. Abstracts of the Society for Freshwater Science.

Davidson*, L., J. Doherty*, L. Gould*, H. Stutzman*, J. Kozarek, K. MacGregor, D. Hornbach and M. Hove. 2017. Land use change, sediment and mussels: A study of ecological interactions between sediment bedload and native freshwater mussels in the Minnesota and St. Croix river basins. Abstracts of the St. Croix River Rendezvous, Oct 2017. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Gould*, L., H. Stutzman*, L. Davidson*, J. Doherty*, J. Kozarek, K. MacGregor, D. Hornbach and M. Hove. 2017. Mussel growth in the St. Croix and Minnesota River basins. Abstracts of the St. Croix River Rendezvous, Oct 2017. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Hunter*, B., J. Kozarek, K. MacGregor and D.J. Hornbach. 2017. Freshwater river mussel gaping response behavior to increased water velocity and total suspended solid concentrations. *Geological Society of America Abstracts with Programs*. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-305474

Hornbach, D.J., M. C. Hove, K.R. MacGregor, M. Agata*, C. Friedman*, M. Guiney*, B. Hunter*, and J. Kozarek. 2016. Impact of suspended sediment load on freshwater mussel assemblages: a comparison of two Minnesota watersheds. Abstracts of the Society for Freshwater Science.

- Gartner, T., C. Thomas, L. Anderson, J. Dosch, K. Geedey, D. Hornbach, K. Lyons, J. Machado, C. Mankiewicz, B. Pohlad, R. Schultz, K. Shea, C. Zimmermann, A. Aguilera, K. Barry, K. Bjorgo-Thorne, R. Boyce, K. Cecala, G. Eaton, K. Kuers, F. Kuserk, J. March, and F. Nieto. 2015. Decomposition of invasive species in aquatic and terrestrial invaded systems display additive and nonadditive effects: insights using the EREN research model. Ecological Society of America.
- Agata*, M., C. Friedman*, D. Hornbach, M. Hove and K. MacGregor. 2015 Species Richness, Diversity, and Impact of Life History Strategies on Distribution of Freshwater Mussels in the Snake River. Abstracts of the St. Croix River Rendezvous, Oct 2015. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Guiney*, M., B. Hunter*, K. MacGregor, D. Hornbach, and M. Hove. 2015. Bed sediment composition and mussel population dynamics on the Snake River, St. Croix River basin, MN. Abstracts of the St. Croix River Rendezvous, Oct 2015. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D., J. Dosch, T. Gartner and C. Thomas. 2014. Decomposition rates of non-native and native species of leaves in Valley Creek: The potential impact of changing forest communities on food resources for aquatic invertebrates. Abstracts of the St. Croix River Rendezvous, Oct 2014. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D. J., M. Hove, H. Liu*, D. Rubin*, and F. Schenck*. 2013. The impact of a small dam on mussel assemblage structure and growth. Abstracts of the Society for Freshwater Science #7499.
- Hornbach, D. J. M. Hove, B. Sietman and M. Davis. 2013. A comparison of sampling techniques to monitor mussel populations: an example from the St. Croix River at Franconia, MN. Abstracts of the St. Croix River Rendezvous, Oct 2013. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D.J. and J.A. Simmons. 2012. Riparian buffers affect stream temperature. Abstracts of the Society for Freshwater Science #6701.
- Simmons, JA, ML Anderson, WJ Dress, J Frick-Ruppert, CJB Hanna, D Hornbach, A Janmaat, F Kuserk, JG March, T Murray, J Niedzwiecki, D Panvini, B Pohlad, CL Thomas and L Vasseur. 2012. Effect of riparian shade on stream water temperature: A collaboration among eleven primarily undergraduate institutions. Ecological Society of America Abstracts PS 2-50.
- Liu H*, D. Rubin*, F. Schenck*, D. Hornbach¹ and, M Hove. 2012. The Impact of a Small Dam on Mussel Assemblages and Habitat in Sunrise River, MN. Abstracts of the St. Croix River Rendezvous, Oct 2012. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

D. Rubin*, F. Schenck*, H. Liu*, D. Hornbach¹ and, M Hove. 2012. Effects of a small dam on the growth of the freshwater mussel, *Actinonaias ligamentina*, in Sunrise River, Chisago County, MN. Abstracts of the St. Croix River Rendezvous, Oct 2012. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

*Indicates an undergraduate student co-author