

## DANIEL J. HORNBACH

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**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 – PRESENT
- Adjunct Professor, Graduate Faculty, Division of Water Quality, Department of Fisheries and Wildlife, University of Minnesota. August 1996-PRESENT.
- Team Member, Endangered Species Recovery Team (USFWS) for the Higginsii Eye Pearly Mussel. September 1995-PRESENT.
- Associate Editor, American Midland Naturalist. September 1995-2001.
- Assistant Professor, Department of Biology, University of Virginia. September 1980 - May 1984.
- Postdoctorate, Mountain Lake Biological Station, University of Virginia. Summer 1982.
- 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 also served as a PKAL consultant for planning building projects and have served as a reviewer for a number of Biology and Environmental Studies departments.

**HONORS AND AWARDS:**

- American Fisheries Society, MN Chapter, Best Poster Award, 38<sup>th</sup> 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 D 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
- American Malacological Union
- Association for Environmental Studies and 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)

**GRANTS:**

- NSF ILIP Grant (1987) - \$35,546
- NSF ILIP Grant (1988) - \$83,000
- US Army Corps of Engineers (1987-1990)- \$72,000
- Pew Charitable Trusts (1990) - \$9000
- Blandin Foundation (1990-91) - \$10,000
- Minnesota Dept. Natural Resources (1990-91) \$3000
- Minnesota Dept. Natural Resources (1992-93) \$3000
- Wisconsin Dept. Natural Resources (1992) \$20,000
- US National Park Service (1993-1996) - \$63,000
- US Environmental Protection Agency (1992-1996) \$505,000
- US Fish & Wildlife Service (1994-1995) - \$34,000
- Army Corps of Engineers (1996) - \$5000
- National Park Service (1997) - \$6000
- Wisconsin Dept. Natural Resources (1997-98) \$6,000
- Legislative Commission on MN Resources (1997-98) - \$9400
- National Park Service (1998) - \$4000
- Legislative Commission on MN Resources (1999-2001) - \$58,000
- National Park Service (2000-2002) - \$40,900
- National Park Service (2001-2004) - \$60,000
- National Park Service (2004-2007) - \$214,000
- National Park Service (2008-2010) - \$149,100
- National Park Service (2009-2011) - \$50,000
- National Park Service (2009-2010) - \$55,535

- Mellon Foundation (2007-2009) - \$300,000\*
- NSF Field Station Planning Grant (2009-2010) - \$24,575
- National Park Service (2010-2011) - \$24,300

\*Grant to start the 3 Rivers Center at Macalester College

#### SELECTED RECENT PRESENTATIONS – LAST 10 YEARS:

- The 46th Meeting of the North American Benthological Society. PEI, Canada. June 1998.
- The 13th International Malacological Congress, Washington, DC. July 1998.
- The Freshwater Mollusk Conservation Society, Chattanooga, TN. March 1999
- The 47th Meeting of the North American Benthological Society. Duluth, MN. June 1999.
- The Freshwater Mollusk Conservation Society, Pittsburgh, PA. March 2001.
- The 49th Meeting of the North American Benthological Society, LaCrosse, WI. June 2001.
- The Freshwater Mollusk Conservation Society, Raleigh, NC. March 2003.
- The 51st Ann. Meeting of the North American Benthological Society, Athens, GA. May 2003.
- The St. Croix River Research Rendezvous, Marine-on-St. Croix, MN. October 2003.
- The 15th International Malacological Congress, Perth, Australia. July 2004.
- The Freshwater Mollusk Conservation Society, St. Paul, MN. May 2005.
- The 53rd Meeting of the North American Benthological Society, New Orleans, LA. June 2005.
- The St. Croix River Research Rendezvous, Sci. Museum of MN, Marine-on-St. Croix, MN. Oct 2005.
- The 54th Meeting of the North American Benthological Society, Anchorage, AK, June 2006.
- The St. Croix River Research Rendezvous, Sci. Museum of MN, Marine-on-St. Croix, MN. Oct. 2006
- The 16th International Malacological Congress, Antwerp, Belgium. July 2007
- The 56th Meeting of the North American Benthological Society, Salt Lake City, UT, May 2008.
- The St. Croix River Research Rendezvous, Sci. Museum of MN, Marine-on-St. Croix, MN Oct 2008
- The 57th Meeting of the North American Benthological Society, Grand Rapids, MI, May 2009.
- The St. Croix River Research Rendezvous, Sci. Museum of MN, Marine-on-St. Croix, MN Oct 2009
- The American Association for Environmental Studies and Sciences, Madison, WI Oct 2009

#### PUBLICATIONS – REFERRED PAPERS

- 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.
- 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., 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., 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., 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.
- 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., 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.
- 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. 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.
- 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.

- 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.
- 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.
- 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. Macrobenthic 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..
- 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\*, 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.
- 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, 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, 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.
- 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. 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.
- 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.
- 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.
- Beekey, MA and D.J. Hornbach. 2004. The effect of size-limited brood size in a freshwater bivalve. *American Midland Naturalist* 151: 274-285.
- 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.
- 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.

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.

#### NON-REFERRED PAPERS

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]

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]

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

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.

Pfirman, S., P. Martin, L. Berry, M. Fletcher, M. Hempel, R. Southard, D. Hornbach, and B. Morehouse. 2007. Interdisciplinary Hiring, Tenure and Promotion: Guidance for Individuals and Institutions. Working Paper for the Council of Environmental Deans and Directors. <http://www.ncseonline.org/CEDD/cms.cfm?id=2042>

#### SELECTED RECENT ABSTRACTS – LAST 10 YEARS

Hornbach, D.J., J. Kroese\* and J. Straka. 1999. Identification of *Quadrula fragosa* with PCR technology. Abstracts of the Freshwater Mollusks Conservation Society, March, 1999. Sponsored by the Tennessee Aquarium, Chattanooga, TN.

Hornbach, D.J., M. Kemperman\*, V. Kurth\*, A. Andersen\*, L. Cunningham\*, F. Hareldson\*, B. Miller\* and P. Vanselow\*.1999. Examination of mussel population and community stability at Interstate Park, St. Croix River, MN and WI. *Bulletin of the North American Benthological Society* 16: 97

Cunningham\*, L.A. D.J. Hornbach and M. C. Hove. 1999. The Efficacy of Mussel Relocation as a Resource Management Tool: An Experiment in the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 19 1999. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Hermanson\*, T.W., L. A. Cunningham\*, K. G. Esse\*, J. C. Hegg\*, M. C. Hove, J. L. Mann\*, and D. J. Hornbach. 1999. Long term changes in mussel populations of the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 19 1999 .Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

- Albert\*, M. C. Harrison\*, J. G. Straka, M. Hove and D. Hornbach. 1999. Taxonomic identification of freshwater mussels of the St. Croix River through DNA analysis. Abstracts of the St. Croix River Rendezvous, Oct 19 1999. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D.J., M.C. Hove, J. Medland and R. Ferrin. 2001. Developing a sampling strategy to examine population trends for the endangered winged mapleleaf mussel, *Quadrula fragosa*.. Freshwater Mollusk Conservation Society, March 2001. Pittsburgh, PA.
- Hornbach, D.J., M. Hove, S. Clarkson\*, L. Gilles\*, I. Harmon\*, E. Nelson\*, K. Paulson\*, C. Salazar\*, E. Peters\*, and J. Lynch\*. Long-term dynamics of mussel populations in the St. Croix River. Freshwater Mollusk Conservation Society, March 2001. Pittsburgh, PA. Also presented at the 49th Annual Meeting of the North American Benthological Society, LaCrosse, WI, June 2001. Bulletin of the North American Benthological Society 18: 198.
- Hove, M.C., R. Baker, M.R. Bartsch, R. Benjamin, M. Davis, H.L. Dunn, R. Ferrin, D. Heath, D.J. Hornbach, B. Karns, D.E. Kelner, R. Maercklein, J. Medland, and T.J. Newton. Experiences of an inter-institutional team to conserve mussels in the St. Croix River. 49th Annual Meeting of the North American Benthological Society, LaCrosse, WI, June 2001. Bulletin of the North American Benthological Society 18: 272.
- Hove, M.C., D.C. Allen\*, R.S. Derhak\*, K.M. Swenson\*, J.E. Thomas\* and D.J. Hornbach. 2001. Second collection of winged mapleleaf valves from the upper St. Croix River. *Ellipsaria* 3: 11-12.
- Hove, M.C., D.C. Allen\*, R.S. Derhak\*, K.M. Swenson\*, J.E. Thomas\* and D.J. Hornbach. 2001. Distribution and status of select mussels in the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2001. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hove, M.C., D.C. Allen\*, K.A. Dietrich\*, C.A. Gonzalez\* K.M. Swenson\*, and D.J. Hornbach. 2002. No evidence of endangered winged mapleleaf found in upper St. Croix River during second year of survey. *Ellipsaria* 4: 13-14.
- Hornbach, D.J., M. Hove, D. Allen\*, K. Dietrich\*, C. Gonzalez\* and K. Swenson. 2002. Juvenile density had decreased in select St. Croix River mussel communities over the last 10 years. Also presented at the 51st Annual Meeting of the North American Benthological Society, Athens, GA, May 2003. Bulletin of the North American Benthological Society 20: 344.
- Hove, M. M. Berg, J. DeMarre, K. Dietrich\*, C. Gonzalez, K. Westberg and D. Hornbach. 2003. Historical range expansion of winged mapleleaf provides possibilities for additional reintroduction sites. *Ellipsaria* 5(3):17-18.
- Hove, M. M. Berg, K. Dietrich\*, C. Gonzalez\*, D. Hornbach, K. Juleen, M. Ledford, M. Marzec, M. McGill, C. Nelson, B.J. Ritger, J. Selander and A. Kapuscinski. 2003. High school students participate in snuffbox host suitability trials. *Ellipsaria* 5(3): 19-20.
- Hornbach, D.J. and M. Hove. 2004. Long-term Population Dynamics of Unionoid Mussels in the St. Croix River, Minnesota and Wisconsin, USA. 15th International Malacological Congress. Perth, Australia, July 2004.
- MacGregor, K. D. Hornbach, M. Hove, E. Kushner\*, M. Cox\*, E. Hankin\*, and B. Dickenson\*. 2004. Preliminary analyses of bed and suspended sediment data in the St. Croix River. *Ellipsaria* 6(3):2.

- Hornbach, D.J., M.C. Hove and M.S. Berg. 2005. Mussels assemblages below a dam: high density, large size and low recruitment. *Bulletin of the North American Benthological Society* 22:396.
- MacGregor, K. and D. Hornbach. 2005. Preliminary analysis of bed and suspended sediment transport in a protected watershed, and the effect on native mussel populations. *Bulletin of the North American Benthological Society* 22: 348-349.
- Hornbach, D.J., M.C. Hove, M.J. Cox\*, B.D. Dickinson\*, E.G. Evans\*, and E.A. Kushner\*. 2005. Small mussel density still low at Interstate State Park, St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2005. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D.J., M.C. Hove and B.D. Dickinson\*. 2005. Adaptive cluster sampling of St. Croix River freshwater mussels at Franconia, Minnesota. Abstracts of the St. Croix River Rendezvous, Oct 2005. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Kushner\*, E. K. MacGregor, E. Evans\*, D. J. Hornbach, M. Hove, M. Cox\* and B Dickinson\*. 2005. Analysis of suspended sediment transport data in the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2005. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Evans\*, E. K. MacGregor, D. J. Hornbach, M. Hove, E. Kushner\*, M. Cox\* and B Dickinson\*. 2005. Bedload sediment transport in the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2005. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D.J., M.C. Hove and K.R. MacGregor. 2006. Using hydraulic parameters to predict mussel density: A preliminary study. *Bulletin of the North American Benthological Society* 23: 387.
- Kushner, E. \*, K. MacGregor, and D. Hornbach. 2006. Analysis of sediment transport data and calculation of historical sediment load, St. Croix River, MN/WI. *Geological Society of America Abstracts with Programs*, Vol. 38: 357.
- Hornbach, D.J. M.C. Hove and J. Medland. 2007. The use of adaptive cluster sampling to estimate the population sizes of *Quadrula fragosa* and *Lampsilis bigginsii* in the St. Croix River between Interstate Park and Osceola, WI. Abstracts of the St. Croix River Rendezvous, Oct 2007. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Von Reis Crooks\*, S., L. Wang\*, M.C. Hove and D.J. Hornbach. 2007. Habitat factors and mussel assemblage of federally endangered mussel species. Abstracts of the St. Croix River Rendezvous, Oct 2007. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Szumowski\*, S. Boyer and D.J. Hornbach. 2007. A comparison of genetic variation between populations of pocketbook and pimpleback mussels above and below the St. Croix Falls dam. Abstracts of the St. Croix River Rendezvous, Oct 2007. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Warren\*, C., D.J. Hornbach and M.C. Hove. 2007. Saving an endangered mussel: Habitat of the Higgins Eye Pearlymussel. 2007. Abstracts of the St. Croix River Rendezvous, Oct 2007. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

- Hornbach, D.J., M.C. Hove and K.R. MacGregor. 2007. Using hydraulic parameters to predict mussel density. Freshwater Mollusk Conservation Society. March 2007, Little Rock, Arkansas. Also presented at the World Macalcollogical Congress, July 2007, Antwerp, Belgium.
- Smith, D.R., R.F. Villella, D.J. Hornbach, and M.C. Hove. 2008. Adaptive cluster, two-stage sequential, and two-phase sampling designs for estimation of freshwater mussel population density. Bulletin of the North American Benthological Society 25: 387.
- Szumowski\*, S.C., S.L. Boyer, D.J. Hornbach and M.C. Hove. 2008. A Comparison of genetic variation between populations of pocketbook and pimpleback mussels (subfamily Ambliminiinae) above and below the St. Croix Falls dam (Minnesota/Wisconsin, USA). Joint meeting of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists. June 2008, Minneapolis MN.
- Ritz\*, L. D. Hornbach, K. MacGregor and M. Hove. 2008. Near-bed Sediment Transport as Indicator of Substrate Stability and Suitable Mussel Habitats in the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2008. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Major\*, R., K. MacGregor, D. Hornbach, M. Hove, L. Ritz\* and C. Loeb\*. 2008. Suspended Sediment in the St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2008. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Loeb\*, C., D. Hornbach, K. MacGregor and B. Mühlenhaus. 2008. Using Geographic Information Systems (GIS) to Map Bathymetric Changes in the Saint Croix River 1968-2008. Abstracts of the St. Croix River Rendezvous, Oct 2008. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D.J., M.C. Hove and K. MacGregor. 2008. Mussel Density at Interstate Park, St. Croix River, MN and WI: A new equilibrium? Abstracts of the St. Croix River Rendezvous, Oct 2008. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Hornbach, D. and D. Lanegran. 2008. The Three Rivers Center at Macalester College: An Andrew W. Mellon Foundation Higher Education and Scholarship Project. Abstracts of the National Council on Science and the Environment Meeting, Dec. 2008.
- Hove, M.C., D.J. Hornbach, B.E. Sietman, A.K. Crownhart and M.S. Berg. 2009. Spectavlecase (*Cumerlandia monodonta*) host studies produce more negative results. Ellipsaria 11: 22.
- Hornbach, D.J., C. D. Loeb\*, M. C. Hove and K. R. MacGregor. 2009. Using GIS to assess dam impact on river bathymetry, St. Croix River, MN/WI. Bulletin of the North American Benthological Society 26: 170.
- Colehour, A.\*, D.J. Hornbach, M.C. Hove and K.R. MacGregor. 2009. The effect of the St. Croix Falls hydrodam on riverbed temperature. Abstracts of the St. Croix River Rendezvous, Oct 2009. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.
- Sansom, B.\*, M.C. Hove and D.J. Hornbach. 2009. Comparative analysis of St. Croix mussels and host fish species. Abstracts of the St. Croix River Rendezvous, Oct 2009. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Wegglar, C.\*, D.J. Hornbach, K.R. MacGregor and M.C. Hove. 2009. Resource partitioning among freshwater mussels. Abstracts of the St. Croix River Rendezvous, Oct 2009. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Skarbek, C.\*, D. Hornbach, M. Hove, and K. MacGregor. 2009. Suspended sediment and organic matter on the St. Croix River and implications for freshwater mussels. Abstracts of the St. Croix River Rendezvous, Oct 2009. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Kutvirt, J.\*, K. MacGregor, D. Hornbach, M.Hove, B. Karns, and J.Medland. 2009. Sedimentation in the Indianhead Reservoir behind St. Croix Falls Dam. Abstracts of the St. Croix River Rendezvous, Oct 2009. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

Jackson, K.\*, K. MacGregor, D. Hornbach and M. Hove. 2009. Bed sediment size distribution and mineralogy in Indianhead Reservoir, St. Croix River. Abstracts of the St. Croix River Rendezvous, Oct 2009. Sponsored by the St. Croix Watershed Research Station, Science Museum of MN.

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