HENRY A. VANDERPLOEG

Position:

Research Ecologist and Chief, Ecosystem Dynamics Branch, NOAA Great Lakes Environmental Research Laboratory
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Education

Ph.D., 1968-1973, Oregon State University, Corvallis, Oregon (Oceanography).
M.S., 1966-1968, University of Wisconsin, Madison, Wisconsin (Zoology).
B.S., 1962-1966, Michigan Technological University, Houghton, Michigan (Biological Sciences).

Current Research Interests

Research interests are food web interactions, particularly feeding mechanisms and life cycle strategies of zooplankton, benthos, and fish; and spatial distribution and interactions of all food web components. Current research projects include: dreissenid mussel feeding behavior, nutrient cycling, and ecosystem effects; long-term trends in zooplankton populations; impacts of the invasion of predatory cercopagids (*Bythotrephes* and *Cercopagis*) on Great Lakes food webs; and changes in spatial structure and function of Great Lakes food webs as driven by stressors such as hypoxia, invasive species, and interannual variability in weather (as surrogate for climate).

- Participates as an advisor in National Research Council Resident Research Associateships (Postdoctoral) Program for postdocs interested in research areas described above.

Professional Experience

April 2011-Present:
Chief, Ecosystems Dynamics Branch and Research Ecologist

July 1974-March 2011:
Research Ecologist (Series GS-408), NOAA/GLERL, Ann Arbor, MI
Duties: Develop research program for understanding ecology of the Great Lakes.

January 1972-July 1974:
Aquatic Ecologist, Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee
Duties: Develop models to describe movement of radionuclides in aquatic systems, evaluate environmental impacts of nuclear power plants on aquatic systems, and develop research program to describe radionuclide cycling in on-site aquatic ecosystems.

Awards for Outstanding Publications

- International Association of Great Lakes Research Chandler-Misner Award Outstanding Article Award Journal of Great Lakes Research, 2010: "Kerfoot, W.C., F. Yousef, S.A. Green, J.W. Budd, D.J. SCHWAB, and H.A. VANDERPLOEG. Approaching storm: Disappearing winter bloom in Lake Michigan. Journal of Great Lakes Research 36:30-41 (2010)."
- Oceanic and Atmospheric Administration 2008 Outstanding Scientific Paper Award for "VANDERPLOEG, H.A., T.H. JOHENGEN, P.J. Lavrentyev, C. Chen, G.A. LANG, M.A. Agy, M.H. Bundy, J.F. CAVALETTO, B.J. EADIE, J.R. LIEBIG, G.S. MILLER, S.A. RUBERG, and M.J. McCORMICK. Anatomy of the recurrent coastal sediment plume in Lake Michigan and its impacts on light climate, nutrients, and plankton. Journal of Geophysical Research 112(C03S90, doi:10.1029/2004JC002379):23 pp. (2007)."
- Office of Oceanic and Atmospheric Administration, National Oceanic and Atmospheric Administration, United States Department of Commerce Outstanding Scientific Paper Award, 2005 for "VANDERPLOEG, H. A., T. F. NALEPA, D. J. Jude, E. L. MILLS, K. T. HOLECK, J. R. LIEBIG, I. A. Grigorovich, and H. Ojaveer. Dispersal and emerging ecological impacts of Ponto-Caspian species in the Laurentian Great Lakes. Canadian Journal of Fisheries and Aquatic Sciences 59:1209-1228 (2002)."
- Environmental Research Laboratories, National Oceanic and Atmospheric Administration, United States Department of Commerce Outstanding Scientific Paper Award, 1996 for "VANDERPLOEG, H.A. Zooplankton particle selection and feeding mechanisms. In The Biology of Particles in Aquatic Systems, R.S. Wotton (ed.). Lewis Publishers, Ann Arbor, MI, 205-234 (1994)."

Recent Service

- Lower Trophic Level Task Group, Lake Michigan Committee (2015-present)
- Guest Editor of Journal of Great Lakes Research Special Issue *"Complex Interactions in Lake Michigan's Rapidly Changing Ecosystem"*
- Invited seminar at Wayne State University "Ecological and Biogeochemical Consequences of the Dreissenid Mussel Invasion to the Great Lakes (10/30/13)"

- Judge at SE Michigan Science Fair for Aquatic Ecology awards for high school and middle school students (each March of the last 20 years)
- Great Lakes Regional Research Information Network (GLRRIN) workshop (April 1-2, 2014) organizing committee, local organizer, and presenter—To evaluate next steps for synthesizing Lake Michigan data associated with Year of Lake Michigan 2010 and plan for Year of Lake Michigan 2015.
- Special Session organizer and presenter at Joint Aquatic Sciences Meeting 2014, Portland, OR, May 18-23, 2014 (2014)
- Chair, Special Session "Tracking and Understanding Changes in Lake Michigan's Emerging Food Web." International Association of Great Lakes Research Meeting (2013).
- Invited presenter at National Shellfisheries 104th Annual Meeting, Seattle Washington March 24-29, 2012.

Recent Proposal Funding

- EPA Coordinated Science and Monitoring Initiative Lake Michigan 2015 ($250K)
- EPA Coordinated Science and Monitoring Initiative Lake Huron 2012 ($323K)

Postdoc Mentoring

Marie H. Bundy, Miguel Dionisio Pires, Radka Ptáčníková, Mark D. Rowe.

Publications

1. Carrick, H.J., E. Butts, D. Daniels, M. Fehringer, C. Frazier, G.L. Fahnenstiel, S.A. Pothoven, and **H.A. Vanderploeg**. Variation in the abundance of pico, nano, and microplankton in Lake Michigan: Historic and basin-wide comparisons. *Journal of Great Lakes Research* 41(Supplement 3):66-74. (DOI:1016/j.jglr.2015.09.009) (2015).

2. Madenjian, C.P., D.B. Bunnell, D.M. Warner, S.A. Pothoven, G.L. Fahnenstiel, T.F. Nalepa, **H.A. Vanderploeg**, I. Tsehaye, R.M. Claramunt, and R.D. Clark. Changes in the Lake Michigan food web following dreissenid mussel invasions: A synthesis. *Journal of Great Lakes Research* 41(Supplement 3):217-231. (DOI:10.1016/j.jglr.2015.08.009) (2015).

3. Ptáčníková, R., **H.A. Vanderploeg**, and J.F. Cavaletto. Big versus small: Does *Bythotrephes longimanus* predation regulate spatial distribution of another invasive predatory cladoceran, *Cercopagis pengoi? Journal of Great Lakes Research* 41(Supplement 3): 143-149. (DOI:10.1016/j.jglr.2015.10.006) (2015).

4. **Vanderploeg, H.A**., D.B. Bunnell, H.J. Carrick, and T.O. Hook. Complex interactions in Lake Michigan's rapidly changing ecosystem. *Journal of Great Lakes Research* 41 (Supplement 3): 1-6. (DOI:10.1016/j.jglr.2015.11.001) (2015).

5. **Vanderploeg, H.A**., S.A. Pothoven, D.M. Krueger, D.M. Mason, J.R. Liebig, J.F. Cavaletto, S.A. Ruberg, G.A. Lang, and R. Ptacnikova. Spatial and predatory interactions of visually preying nonindigenous zooplankton and fish in Lake Michigan during midsummer. *Journal of Great Lakes Research* 41(Supplement 3):125-142. (DOI:10.1016/j.jglr.2015.10.005) (2015).

6. Bai, X., J. Wang, J. Austin, D.J. Schwab, R.A. Assel, A.H. Clites, J.F. Bratton, M.C. Colton, J. Lenters, B.M. Lofgren, T. Wohlleben, S. Helfrich, **H.A. Vanderploeg**, L. Luo, and G.A. Leshkevich. A record-breaking low ice cover over the Great Lakes during winter 2011/2012: Combined effects of a strong positive NAO and La Nina. *Climate Dynamics* 44(5-6):1187-1213 (DOI:10.1007/s00382-014-2225-2) (2015).

7. Bootsma, H.A., M.D. Rowe, C.N. Brooks, and **H.A. Vanderploeg**. Commentary: The need for model development related to *Cladophora* and nutrient management in Lake Michigan. *Journal of Great Lakes Research* 41 (Supplement 3):7-15. (DOI:10.1016/j.jglr.2015.03.023) (2015).

8. Rowe, M.D., E.J. Anderson, J. Wang, and **H.A. Vanderploeg**. Modeling the effect of invasive quagga mussels on the spring phytoplankton bloom in Lake Michigan. *Journal of Great Lakes Research* 41 (Supplement 3): 49-65 . (DOI:10.1016/j.jglr.2014.12.018) (2015).

9. Rowe, M.D., D.R. Obenour, T.F. Nalepa, **H.A. Vanderploeg**, F. Yousef, and W.C. Kerfoot. Mapping the spatial distribution of the biomass and filter-feeding effect of invasive dreissenid mussels on the winter-spring phytoplankton bloom in Lake Michigan. *Freshwater Biology* 60: 2270-2285. (DOI:10.1111/fwb.12653) (2015).

10. Bai, X., J. Wang, J. Austin, D.J. Schwab, R.A. Assel, A.H. Clites, J.F. Bratton, M.C. Colton, J. Lenters, B.M. Lofgren, T. Wohlleben, S. Helfrich, **H.A. Vanderploeg**, L. Luo, and G.A. Leshkevich. A record-breaking low ice cover over the Great Lakes during winter 2011/2012: Combined effects of a strong positive NAO and La Nina. *Climate Dynamics*: 27 pp. (DOI:10.1007/s00382-014-2225-2) (2014).

11. Lavrentyev, P.J., **H.A. Vanderploeg**, G. Franze, D.H. Chacin, J.R. Liebig, and T.H. Johengen. Microzooplankton distribution, dynamics, and trophic interactions relative to phytoplankton and quagga mussels in Saginaw Bay, Lake Huron. *Journal of Great Lakes Research* 40(Supplement 1):95-105 (DOI:10.1016/j.jglr.2013.11.012) (2014).

12. TANG, H., **H.A. VANDERPLOEG,** T.H. JOHENGEN, and J.R. LIEBIG**.** Quagga mussel (*Dreissena rostriformis bugensis*) selective feeding of phytoplankton in Saginaw Bay. *Journal of Great Lakes Research* 40 (Supplement 1):83-94 pp. (DOI:10.1016/j.jglr.2013.11.011) (2014).

13. Alderstein, S.A., T.F. Nalepa, **H.A. Vanderploeg**, and G.L. Fahnenstiel. Trends in phytoplankton, zooplankton, and macroinvertebrates in Saginaw Bay relative to zebra mussel (*Dreissena polymorpha*) colonization: A generalized linear model approach. In *Quagga and Zebra Mussels: Biology, Impacts, and Control*, Second Edition. T.F. Nalepa, and D.W. Schlosser (Eds.). CRC Press, Boca Raton, FL, 525-543 pp. (2013).

14. Johengen, T.H., **H.A. Vanderploeg**, and J.R. Liebig**.** Effects of algal composition, seston stoichiometry, and feeding rate on zebra mussel (*Dreissena polymorpha*) nutrient excretion in two Laurentian Great Lakes. In *Quagga and Zebra Mussels: Biology, Impacts, and Control*, Second Edition. T.F. Nalepa, and D.W. Schlosser (Eds.). CRC Press, Boca Raton, FL, 445-459 pp. (2013).

15. **VANDERPLOEG, H.A.,** and J.R. Strickler**.** Video Clip 6: Behavior of zebra mussels exposed to *Microcystis* colonies from natural seston and laboratory cultures. In *Quagga and Zebra Mussels: Biology, Impacts, and Control*, Second Edition. T.F. Nalepa, and D.W. Schlosser (Eds.). CRC Press, Boca Raton, FL, 757-758 pp. (2013).

16. **VANDERPLOEG, H.A.,** A.E. Wilson, T.H. JOHENGEN, J. DYBLE BESSSIE, O. Sarnelle, J.R. LIEBIG, S.D. ROBINSON, and G.P. Horst**.** Role of selective grazing by dreissenid mussels in promoting toxic *Microcystis* blooms and other changes in phytoplankton composition in the Great Lakes. In *Quagga and Zebra Mussels: Biology, Impacts, and Control*, Second Edition. T.F. Nalepa, and D.W. Schlosser (Eds.). CRC Press, Boca Raton, FL, 509-523 pp. (2013).

17. LUO, L., J. WANG, D.J. SCHWAB, **H.A. VANDERPLOEG**, G.A. LESHKEVICH, X. BAI, H. HU, and D. Wang. Simulating the 1998 spring bloom in Lake Michigan using a coupled physical-biological model. *Journal of Geophysical Research* 117(C10011):14 pp. (DOI:10.1029/2012JC008216) (2012).

18. POTHOVEN, S.A., **H.A. VANDERPLOEG,** T.O. Hook, and S.A. Ludsin**.** Hypoxia modifies planktivore-zooplankton interactions in Lake Erie. *Canadian Journal of Fisheries and Aquatic Sciences* 69:2018-2028 (DOI:10.1139/cjfas-2012-0144) (2012).

19. BELETSKY, D., N. HAWLEY, Y.R. Rao, **H.A. VANDERPLOEG**, R. BELETSKY, D.J. SCHWAB, and S.A. RUBERG. Summer thermal structure and anticyclonic circulation of Lake Erie. *Geophysical Research Letters* 39:L06605 (DOI:10.1029/2012GL051002) (2012).

20. Goto, D., K. Lindelof, D.L. FANSLOW, S.A. Ludsin, S.A. POTHOVEN, J.J. Roberts, **H.A. VANDERPLOEG,** A.E. Wilson, and T.O. Hook. Indirect consequence of hypolimnetic hypoxia on zooplankton growth in a large eutrophic lake. *Aquatic Biology* 16:217-227 (DOI:10.3354/ab00442) (2012).

21. POTHOVEN, S.A., **H.A. VANDERPLOEG**, D.M. Warner, J.S. Schaeffer, S.A. Ludsin, R.M. Claramunt, and T.F. NALEPA. Influences on *Bythotrephes longimanus* life-history characteristics in the Great Lakes. *Journal of Great Lakes Research*:134-141 (DOI:10.1016/j.jglr.2011.10.003) (2012).

22. ROBERTS, J.J., P. Grecay, S.A. Ludsin, S.A. POTHOVEN, **H.A. VANDERPLOEG**, and T.O. Hook**.** Evidence of hypoxic foraging forays by yellow perch (*Perca flavescens*) and potential consequences for prey consumption. *Freshwater Biology* 57:922-937 (DOI:10.1111/j.1365-2427.2012.02753.x) (2012).

23. **VANDERPLOEG, H.A.**, S.A. POTHOVEN, G.L. FAHNENSTIEL, J.F. CAVALETTO, J.R. LIEBIG, C.A. STOW, T.F. NALEPA, C.P. Madenjian, and D.B. Bunnell. Seasonal

zooplankton dynamics in Lake Michigan: Disentangling impacts of resource limitation, ecosystem engineering, and predation during a critical transition. *Journal of Great Lakes Research* 38(2):336-352 (DOI:10.1016/j.jglr.2012.02.005) (2012).

24. Millie, D.F., G.L. FAHNENSTIEL, G.R. Weckman, D.M. Klarer, J. DYBLE BRESSIE, **H.A. VANDERPLOEG**, and D.B. Fishman. An "Enviro-Informatic" assessment of Saginaw Bay (Lake Huron, USA) phytoplankton: Data-driven characterization and modeling of*Microcystis* (Cyanophyta). *Journal of Phycology* 47:714-730 (DOI:10.1111/j.1529-8817.2011.01022.x) (2011).

25. Pichlova-Ptáčníková, R., and H**.A. VANDERPLOEG**. The quick and the dead: Might differences in escape rates explain the changes in the zooplankton community composition of Lake Michigan after invasion by *Bythotrephes*? *Biological Invasions*:10 pp. (DOI:10.1007/s10530-011-0076-x) (2011).

26. CAVALETTO, J.F., **H.A. VANDERPLOEG,** R. Pichlová-Ptáníková, S.A. POTHOVEN, J.R. LIEBIG, and G.L. FAHNENSTIEL**.** Temporal and spatial separation allow coexistence of predatory cladocerans: *Leptodora kindtii*, *Bythotrephes longimanus*, and *Cercopagis pengoi* in southeastern Lake Michigan. *Journal of Great Lakes Research* 36:65-73 (2010).

27. FAHNENSTIEL, G.L., S.A. POTHOVEN, T.F. NALEPA, **H.A. VANDERPLOEG,** D.M. Klarer, and D. Scavia. Recent changes in primary production and phytoplankton in the offshore region of southeastern Lake Michigan. *Journal of Great Lakes Research* 36:20-29 (2010).

28. Kerfoot, W.C., F. Yousef, S.A. Green, J.W. Budd, D.J. SCHWAB, and **H.A. VANDERPLOEG.** Approaching storm: Disappearing winter bloom in Lake Michigan. *Journal of Great Lakes Research* 36:30-41 (2010).

29. Mida, J.L., D. Scavia, G.L. FAHNENSTIEL, S.A. POTHOVEN, **H.A. VANDERPLOEG**, and D.M. Dolan. Long-term and recent changes in southern Lake Michigan water quality with implications for present trophic status. *Journal of Great Lakes Research* 36:42-49 (2010).

30. POTHOVEN, S.A., G.L. FAHNENSTIEL, and **H.A. VANDERPLOEG.** Temporal trends in *Mysis relicta* abundance, production, and life-history characteristics in southeastern Lake Michigan. *Journal of Great Lakes Research* 36:60-64 (2010).

31. **VANDERPLOEG, H.A.,** J.R. LIEBIG, T.F. NALEPA, G.L. FAHNENSTIEL, and S.A. POTHOVEN**.** *Dreissena* and the disappearance of the spring phytoplankton bloom in Lake Michigan. *Journal of Great Lakes Research* 36:50-59 (2010).

32. Yurista, P.M., **H.A. VANDERPLOEG**, J.R. LIEBIG, and J.F. CAVALETTO. Lake Michigan *Bythotrephes* prey consumption estimates for 1994-2003 using a temperature and size corrected bioenergetic model. *Journal of Great Lakes Research* 36:74-92 (2010).

33. Fishman, D.B., S.A. Alderstein, **H.A. Vanderploeg**, G.L. Fahnenstiel, and D. Scavia**.** Causes of phytoplankton changes in Saginaw Bay, Lake Huron during the zebra mussel invasion. *Journal of Great Lakes Research* 35:482-495 (2009).

34. ROBERTS, J.J., T.O. Höök, S.A. Ludsin, S.A. POTHOVEN, **H.A. VANDERPLOEG,** and S.B. Brandt. Effects of hypolimnetic hypoxia on foraging and distributions of Lake Erie yellow perch. *Journal of Experimental Marine Biology and Ecology* 381:S132-S142 (2009).

35. **VANDERPLOEG, H.A**., S.A. Ludsin, J.F. CAVALETTO, T.O. Höök, S.A. POTHOVEN, S.B. Brandt, J.R. LIEBIG, and G.A. LANG. Hypoxic zones as habitat for zooplankton in Lake Erie: Refuges from predation or exclusion zones? *Journal of Experimental Marine Biology and Ecology* 381:S108-S120 (2009).

36. **VANDERPLOEG, H.A.**, S.A. Ludsin, S.A. RUBERG, T.O. Höök, S.A. POTHOVEN, S.B. Brandt, G.A. LANG, J.R. LIEBIG, and J.F. CAVALETTO. Hypoxia affects spatial distributions and overlap of pelagic fish, zooplankton, and phytoplankton in Lake Erie. *Journal of Experimental Marine Biology and Ecology* 381:S92-S107 (2009).

37. Pichlova-Ptacníkova, R., and **H.A. VANDERPLOEG.** The invasive cladoceran *Cerocopagis pengoi* is a generalist predator capable of feeding on a variety of prey species of different sizes and escape abilities. *Fundamental and Applied Limnology* 173(4):267-279 (2009).

38. POTHOVEN, S.A., **H.A. VANDERPLOEG**, S.A. Ludsin, T.O. HÖÖK, and S.B. BRANDT. Feeding ecology of emerald shiners and rainbow smelt in Lake Erie. *Journal of Great Lakes Research* 35:190-198 (2009).

39. **VANDERPLOEG, H.A.**, T.H. JOHENGEN, and J.R. LIEBIG. Feedback between zebra mussel selective feeding and algal composition affects mussel condition: did the regime changer pay a price for its success? *Freshwater Biology* 54:47-63 (2009).

40. RUBERG, S.A., E. Guasp, N. HAWLEY, R.W. MUZZI, S.B. BRANDT, **H.A. VANDERPLOEG**, J.C. LANE, T.C. MILLER, and S.A. CONSTANT**.** Societal benefits of the real-time coastal observation network (ReCON): Implications for municipal drinking water quality. *Marine Technology Society Journal* 42(3):103-109 (2008).

41. Kerfoot, W.C., J.W. Budd, S.A. Green, J.B. Cotner, B.A. Biddanda, D.J. SCHWAB, and **H.A. VANDERPLOEG.** Doughnut in the desert: Late-winter production pulse in southern Lake Michigan. *Limnology and Oceanography* 53(2):589-604 (2008).

42. LIEBIG, J. R., and **H. A. VANDERPLOEG.** Selecting optical plankton counter size bins to optimize zooplankton information in Great Lakes studies. NOAA Technical Memorandum GLERL-143. NOAA, Great Lakes Environmental Research Laboratory, Ann Arbor, MI, 16 pp. (2008). http://www.glerl.noaa.gov/ftp/publications/tech_reports/glerl-143/tm-143.pdf

43. POTHOVEN, S.A., **H.A. VANDERPLOEG**, J.F. CAVALETTO, D.M. KRUEGER, D.M. MASON, and S.B. BRANDT. Alewife planktivory controls the abundance of two

invasive predatory cladocerans in Lake Michigan. *Freshwater Biology* 52(doi:10.1111/j.1365-2427.2007.01728.x):561-573 (2007).

44. **VANDERPLOEG, H.A.**, T.H. JOHENGEN, P.J. Lavrentyev, C. Chen, G.A. LANG, M.A. Agy, M.H. Bundy, J.F. CAVALETTO, B.J. EADIE, J.R. LIEBIG, G.S. MILLER, S.A. RUBERG, and M.J. McCORMICK. Anatomy of the recurrent coastal sediment plume in Lake Michigan and its impacts on light climate, nutrients, and plankton. *Journal of Geophysical Research* 112(C03S90, doi:10.1029/2004JC002379):23 pp. (2007).

45. LIEBIG, J. R., **H. A. VANDERPLOEG**, and S. A. RUBERG. Factors affecting the performance of the optical plankton counter in large lakes: insights from Lake Michigan and laboratory studies. *Journal of Geophysical Research* 111(C05S02):10 pp. (2006).

46. **VANDERPLOEG, H. A.**, and M. R. Roman. Introduction to special section on analysis of zooplankton distributions using the optical plankton counter. *Journal of Geophysical Research* 111(C05S01):doi:10.1029/2006JC003598 (2006).

47. Bundy, M. H., **H. A. VANDERPLOEG**, P. J. Lavrentyev, and P. A. Kovalcik. The importance of microzooplankton versus phytoplankton to copepod populations during late winter and early spring in Lake Michigan. *Canadian Journal of Fisheries and Aquatic Sciences* 62:2371-2385 (2005).

48. PEACOR, S., K. PANGLE and **H. A. VANDERPLOEG.** Behavioral response of Lake Michigan *Daphnia galeata mendotae* to *Mysis relicta*. *Journal of Great Lakes Research* 31:144-154 (2005).

49. POTHOVEN, S. A. and **H. A. VANDERPLOEG.** Diet and prey selection of alewives in Lake Michigan: seasonal, depth, and interannual patterns. *Transactions of the American Fisheries Society* 133:1068-1077 (2004).

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51. Chen, C., L. Wang, R. Ji, J. W. Budd, D. J. SCHWAB, D. BELETSKY, G. L. FAHNENSTIEL, **H. A. VANDERPLOEG**, B. J. EADIE, and J. Cotner. Impacts of suspended sediment on the ecosystem in Lake Michigan: A comparison between the 1998 and 1999 plume events. *Journal of Geophysical Research* 109(C10S05):18 (2004).

52. Kerfoot, W. C., J. W. Budd, B. J. EADIE, **H. A. VANDERPLOEG**, and M. AGY. Winter storms: sequential sediment traps record *Daphnia* ephippial production, resuspension, and sediment interactions. *Limnology and Oceanography* 49(4, part 2):1365-1381 (2004).

53. Messick, G. A., **H. A. VANDERPLOEG**, J. F. CAVALETTO, and S. S. Tyler. Histological characteristics of abnormal protrusions on copepods from Lake Michigan. *Zoological Studies* 43(2):314-322 (2004).

54. POTHOVEN, S. A., G. L. FAHNENSTIEL, and **H. A. VANDERPLOEG**. Spatial distribution, biomass, and population dynamics of *Mysis relicta* in Lake Michigan. *Hydrobiologia* 522:291-299 (2004).

55. **VANDERPLOEG, H. A.** Ecological forecasting of impacts of ponto-caspian species in the Great Lakes: Describing, understanding, and predicting a system in transition. In *Ecological Forecasting: New Tools for Coastal and Marine Ecosystem Management*. N. Valette-Silver and D. Scavia (eds.). NOAA Technical Memorandum NOS NCCOS 1, Silver Spring, MD, 81-84 (2003).http://www.glerl.noaa.gov/pubs/fulltext/2003/20030015.pdf

56. POTHOVEN, S. A., G. L. FAHNENSTIEL, and **H. A. VANDERPLOEG**. Population characteristics of *Bythotrephes* in Lake Michigan. *Journal of Great Lakes Research* 29(1):145-156 (2003).

57. Bundy, M. H., and **H. A. VANDERPLOEG**. Detection and capture of inert particles by calanoid copepods: the role of the feeding current.*Journal of Plankton Research* 24(3):215-223 (2002).

58. Chen, C., R. Ji, D. J. SCHWAB, D. BELETSKY, G. L. FAHNENSTIEL, M. Jiang, T. H. JOHENGEN, **H. A. VANDERPLOEG**, B. J. EADIE, J. W. Budd, M. H. Bundy, W. Gardner, J. Cotner, and P. Lavrentyev. A model study of the coupled biological and physical dynamics in Lake Michigan. *Ecological Modeling* 152:145-168 (2002).

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60. Madenjian, C. P., G. L. FAHNENSTIEL, T. H. JOHENGEN, T. F. NALEPA, **H. A. VANDERPLOEG**, G. W. Fleischer, P. J. Schneeberger, D. M. Benjamin, E. B. Smith, J. R. Bence, E. S. Rutherford, D. S. Lavis, D. M. Robertson, D. J. Jude, and M. P. Ebener. Dynamics of the Lake Michigan food web, 1970-2000. *Canadian Journal of Fisheries and Aquatic Sciences* 59:736-753 (2002).

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