BIOGRAPHICAL SKETCH – ELIZABETH WATKINS NORTH

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Professional Preparation

1991	B. A., Swarthmore College (Comparative Religion)
1995-1996	Graduate prerequisite courses in calculus, statistics, physics, and organic chemistry, University of Maryland, College Park
1996	M. S., Johns Hopkins University School of Continuing Studies (Interdisciplinary Science Studies, concentration in Environmental Science)
2001	Ph.D., University of Maryland, College Park (Marine-Estuarine-Environmental Science, specialization in Fisheries Science)

Positions Held

2001-2004	Assistant Research Scientist, University of Maryland Center for Environmental Science, Horn Point Laboratory
2004-present	Assistant Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory

Publications Last Three Years

North, E. W., Z. Schlag, R. R. Hood, M. Li, L. Zhong, T. Gross, and V. S. Kennedy. 2008. Vertical swimming behavior influences the dispersal of simulated oyster larvae in a coupled particle-tracking and hydrodynamic model of Chesapeake Bay. Marine Ecology Progress Series 359: 99-115.

Chen, S. N., L.P. Sanford, E.W. Koch, F. Shi, and E.W.North. 2007. A nearshore model to investigate the effects of seagrass bed geometry on wave attenuation and suspended sediment transport. Estuaries and Coasts, 30(2): 296-310.

Gallego, A., E. W. North, and P. Petitgas. 2007. Introduction: status and future of modelling physical-biological interactions during the early life of fishes. Marine Ecology Progress Series 345: 121-126.

Glibert, P. M., J. Alexander, D. W. Meritt, E. W. North, and D. K. Stoecker. 2007. Harmful algae pose additional challenges for oyster restoration: impacts of the harmful algae *Karlodinium veneficum* and *Prorocentrum minimum* on early life stages of the oysters *Crassostrea virginica* and *Crassostrea ariakensis*. Journal of Shellfish Research 26(4): 919–925.

North, E. W., and E. D. Houde. 2006. Retention mechanisms of white perch (*Morone americana*) and striped bass (*M. saxatilis*) early-life stages in an estuarine turbidity maximum: an integrative mapping and Eulerian approach. Fisheries Oceanography 15(6): 429-450.

North, E. W., R. R. Hood, S.-Y. Chao, and L. P. Sanford. 2006. Using a random displacement model to simulate turbulent particle motion in a baroclinic frontal zone: a new implementation scheme and model performance tests. Journal of Marine Systems 60: 365-380.

Five Other Relevant Publications

North, E. W., R. R. Hood, S.-Y. Chao, and L. P. Sanford. 2005. The influence of episodic events on transport of striped bass eggs to an estuarine nursery area. Estuaries 28(1): 106-121.

North, E. W., S.-Y. Chao, L. P. Sanford, and R. H. Hood. 2004. The influence of wind and river pulses on an estuarine turbidity maximum: numerical studies and field observations. *Estuaries* 27(1): 132-146

North, E. W., and E. D. Houde. 2004. Distribution and transport of bay anchovy (*Anchoa*

mitchilli) eggs and larvae in Chesapeake Bay. *Estuarine, Coastal and Shelf Science* 60: 409-429.

North, E. W., and E. D. Houde. 2003. Linking ETM physics, zooplankton prey, and fish early-life histories to white perch (*Morone americana*) and striped bass (*M. saxatilis*) recruitment success. *Marine Ecology Progress Series* 260:219-236

North, E. W., and E. D. Houde. 2001. Retention of white perch and striped bass larvae: biological-physical interactions in Chesapeake Bay estuarine turbidity maximum. *Estuaries* 24(5): 756-769.

Synergistic Activities

1. ***Member***, International Council for the Exploration of the Seas (ICES) Working Group on Modelling Physical-Biological Interactions. May, 2002 to present.
2. ***Member***, US Global Ocean Ecosystem Dynamics (GLOBEC) Program Scientific Steering Committee. May 2007 to present.
3. ***Co-Chair,*** ICES Workshop on Advancements in Modelling Physical-Biological Interactions in fish early-life history: recommended practices and future directions, Nantes, France, 3-5 April, 2006 (http://northweb.hpl.umces.edu/wkamf/whome.htm).
4. ***Manuscript reviewer*** for *Estuaries and Coasts*, *Estuarine, Coastal and Shelf Science*, *Fisheries Oceanography*, *ICES J. of Marine Science* (guest editor), *J.of Experimental Marine Biology and Ecology, Limnology and Oceanography, Marine and Freshwater Research, Marine Ecology Progress Series* (guest editor), *Transactions of the American Fisheries Society*, *Fisheries Research*, and proposal reviewer for NSF Biological Oceanography and Ocean Technology and Interdisciplinary Coordination Programs.
5. ***Scientist Participant, Mid-Atlantic Center for Ocean Science Education Excellence*** (COSEE) teacher training program. June 2003, July 2004, July 2005, July 2006, July 2007. An example talk and student activity that can be found at: http://northweb.hpl.umces.edu/education_outreach/education_outreach.htm.

Collaborators and Other Affiliations

a) Collaborators (UMCES affiliation unless specified otherwise): W. Boicourt, D. Boesch, W. Boynton, J. Brubaker (VIMS), S.-Y. Chao, S. Chen, M. Christman (UFL), V. Coles, B. Crump, D. DiToro (UDEL), C. Epifanio (UDEL), K. Fennel (Dalhousie), A. Gallego (UK FRS), Z. Garraffo (U Miami), T. Gross (UNESCO), R. Hood, E. Houde, M. Kemp, L. Kellogg (UMCP), V. Kennedy, E. Koch, M. Li, M. Liddel (UMCP), M. Luckenbach (VIMS), J. McCleave (U Maine), M. Miller (U Tokyo), R. Newell, J. Olney (VIMS), K. Paynter (UMCP), P. Petitgas (IFREMER), M. Roman, L. Sanford, D. Secor, F. Shi (UDEL), J. Shoji (U Kyoto), K. Smith, T. Targett (UDEL), A. Valle-Levinson (UFL), J. Volstad (Norway IMR), F. Werner (Rutgers), J. Xu (NOAA NOS), L. Zhong (CSIRO).

b) Graduate and Postdoctoral Advisors
Graduate Advisor: Dr. Edward Houde; Postdoctoral Advisor: Dr. Raleigh Hood

c) Mentor for:

- Jeff Biermann, Ginger Jahn (Masters students)
- Ginger Jahn, Katherine Smith, Kiera Jarvis (REU undergraduate students)
- Shaaban Fundi, Stephanie Snyder (Summer middle school teacher fellows)