



Sean F. Werle

Aquatic Biologist

Summary Sean Werle has over 10 years of professional experience working as an aquatic biologist. At New England Environmental, Inc. (NEE) he is responsible for the development and implementation of aquatic macroinvertebrate protection plans and rare species assessments in compliance with state and federal permitting.

- Areas of Expertise**
- Expert aquatic macroinvertebrate identification (including freshwater mussels)
 - MA-NHESP freshwater mussel habitat assessment protocols
 - MA-NHESP freshwater mussel translocation protocols
 - SCUBA surveying (Freshwater mussels and aquatic plants)
 - Photographic surveying (Odonata)
 - Freshwater algae identification
-

Education

Ph. D., Organismic and Evolutionary Biology – University of Massachusetts, Amherst, MA, 2004.

M.Sc., Entomology – University of Massachusetts, Amherst, MA, 2000.

B.Sc., Zoology - University of Rhode Island, Kingston, RI, 1995.

Credentials

SCUBA (PADI) Rescue Diver

Experience

New England Environmental, Inc.	2010-present
Aquatic Biologist	
Responsibilities include rare species sampling and habitat use; providing scientific data and guidance to assist clients in meeting standards for Conservation and Management Permits under the Massachusetts Endangered Species Act; developing mitigation plans to minimize impacts to wildlife habitat; report writing.	
Axarus Environmental Consulting, LLC	2000-present
Senior Scientist and Principal	
Development and production of educational materials for AP High School and college students.	
University of Massachusetts, Amherst	2004-present
Adjunct lecturer, Faculty of Biology	
Teaching undergraduate courses including Aquatic Invertebrates, Tropical Field Biology, and Biology of Social Issues.	
University of Massachusetts, Amherst	2006-Present
Curator, Natural History Collections	
Curation of and acquisition for the invertebrate collections including numerous collecting expeditions in New England, Costa Rica, Mexico and Belize.	





University of Massachusetts, Amherst**June 1995-May 2004****Graduate research and teaching assistant**

Served as a teaching assistant in numerous laboratory courses and conducted research on turfgrass insects (1995-2000) and aquatic insects (1999-2004).

Professional Training/Education

- Odonate identification workshop. Museum of Comparative Zoology, Harvard University, 1997.
- Freshwater algae and diatom identification workshop. Watershed Assessment Associates, 2008.

Affiliations/ Memberships

- Freshwater Mollusk Conservation Society

Publications

Asikainen, CA and SF Werle. 2007. Accretion of ferromanganese nodules that form pavement in Second Connecticut Lake, New Hampshire. *Proceedings of the National Academy of Sciences*. 104 (45): 17579-17581.

Werle, SF, NA Johnson, ER Dumont and P Parasiewicz. 2007. Ecological dissimilarity analysis: A simple method of demonstrating community-habitat correlations for frequency data. *Northeastern Naturalist* 14 (3): 439-446.

Werle SF. 2005. Populations of a Connecticut River midge structured by geological history and downstream gene flow. *Chromosome Research* 13 (1): 97-106.

Werle SF, DG Smith and E Klekowski. 2004. Life in crumbling clay: The biology of *Axarus* species (Diptera : Chironomidae) in the Connecticut River. *Northeastern Naturalist* 11 (4): 443-458.

Werle SF, E Klekowski and DG Smith. 2004. Inversion polymorphism in a Connecticut River *Axarus* species (Diptera: Chironomidae): biometric effects of a triple inversion heterozygote. *Canadian Journal of Zoology* 82 (1): 118-129.

Smith DG, SF Werle and E Klekowski. 2003. The anatomy and brooding biology of *Pottsiella erecta* (Potts, 1884) (Ectoprocta : Gymnolaemata : Ctenostomata), with an expanded diagnosis of the Pottsiellidae. *Hydrobiologia* 490 (1-3): 135-145.

Smith DG, SF Werle and E Klekowski. 2002. The rapid colonization and emerging biology of *Cordylophora caspia* (Pallas, 1771) (Cnidaria : Clavidae) in the Connecticut River. *Journal Of Freshwater Ecology* 17 (3): 423-430.

Languages

Fluent English, training in Spanish

