Biographical Data for Richard J. Horwitz

Position Senior Scientist and Fisheries Section Leader, Patrick Center for Environmental Research (PCER), Academy of Natural Sciences (ANS).

Education

Ph.D. 1976—Evolutionary Biology; University of Chicago, Chicago, IL.

B.A. 1971—Biology; Cornell University, Ithaca, N.Y.

Professional Experience

1984-2001 Senior Scientist, PCER, ANS

1982-2001 Section Leader, Fisheries Section, PCER, ANS

1976-1984 Assistant Curator, ANS

1980-1982 Section Leader, Biometry Section, PCER, ANS

1977-1980 Adjunct Assistant Professor, Department of Biology, University of Pennsylvania.

Recent Research Experience, Grants Received

- 2000-2002 Ecological Assessment of effects of removal of a dam on Manatawny Creek, Pottstown, PA. State of Pennsylvania.
- 1997-2001 Master planning and restoration implementation for Fairmount Park, Philadelphia.

 Natural Lands Restoration and Environmental Education Program of the Fairmount Park Commission. Project Leader
- 1998-2001 Riparian Reforestation in an Urbanizing Watershed: Effects of Upland Conditions on In-stream Ecological Benefits. U.S. EPA/NASA. Co-PI.
- 1997-1999 Streamside Reforestation: an analysis of Ecological Benefits and Societal Perceptions. NSF. Co-PI.
- 1992-2001 Assessment of Contamination of fishes of New Jersey. Office of Science and Research, New Jersey Department of Environmental Protection. Project Leader.

Selected Professional Publications

Horwitz, R.J., B.W. Thompson, C. Cianfrani, N.C. Coulter, W.C. Hession, J.E. Pizzuto, A. Rhoads, and A.E. Schuyler. Master Plan for Natural Lands Restoration in Fairmount Park, Philadelphia. Volume 2. Park specific assessment and restoration plans.

Horwitz, R.J., B.W. Thompson, C. Cianfrani, N.C. Coulter, W.C. Hession, M. McBride, J.E. Pizzuto, A. Rhoads, and A.E. Schuyler. Master Plan for Natural Lands Restoration in Fairmount Park, Philadelphia. Volume 3 (rev.). Appendices.

Horwitz, R.J., W. Cully Hession, and B.S. Sweeney. Effects of forested and unforested riparian zones on stream fishes. Pp. 197-202 in Proc. Amer. Water Resources Ass. Int. Conference on Riparian ecology and management in multi-land use watersheds. Portland, Oregon, August, 2000.

Hession, W.C., T.E. Johnson, D.F. Charles, D.D. Hart, R.J. Horwitz, D.A. Kreeger, J.E. Pizzuto, D.J. Velinsky, J.D. Newbold, C. Cianfrani, T. Clason, A.M. Compton,

- N. Coulter, L. Fuselier, B.D. Marshall, and J. Reed. Ecological benefits of riparian reforestation in urban watersheds: Study design and preliminary results. *Environmental Monitoring and Assessment* **63(1)**:211-222.
- Horwitz, R.J., B.W. Thompson, C. Cianfrani, N.C. Coulter, W.C. Hession, M. McBride, J.E. Pizzuto, A. Rhoads, and A.E. Schuyler. Master Plan for Natural Lands Restoration in Fairmount Park, Philadelphia. Volume 1. Restoration goals, park-wide assessment and general restoration planning.
- Fairchild, G.M., R.J. Horwitz, D.A. Nieman, M.R. Boyer and D.F. Knorr.. Effects of habitat quality, and historical change, on fish communities of the Schuylkill River drainage, southeast Pennsylvania. *American Midland Naturalist* **139**:282-295.
- Horwitz, R.J., B. Ruppell, S. Wisniewski, P. Kiry, M. Hermanson and C. Gilmour. Mercury concentrations in freshwater fishes in New Jersey. *Wat., Air and Soil Poll.* **80**:885-888.
- Horwitz, R.J. Preliminary assessment of total mercury concentrations in fishes from rivers, lakes and reservoirs of New Jersey. Rept. No. 93-15F. Acad. Nat. Sci. Phila., submitted to Office of Science and Research, New Jersey Department of Environmental Protection. 92 pp.
- Hart. D.D. and R.J. Horwitz. Alternative models and tests of the interaction between habitat structure and species-area relationships *in* S.S Bell, E.D. McCoy and H. Mushinsky, eds. *Habitats Structure: The Physical Arrangement of Objects in Space*. Chapman and Hall. 420 pp.
- Tessier, A.J. and R.J. Horwitz. Influence of water chemistry on size structure of zooplankton assemblages. *Can. J. Fisher. and Aq. Sci.* **47(10)**:1937-1943.
- Horwitz, R.J. Fishes of the Delaware Estuary in Pennsylvania. Chapter 15 in S.K. Majumdar, F.J. Brenner and A.F. Rhoads, eds. *Endangered and Threatened Species Programs in Pennsylvania and Other States: Causes, Issues and Management.* The Pennsylvania Academy of Sciences. 519 pp.
- Horwitz, R.J. Temporal variability patterns and the distributional patterns of stream fishes. *Ecol. Monogr.* **48**:307-321.