

**Robert A. Bachman**

**675 Blue Lake Road, Denver, PA 17517-9520 Phone: 717-336-1029 Email: [bbachman@ptd.net](mailto:bbachman@ptd.net)**

**EDUCATION:**

**The Pennsylvania State University. Ph.D. Ecology, 1982. Thesis, Foraging Behavior of Free-Ranging Wild and Hatchery Brown Trout (Salmo trutta) in a stream.**

**The University of Washington. BS. Physical Oceanography, 1963.**

**U.S. Naval Academy. BS. Marine Engineering and Electrical Engineering, 1956.**

**Boards and Commissions:**

**Delaware River Basin Commission, Subcommittee on Ecological Flows. 2004-present.**

**Pennsylvania Flyfishing Museum Association. 2001 – present.**

**PFBC Trout Working Group. 2003 – present.**

**Pennsylvania Council of Trout Unlimited. –Trout Management Committee. Chairman. 2001 – present.**

**Cocalico Creek Watershed Association – Founder and President 2002-present.**

**Friends of the Upper Delaware – Board member and research director. 2002-present.**

**PA Governor’s Council on Hunting, Fishing and Conservation. Member. 2004- 2006.**

**Lehigh River Coldwater Alliance. 2004-present.**

**Atlantic States Marine Fisheries Commission – Maryland’s Fishery Commissioner. 1998-1999.**

**Northeastern Association of Fish and Wildlife Agencies. President, 1995-1996.**

**Southeastern Association of Fish and Wildlife Agencies. President, 1997-1998**

**International Association of Fish and Wildlife Agencies. Member of Executive Committee, 1994-1998**

**EMPLOYMENT:**

**Aquatic and Environmental Consultant (Self employed) – 1999 to present.**

**Sub-contractor to LandsStudies, Inc. Lititz, PA to relocate McIlvain Run in Chester County and establish a wild brown trout population. Sub-contract to Kathphal Technologies, Low-level Radioactive Waste Disposal. Lecturer and advisor on aquatic ecosystems with emphasis on trout and bass.**

**Maryland Department of Natural Resources, Aug. 1986 to March 1999.**

**Director, Fisheries Service, Jan 98- Mar 99. Developed and implemented measures for the protection, conservation, enhancement and harvest of Maryland's tidal fisheries, including marine finfish, crabs, oysters, clams and other shellfish. Implemented measures to reduce the by-catch of black drum, striped bass and many other species of finfish and shellfish and strong advocate for reduction of harvest of Atlantic menhaden in the coastal fishery. Served as Maryland's Fisheries Commissioner on the Atlantic States Marine Fisheries Commission. Co-chairman, Living Resources Subcommittee, Chesapeake Bay Program. Member of ASMFC management board for bluefish, weakfish, American lobster, shad and river herring, eel, and summer flounder.**

**Deputy Director, Fisheries Service, Jul 95 – Jan 98. Directed data collection, analysis, interpretation and dissemination of all information pertaining to Maryland's marine resources. Supervised field work, presented data to the Chesapeake Bay Program, Atlantic States Marine Commission, State Legislature and various public and private organizations. Directed and supervised Maryland's striped bass restoration program, measures to reduce bycatch of finfish, decrease the mortality of blue crabs and replenishment of Maryland's oyster resources.**

**Director, Fish, Heritage and Wildlife Administration, Jul 92 – Jul 95. Responsible for the protection, conservation, enhancement and use of Maryland's game and non-game wildlife, freshwater fisheries resources, and all threatened and endangered species. Administered all revenues derived from the sale of hunting licenses, non-tidal fishing licenses, special funds appropriated for the protection of threatened and endangered species and federal funds allocated for the restoration of wildlife and freshwater finfish. Established policies for the efficient administration of the Freshwater Fisheries Division, the Wildlife Division, the Natural Heritage Division, and the General Direction Division of the agency. Proposed and promulgated regulations, prepared environmental review positions, and provided professional advice and information to federal, state and local government agencies on fish and wildlife issues. Served as Maryland's**

**representative to the Northeastern, Southeastern and International Fish and Wildlife Agencies and as President of the Northeastern and Southeastern Fish and Wildlife Agencies served as ex-officio member on the Executive Committee of the International Association of Fish and Wildlife Agency. Assisted other members of the International Association of Fish and Wildlife Agency to review and comment on the Federal Budget including budget proposals of the U.S. Fish and Wildlife Service, Bureau of Mines, Department of Agriculture (Farm Bill) and other federal agencies whose activities affected fish and wildlife throughout the country.**

**Director, Freshwater Fisheries Division, Aug 86 - Jul 92. Responsible for the biological and administrative management of the freshwater fishery resources of Maryland. Duties included preparation and review of fisheries management plans, fishing regulations, environmental reviews, field surveys and inventories, and research proposals. Responsible for program budget, personnel matters, procurement, public relations and federal assistance. Promulgated regulations and environmental protection policies resulting in dramatic increase in wild trout populations in Maryland and innovative regulations on smallmouth and largemouth bass, resulting in exceptional increases in the size and number of bass in both tidal and non-tidal fresh water of Maryland. Provided expert testimony on the effects of road building, housing development, logging, mining, waste water discharge, golf courses, agricultural practices, and other industrial and municipal practices on stormwater, sediment transport, water consumption, thermal pollution and other harmful effects on aquatic resources. Extensive experience with the effects of these and other environmental insults on trout streams, the Potomac River, the Susquehanna Flats and the Chesapeake Bay in general. Supervised and directed restoration of wild trout fisheries in Gunpowder Falls, Savage River, and North Branch Potomac River. Reestablished a formerly extirpated wild brook trout population in the Jabez Branch, a tributary to Severn Run, flowing directly into the Chesapeake Bay.**

**Leisure Time Products, Minnesota Mining and Manufacturing, St. Paul, Minnesota. Aug 85 - 87. Technical Advisor. Reviewed video tape outlines, scripts and guide books on trout fishing for technical accuracy.**

**Aquatic Resource Consulting, Stroudsburg, Pa. Jun 85 - Aug 86. Project manager and principal investigator of contract with the**

**Maryland State Highway Administration to study and report on: Mitigation of Effect of Inter-county Connector on the Paint Branch Watershed, Montgomery County, Maryland. A one-year contract with the Maryland State Highway Administration to assess the biological, chemical and physical parameters effecting the population dynamics of a wild brown trout population near Washington D.C. Prepared technical and price proposal and supervised data collection, analysis and preparation of final report.**

**The Pennsylvania State University. Aug 82 -Aug 86. Lecturer. Taught mammalian anatomy and human physiology at the Phillipsburg Nursing School, resident and continuous environmental education courses at the University Park Campus of The Pennsylvania State University, the Altoona Campus, DuBois Campus, and the Rockville State Correctional Institution.**

**U.S. Cooperative Fish and Wildlife Research Unit, University Park, Pennsylvania. Aug 82 - Aug 86. Research Associate. Conducted research in population dynamics and behavior of wild trout, age and growth of fishes and trout migration.**

**The Pennsylvania State University. Lecturer, teaching assistant and graduate student. 1976 -1982.**

**United States Navy. 1956 – 1975. Commsioned Officer. Administration, management and teaching. Twenty years experience in personnel management. Served on five submarines, three nuclear and two diesel, and one surface ship. Executive Officer of two nuclear powered submarines, USS Nautilus, SSN 571, (the world's first nuclear-powered submarine), and the USS George Washington SSBN 598. Experience in operation of nuclear power plants, nuclear weapons systems, and advanced electronic navigation systems. Four years experience working with Canadian Government in Halifax, Nova Scotia and member of NATO working group.**

**Memberships:**

**Cocalico Creek Watershed Association  
Lehigh River Coldwater Alliance  
Cocalico Sportsmen Club  
Federation of Flyfishing  
Donegal Chapter Trout Unlimited  
Friends of the Upper Delaware River  
Maryland Saltwater Sportsmen Association  
Recreational Fishing Alliance  
The Nature Conservancy  
The Lancaster County Conservancy**

**Professional Awards:**

**1985 Best Paper Award. Volume 113 of The Transactions of the American Fisheries Society.**

**1981 Student Award of Merit. Northeastern Division of the American Fisheries Society.**

**Selected Publications:**

**Bachman, R.A. 2001. Closing plenary session presentation: Integrating the ecological and human dimensions of trout management. Pages 84-89 in R. DuBois, K.Kayle, M. Ebbers, and S. Turner, editors. Trout and the Trout Angler II. American Fisheries Society, North Central Division, Salmonid Technical Committee, St. Paul, Minnesota.**

**Pittinger, et.al. 2000. A multi-Stakeholder Framework for Ecological Risk Management. Society of Environmental Toxicology and Chemistry (SETAC), 1010 North 12<sup>th</sup> Avenue, Pensacola, FL 32501-3367.**

**Bachman, R.A. 1994. Restoring wild trout resources: how hatchery trout fit into the equation, p. 26-37. In D. Zaldokas and P.A. Slaney [ed.] Proceedings of the Clean Water - Wild Trout International Conservation Symposium, Kamloops, B.C. June 1993. Prov. B.C. Fish. Proj. Rep. No. RD40:60p.**

**Bachman, Robert A. 1990. Fisheries and Water Quality. Pages 76-78 in Proceedings of the First Annual Governor's Conference on Greenways. Greenways and Resource Planning, Maryland Department of Natural Resources, Annapolis, Maryland 21401.**

**Bachman, Robert A., Howard J. Stinefelt, and Charles R. Gougeon. 1989. Wild Trout Management in the Eastern Megalopolis. Pages 141-152 in F. Richardson and R. H. Hamre, editors. Wild Trout IV. Trout Unlimited, Vienna Virginia.**

**Fewlass, Leon and Robert A. Bachman. 1989. Tidal Largemouth Bass Management in Maryland: 1989 Progress Report. In Estuaries: The Key to Our Aquatic Future. Potomac Chapter American Fisheries Society.**

**Arnold, Dean E., John T. Nichols, and Robert A. Bachman. 1987. Potamodromous spawning migrations of brown trout, with a case**

study from Pennsylvania. Final report, contribution 280 of the Pennsylvania Cooperative Fish and Wildlife Research Unit, 7 Ferguson Building, University Park, Pa. 16802. 50 pp.

Aquatic Resource Consulting. 1986. Mitigation of Effects of Proposed Inter-county Connector (ICC) on the Paint Branch watershed. SHA Contract No. M 971-002-370, final report. Aquatic Resource Consulting, R.D.8, Box 8062, Stroudsburg, Pa. 18360. 173 pp.

Bachman, Robert A. 1984. Foraging behavior of free-ranging wild and hatchery brown trout in a stream. Transactions of the American Fisheries Society 113(1):1-32. [Most significant paper award].

Bachman, Robert A. 1982. A growth model for drift-feeding salmonids: A selective pressure for migration. Pages 128-135 in E.L. Brannon and E.L. Salo, editors. Proceedings of Salmon and Trout Migratory Behavior Symposium. University of Washington, Seattle, Washington. [Invited paper].

Bachman, Robert A., William W. Reynolds and Martha E. Casterlin. 1979. Diel locomotor activity patterns of wild brown trout (Salmo trutta L.) in an electronic shuttlebox. Hydrobiologia 65:45-47.

**Book Review:** 1986 The Ways of Trout by Leonard M. Wright, Jr. Fisheries. 11(1):67.

**Selected Popular articles:**

Bachman, Robert A. 1989. What makes a trout stream best? Trout. Thirtieth Anniversary Issue of Trout magazine.

Bachman, Robert A. 1985. How trout feed. Trout 26(1):10-16.  
\*\* Award 1985 Orvis Writer's Contest --- Best "How to" flyfishing article published in a magazine.

Bachman, Robert A. 1983. Brown trout don't always do what they're supposed to. Trout 24(2):20-25.

Bachman, Robert A. 1983. Feeding behavior of trout emphasizes energy savings. Science in Agriculture 30(2):7.

Bachman, Robert A. 1980. Wild trout and stocking. Fishing World 27(5):544-45.