

John W. Davidson III

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EDUCATION

Williamsport High School, Williamsport, MD, graduated 1993

Shepherd College (now Shepherd University), Shepherdstown, West Virginia, graduated 1998
Bachelor of Science in Biology

Currently pursuing a Master's degree in Fisheries Sciences through West Virginia University

PROFESSIONAL EXPERIENCE

The Conservation Fund's Freshwater Institute

Internship 1997

Part-time: November 1998- January 1999

Full Time: February 1999– Present

- Served as a Research associate and assistant systems manager
- Research focus: recirculating aquaculture system technologies and waste management technologies for aquaculture.
- Assists engineering services staff on research and consulting projects with the US Fish and Wildlife Service.
- Currently working on projects to evaluate the effects of aquaculture noise on growth, survival, and hearing of rainbow trout and a project evaluating the effects of low water exchange rates on rainbow trout growth and health.
- Extensively involved in the management and care of fish around the facility.

Other specific duties have included:

- Water sample collection and analysis
- Minor construction and repairs of recirculating fish culture systems
- Fish husbandry and maintenance for experimental fish culture systems
- Operation and calibration of monitoring equipment for aquatic environments such as dissolved oxygen and pH meters as well as specialized equipment such as velocity meters, flow meters, sound recording devices
- Organize, summarize and conduct statistical analyses of collected data
- Prepares drafts, drawings, charts, graphs, figures and professional publications for aquaculture research

PROFESSIONAL TRAINING

Graduate Studies in Fisheries Management: 15 credit hrs. including Fish Ecology, Advanced Fisheries Management, Data Analysis I, Data Analysis II, and Ichthyology

Coldwater Fish Culture. National Conservation Training Center. July 19-30, 1999. 7 CEU's

Water Reuse Systems Short Course. Sponsored by The Freshwater Institute and Cornell University. Shepherdstown, West Virginia. July 2001

Electrical Troubleshooting (Wastewater Systems). West Virginia Environmental Training Center and West Virginia Department of Education. 12 CEU's. April 2002

Basic Course in HACCP (Hazard Analysis and Critical Control Point) sponsored by the Association of Food and Drug Officials/ Seafood HACCP Alliance. Hampton, VA. November 2002.

CAREER HIGHLIGHTS

Lead author and technical researcher for the following publications:

Davidson, J.W., Frankel, A.S., Ellison, W., Summerfelt, S.T., Popper, A.N., Mazik, P., and Bebak, J. Minimizing noise in fiberglass aquaculture tanks: Noise reduction potential of various tank retrofits. In Press. *Aquacultural Engineering*.

Davidson, J.W. & S.T. Summerfelt. 2005. Settler Evaluation: Radial Flow vs. Tangential Flow. *Global Aquaculture Advocate* 8 (3): 56-57.

Davidson, J.W. & S.T. Summerfelt. 2005. Solids Removal from a Coldwater Recirculating System – Comparison of a Swirl Separator to a Radial-Flow Settler. *Aquacultural Engineering* 33: 47-61.

Davidson, J.W., A. Masters., B. Vinci., & S.T. Summerfelt. 2004. Testing Dual Drain Tanks for Improved Waste Removal at Craig Brook NFH. *Hatchery International* 5 (3): 22-23, 34.

Davidson, J.W., T. Waldrop, S.T. Summerfelt, & J. Bebak-Williams. 2004. Arctic char performance at 13-14 °C using recirculating technologies. *World Aquaculture* 35 (1): 48-51.

Davidson, J.W. & S.T. Summerfelt. 2004. Solids flushing, mixing, and water velocity profiles within large (10 and 150 m³) circular 'Cornell-type' dual-drain tanks. *Aquacultural Engineering* 32: 245-271.

Coauthor and technical researcher for the following publications:

Wysocki, L.E., M.E. Smith, A.N. Popper, **J. Davidson**, A. Frankel, W. Ellison, F. Ford, J. Bebak-Williams. 2006. Effects of environmental noise on hearing capabilities of fish. 29th Mid Winter Meeting of the Association for Research in Otolaryngology, February 5-9, Baltimore, MD (poster).

Summerfelt, S., **J. Davidson**, T. Waldrop, S. Tsukuda, and J. Bebak-Williams. 2005. Partial-Reuse Systems: Offer Benefits for Coldwater, Seawater Aquaculture. *Global Aquaculture Advocate* 8 (1): 68-69.

Summerfelt, S.T., **J. Davidson**, T. Waldrop, S. Tsukuda, and J. Bebak-Williams. 2004. A partial-reuse system for coldwater aquaculture. *Aquaculture Engineering* 31: 157-181.

Tsukuda, S.M., **J. Davidson**, A. Adkins, and S.T. Summerfelt. 2003. Evaluation of Dissolved Chitosan for Suspended Solids Removal. *International Journal of Recirculating Aquaculture* 4: 33-46.

Summerfelt, S.T., **J. Davidson**, and T. Waldrop. 2003. Evaluation of full-scale carbon dioxide stripping columns in a coldwater recirculating system. *Aquaculture Engineering* 28, 155-169.

Professional Presentations

Fluidized Sand Biofilter Remove Ammonia and Biochemical Oxygen Demand from an Intensive Aquaculture Effluent. International Conference on Recirculating Aquaculture. 2006

Minimizing Noise in Fiberglass Aquaculture Tanks: Noise Reduction Potential of Various Tank Retrofits. Aquaculture America 2006. Las Vegas, NV.

The Effects of Aquaculture Noise on the Growth and Survival of Rainbow Trout. Aquaculture America 2006. Las Vegas, NV.

Commercial Scale Growout of Arctic char using Recirculating Systems Technology. Aquaculture America 2004. Honolulu, Hawaii.

Solids Removal from a Coldwater Recirculating System: Comparison of a Swirl Separator and a Radial Flow Settler. 5th International Conference on Recirculating Aquaculture, July 2004, Roanoke, VA.

Solids Flushing, Mixing, and Water Velocity Profiles within Large Circular Dual Drain Tanks for Salmonid Culture. Aquaculture Engineering Society Issues Forum, 2003. Seattle, WA.

Growth Performance of a Yukon Gold x Tree Rivers Arctic Char and a Yukon Gold Arctic Char at 12 – 14 °C. Aquaculture America, San Diego, CA.

Other Accomplishments

Identified and coordinated donations of food-size rainbow trout and Arctic char to local rescue missions in Martinsburg (WV), Winchester (VA), Hagerstown (MD), and Frederick (MD), which led to collaboration with the Federation of Virginia Food Banks and the donation of over 200,000 pounds of fish to their program.

