DAVID B. ARSCOTT, Ph.D., President, Executive Director, Research Scientist

Stroud Water Research Center, 970 Spencer Road, Avondale, PA 19311

Email: darscott@stroudcenter.org; Tel (o): 610-268-2153 x 278; Tel (c): 484-885-5225

Web: https://stroudcenter.org/people/arscott/

Professional Experience

2018-Present President, Stroud Water Research Center

2017-Present Executive Director, **Stroud Water Research Center** 2011-2017 Vice President, **Stroud Water Research Center**

2011-Present Adjunct Faculty, Dept. Biology, University of Pennsylvania

2009-2016 Assistant Director, Research Scientist, Stroud Water Research Center

Administrative: manage, coordinate, and facilitate scientific research; public outreach; develop and oversee institutional budgets; fundraising; marketing; develop and oversee human resource policies; assist with center-wide grant reporting requirements

Research: aquatic invertebrate ecology; water resource monitoring program development; tropical river ecology; riparian and wetland ecology; ecohydrology; landscape ecology; surface-groundwater interactions;

2006-2009 Freshwater Ecologist, National Institute for Water and Atmospheric Research (NIWA), Christchurch, New Zealand

Research: aquatic invertebrate ecology of gravel-bed rivers and riparian wetlands, water allocation, ecohydrology (flow-biota relationships in rivers), landscape ecology, surface-groundwater interactions, Antarctic ecology Supervisor: Dr. Brian Sorrell

2003-2006 Research Scientist/Project Coordinator, Stroud Water Research Center

Research: water quality research for New York City's water supply, invertebrate ecology, riparian and wetland ecology, water resources management Supervisors: Dr. Charles L. Dow and Dr. Bernard W. Sweeney

2002-2003 Research Assistant Professor at the **University of Minnesota, Crookston**, Center for Agriculture and Natural Resources, Crookston, MN, USA

Research and Teaching Topics: sustainable development of NW Minnesota natural resources, conservation and management of freshwater ecosystems, riparian and wetland ecology and management, fisheries management

Supervisor: Dr. John P. Loegering

1994-1995 **Student Conservation Association** Resource Assistant Internship with the US Forest Services Fisheries and Wildlife Division, Ketchikan Rangers District, Alaska *Activities*: Basin-wide fish habitat surveys, stream water quality determinations for timber harvest, fish ladder handler

Education

1998-2002 Ph.D. in Natural Sciences, **Swiss Federal Institute of Environmental Science** and **Technology** (ETH/EAWAG) in Zurich, Switzerland

Dissertation Title: Habitat heterogeneity & aquatic invertebrates along an Alpine floodplain river

Supervisors: Prof. Dr. James V. Ward and Dr. Klement Tockner

1995-1997 M.S. in Water Resources Management, University of New Hampshire

Thesis Title: Primary production in a 4th order arctic stream

Supervisor: Dr. William Breck Bowden

Teaching and Teaching Assistantships

- 2018-present University of Pennsylvania Course lecturer Introduction to Freshwater Ecology (Department of Biology, Bio 415)
 2010-2018 University of Pennsylvania Course coordinator and lecturer Introduction to Freshwater Ecology (Department of Biology, Bio 415)
- 2003-2006 University of Pennsylvania Guest Lectures for Primer in Stream Ecology and Introduction to Freshwater Ecology (Environmental Studies Program)
- 2002-2003 University of Minnesota, Crookston Assistant Professor, Dept. of Natural Resources Wetland and Riparian Ecology and Management; Principles of Fisheries Management; Water Resources Management: Special Topics Seminar Series
- 1998-2001 Swiss Federal Institute for Science and Technology Teaching Assistant in the Dept. of Limnology, EAWAG Biostatistics; Aquatic Invertebrate Ecology and Taxonomy
- 1995-1997 University of New Hampshire Teaching Assistant in the Dept. of Natural Resources Introduction to Water Resources Management; Conservation of Natural Resources

Professional Activities

Publications (most recent sorted to top)

https://scholar.google.com/citations?user=FnLEvLkAAAAJ&hl=en

- Ensign, S., **D.B. Arscott**, S. Hicks, A.K. Aufdenkampe, T. Muenz, J. Jackson, D. Bressler. (submitted 2018). A digital mayfly swarm is emerging. EOS.
- Freedman, P., **D.B.** Arscott, S. Haag, K. Hall. (in-press 2018). Data and models help define effective strategies in the Delaware River Watershed Initiative. Water Resources Impact.
- Richardson, D.C., I.A. Oleksy, T.J. Hoellein, **D.B. Arscott**, C.A. Gibson, S.M. Root. 2014. Habitat characteristics, temporal variability, and macroinvertebrate communities associated with a mat-forming nuisance diatom (*Didymosphenia geminata*) in Catskill Mountain streams, New York. Aquatic Sciences. 76(4):553-564.
- Gallardo, B., S. Dolédec, A. Paillex, **D.B. Arscott,** F. Sheldon, F. Zilli, S. Merigoux, E. Castella, F.A. Comín. 2014. Response of benthic macroinvertebrates to gradients in hydrological connectivity: a comparison of temperate, subtropical, Mediterranean and semiarid river floodplains. Freshwater Biology. 59:630-648. DOI:10.1111/fwb.12292.
- Lessard, J., D.M. Hicks, T.H. Snelder, **D.B. Arscott**, S.T. Larned, D. Booker, A.M. Suren. 2013. Dam design can impede adaptive management of environmental flows: a case study from the Opuha Dam, New Zealand. Environmental Management. 51(2):459-473. DOI 10.1007/s00267-012-9971-x.
- Datry T., **D.B. Arscott**, S. Sabater. 2011. Recent Perspective on temporary river ecology. Aquatic Sciences 73(4): 453-457.
- Hawes, I., K. Safi, B. Sorrell, J. Webster-Brown, **D.B. Arscott.** 2011. Summer-winter transitions in Antarctic ponds: I. The physical environment. Antarctic Science. 23(3):235-242.
- Hawes, I., K. Safi, J. Webster-Brown, B. Sorrell, **D.B. Arscott**. 2011. Summer-winter transitions in Antarctic ponds: II. Biological responses. Antarctic Science. 23(3):243-254.

- **Arscott, D.B.,** S.T. Larned, M. Scarsbrook, P. Lambert. 2010. Aquatic invertebrate community structure along an intermittence gradient: Selwyn River, New Zealand. Journal of the North American Benthological Society. 29(2):530-545.
- Larned, S.T., **D.B. Arscott**, J. Schmidt, J.C. Diettrich. 2010. A framework for analyzing longitudinal and temporal variation in river flow and developing flow-ecology relationships. Journal of the American Water Resources Association (JAWRA). 1-13. DOI:10.1111/j.1752-1688.2010.00433.x
- Larned, S.T., T. Datry, **D.B. Arscott**, K. Tockner. 2010. Emerging concepts in temporary-river ecology. Freshwater Biology. 55(4):717-738
- Schmidt, J., S.T. Larned, **D.B. Arscott**, J.C. Diettrich. 2009. Hydrological indices for quantifying ecologically relevant flow conditions in intermittent alluvial plain rivers. Pages 94-102 in M. Thoms, K. Heal, E. Bogh, A. Chambel, V. Smakhtin (editors). Ecohydrology of Surface and Groundwater Dependent Systems: Concepts, Methods, and Recent Developments. Proceedings of symposium JS1 held at the Joint IAHS & IAH Convention, Hyderabad, India, 6-12 September 2009. IAHS Publ. 328, 2009, 94-102.
- Larned, S.T., D.M. Hicks, J. Schmidt, A.J.H. Davey, K. Dey, M. Scarsbrook, **D.B. Arscott**, R.A. Woods. 2008. The Selwyn River of New Zealand: A benchmark system for alluvial plain rivers. River Research and Applications. 24:1-24.
- Rupp, D.E., S.T. Larned, **D.B. Arscott**, J. Schmidt. 2008. Reconstruction of a longitudinally-continuous daily flow record for a mid-reach drying river. Journal of Hydrology 359:88-104.
- **Arscott, D.B.,** J.K. Jackson, E.B. Kratzer. 2006. Role of rarity and taxonomic resolution in a regional and spatial analysis of stream macroinvertebrates. Journal of the North American Benthological Society 25:977-997.
- Arscott, D.B., C.L. Dow, B.W. Sweeney. 2006. Landscape template of New York City's drinking-water-supply watersheds. Journal of the North American Benthological Society 25:867-886
- Aufdenkampe, A.K., L.J. Standley, C.L. Dow, **D.B. Arscott**. 2006. Molecular tracers of soot and sewage contamination in streams supplying NYC drinking water. Journal of the North American Benthological Society 25:928-953.
- Blaine, J.G., B.W. Sweeney, **D.B. Arscott**. 2006. Enhanced source-water monitoring for New York City: historical framework, political context, and project design. Journal of the North American Benthological Society 25:851-866.
- Bott, T.L., J.D. Newbold, **D.B. Arscott**. 2006. Ecosystem metabolism in Piedmont streams: The influence of riparian vegetation is modulated by reach geomorphology. Ecosystems 9:398-421.
- Bott, T.L., D.S. Montgomery, **D.B. Arscott**, C.L. Dow. 2006. Primary productivity in receiving reservoirs: links to influent streams. Journal of the North American Benthological Society 25:1045-1061.
- Bott, T.L., D.S. Montgomery, J.D. Newbold, **D.B. Arscott**, C.L. Dow, A.K. Aufdenkampe, J.K. Jackson, L.A. Kaplan. 2006. Ecosystem metabolism in streams of the Catskill Mountains (Delaware and Hudson River watersheds) and Lower Hudson Valley. Journal of the North American Benthological Society 25:1018-1044.
- Dow, C.L., **D.B. Arscott**, & J.D. Newbold. 2006. Relating major ions and nutrients to watershed conditions across a mixed-use, water-supply watershed. Journal of the North American Benthological Society 25:887-911.
- Kratzer, E.B., J.K. Jackson, **D.B. Arscott**, A.K. Aufdenkampe, C.L. Dow, L.A. Kaplan, J.D. Newbold, B.W. Sweeney. 2006. Macroinvertebrate distribution in relation to land use and water chemistry in New York City drinking-water-supply watersheds. Journal of the North American Benthological Society 25:954-976.
- Sweeney, B.W., **D.B. Arscott**, C.L. Dow, J.G. Blaine, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold. 2006. Enhanced source-water monitoring for New

- York City: summary and perspective. Journal of the North American Benthological Society 25:1062-1067.
- **Arscott, D.B.**, K. Tockner, J.V. Ward. 2005. Lateral organization of aquatic invertebrates along the continuum of a braided-floodplain river (Tagliamento River, NE Italy). Journal of the North American Benthological Society 24:934-945.
- Kaiser, E., **D.B. Arscott**, K. Tockner, B. Sulzberger. 2004. Transformations and discharge of organic carbon and nitrogen in the Tagliamento River, Italy. Aquatic Sciences Research Across Boundaries 66:103-116.
- **Arscott, D.B.**, K. Tockner, J.V. Ward. 2003. Spatio-temporal patterns of benthic invertebrates along the river continuum of a braided Alpine river (Tagliamento River, NE Italy). Archiv für Hydrobiologie 158:431-460.
- **Arscott, D.B.,** B. Keller, K. Tockner, J.V. Ward. 2003. Habitat structure and Trichoptera diversity in 2 headwater flood plains, N.E. Italy. International Review of Hydrobiology 88: 255-273.
- Tockner, K., J.V. Ward, **D.B. Arscott**, P.J. Edwards, J. Kollmann, A.M. Gurnell, G.E. Petts, B. Maiolini. 2003. The Tagliamento River: A model ecosystem of European importance. Aquatic Sciences 65:239-253.
- Arscott, D.B., R. Glatthaar, K. Tockner, J.V. Ward. 2002. Larval blackfly distribution and diversity along a braided floodplain river in the Alps (Tagliamento River, Italy). Verhandlungen Internationale Vereinigung Limnologie 28:524-531.
- **Arscott, D.B.,** K. Tockner, D. van der Nat, J.V. Ward. 2002. Geomorphic dynamics and aquatic habitat structure along a braided Alpine river (Tagliamento River, N.E. Italy). Ecosystems 5:802-814.
- Ward, J.V., K. Tockner, **D.B. Arscott**, C. Claret. 2002. Riverine landscape diversity. Freshwater Biology 47: 517-539.
- **Arscott, D.B.,** K. Tockner, J.V. Ward. 2001. Thermal heterogeneity along a braided floodplain river in the Alps (Tagliamento River, N.E. Italy). Canadian Journal of Fisheries and Aquatic Sciences 58: 2359-2373.
- Wollheim, W.M., B.J. Peterson, L.A. Deegan, J.E. Hobbie, B. Hooker, W.B. Bowden, K.J. Edwardson, **D.B. Arscott**, A.E. Hershey. 2001. Influence of stream size on ammonium and suspended particulate nitrogen processing. Limnology and Oceanography 46: 1-13.
- **Arscott, D.B.,** K. Tockner, J.V. Ward. 2000. Aquatic habitat diversity along the corridor of an Alpine floodplain river (Fiume Tagliamento, Italy). Archiv für Hydrobiologie 49: 679-704.
- **Arscott, D.B.,** W.B. Bowden, J.C. Finlay. 2000. Effects of desiccation and temperature/irradiance on the metabolism of 2 arctic stream bryophyte taxa. Journal of the North American Benthological Society 19: 263-273.
- Stream Bryophyte Group. 1999. Roles of bryophytes in stream ecosystems. Journal of the North American Benthological Society 18:151-184.
- **Arscott, D.B.,** W.B. Bowden, J.C. Finlay. 1998. Comparison of epilithic algal and bryophyte metabolism in an arctic tundra stream, Alaska. Journal of the North American Benthological Society 17: 210-227.

Client Reports

- Arscott, D.B., C.L. Dow. 2015. Expert Report: Physical, Chemical and Biological Connections Between Headwater Aquatic Habitats Associated with the Neal Run Crossing Property and Downstream Navigable Waters in Wood County, WV. Prepared for the U.S. Department of Justice, Environment and Natural Resources Division on 22 June, 2015 for Case No. 2:14-cv-16744 (S.D.W.V.), Ron Foster et al. V. U.S. EPA et al. Stroud Report #: SWRC2015004.
- **Arscott, D.B.**, W.H. Eldridge. 2015. Draft Report. Expert Report: Physical, Chemical and Biological Connections Between a Headwater Wetland Complex and Downstream Waters

- Associated with the Great Plains Property in Mentor, OH. Perpared for the U.S. Department of Justice, Environment and Natural Resources Division on 6 March 2015 for Case No. 1:11-cv-2039, United States v. Richard M. Osborne, Sr., et al.
- Eldridge, W.H., **D.B. Arscott**, B.W. Sweeney. 2012. Evaluating threats to humans and aquatic ecosystems posed by agriculture around the Rio Sierpe, Costa Rica. SWRC Report 2012009.
- Eldridge, W.H., **D.B. Arscott**, J.K. Jackson. 2012. Review of the 2012 proposed water quality criteria for chloride for the protection of aquatic life in Pennsylvania. Prepared for Clean Water Action, Pennsylvania. SWRC Report No. 2012007.
- Eldridge, W.H., **D.B. Arscott,** J.K. Jackson. 2010. Stroud Water Research Center Expert Report on the Proposed Rulemaking by the Pennsylvania Environmental Quality Board [25 PA. CODE CH. 93] for Ambient Water Quality Criterion; Chloride (Ch) [40 Pa.B. 2264] [Saturday, May 1 2010]. Prepared for the University of Pittsburgh Environmental Law Clinic. SWRC Report 2010004.
- Kaplan, L.A., W.H. Eldridge, **D.B. Arscott**. 2010. Stroud Water Research Center comments on potential for MARC I Hub Lin to impact water resources. Prepared for EarthJustice. December 2010.
- **Arscott, D.B.,** W. Eldridge, B.W. Sweeney. 2010. A preliminary water quality study of the Rio Sierpe and its tributaries (Costa Rica). Prepared for the Blue Moon Foundation. SWRC Report 2010001.
- Sweeney, B.W., L.A. Kaplan, **D.B. Arscott**. 2009. Expert Report: Physical, Chemical, and Biological Connections Between a Headwater Wetland Complex and Downstream Waters. US Dept. Of Justice. SWRC Report 2009010. Other authors: A.K. Aufdenkampe, W. Eldridge, J.D. Newbold. Prepared for the Environmental Defense Section of the U.S. Department of Justice. United States vs. David Donovan, No. 96-484.
- Arscott, D.B, C. Kilroy, K. Shearer. 2009. Benthic and drifting macroinvertebrate community response to the incursion of *Didymosphenia geminata* in the Opuha River (2006-2008). Prepared by Stroud Water Research Center and NIWA Ltd. for N.Z. Department of Conservation. October 2009. NIWA Client Report CHC2009-177. NIWA Project: DOC09505.
- **Arscott, D.B.,** B. Crocker. 2008. Tongariro Power Scheme river monitoring programme: summary of results (2007-08). Prepared by NIWA Ltd. for Genesis Energy Ltd. July 2008. NIWA Client Report CHC2008-081.
- **Arscott, D.B.** 2008. Interim update: Flushing-flows for the management of nuisance periphyton growth in the Opuha River, New Zealand (2004-2006). Prepared by NIWA Ltd. for Opuha Water Partnership. March 2008. NIWA Client Report CHC2008-017.
- **Arscott, D.B.**, B. Crocker, M. Whiting. 2007. Tongariro Power Scheme river monitoring programme: summary of results (2006-07). Prepared by NIWA Ltd. for Genesis Energy Ltd. September 2007. NIWA Client Report CHC2007-116.
- **Arscott, D.B.**, D.J. Kelly, E. Tuck. 2007. Flushing-flows for the control of nuisance periphyton growth in the Opuha-Opihi River system (2004-2006). Prepared by NIWA Ltd. for Alpine Energy Ltd. April 2007. NIWA Client Report CHC2007-034.
- Larned, S., **D.B. Arscott**, N. Blair, B. Jarvie, D. Jellyman, K. Lister, M. Schallenberg, S. Sutherland, K. Vopel, B. Wilcock. 2007. Ecological studies of *Didymosphenia geminata* in New Zealand, 2006-07. Prepared by NIWA Ltd. for MAF Biosecurity New Zealand. Client Report CHC2007-070, NIWA Ltd., Christchurch, NZ.
- Sweeney, B.W., **D.B. Arscott**, C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold. 2008. Water quality monitoring in the source areas for New York City: An integrative watershed approach. A final report on monitoring activities 2000-2005. Report SWRC Contribution No. 2008006.
- Sweeney, B.W., **D.B.** Arscott, C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold. 2005. Water quality monitoring in the source areas for New York City: An integrative watershed approach. A report on year 5 monitoring activities (2004).

- Prepared by the Stroud Water Research Center for New York Department of Environmental Conservation. 27 October 2005. Report SWRC Contribution No. 2005007.
- Sweeney, B.W., **D.B. Arscott**, C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold. 2004. Water quality monitoring in the source areas for New York City: An integrative watershed approach. A report on year 4 monitoring activities (2003). Prepared by the Stroud Water Research Center for New York Department of Environmental Conservation. 31 August 2004. Report SWRC Contribution No. 2004009.
- Sweeney, B.W., **D.B. Arscott**, C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold. 2004. Water quality monitoring in the source areas for New York City: An integrative watershed approach. A report on Phase I of Monitoring (2000-2002). Prepared by the Stroud Water Research Center for New York Department of Environmental Conservation. 30 July 2004. Report SWRC Contribution No. 2004008.

First Author Presentations and Published Abstracts at Professional Conferences

- Arscott, D.B., S. Hicks, S. Ensign, D. Bressler, S. Damiano, T. Muenz, A. Aufdenkampe, J. Horsburgh. 2018. An Open-Source Solution for Using Environmental Sensors to Monitor Water Quality with Real-Time Access to Data. Annual Conference of the American Water Resources Association. Baltimore, MD. (Oral Presentation).
- Arscott, D.B., A. Aufdenkampe, D. Tarboton, B. Evans, S. Haag, S. Kerlin, M. Daniels, A. Robbins. 2018. Model My Watershed[®]: A web application for modeling stormwater runoff and water quality. 2018 Chesapeake Community Research and Modeling Symposium. Annapolis, MD. (Oral Presentation).
- Arscott, D.B., A.K. Aufdenkampe, D. Tarboton, B. Evans, S. Haag, A. Robbins, M. McFarland, S. Kerlin, M. Daniels. 2018. Model My Watershed®: A web application for modeling stormwater runoff and water quality. AWRA 2018 Spring Specialty Conference. GIS & Water Resources X: Spatial Analysis of Watershed Ecological, Hydrological, and Societal Responses. April 22-25 Orlando, Fl. (Oral Presentation).
- Arscott, D.B., D. Bressler, S. Hicks. 2017. Do-It-Yourself, Real-Time, Low-Cost Environmental Monitoring Solutions. Pennsylvania Statewide Watershed Conference. State College, PA. (Oral Presentation).
- Arscott, D.B., S. Hicks, D. Bressler, T. Muenz, S. Domiano, J. Kan, B.W. Sweeney, J.K. Jackson, and S. Kerlin. 2017. Utilizing open-source, low cost environmental monitoring solutions: examples from water quality studies, best management plan implementations, and environmental education programs. Annual Conference of the Society for Freshwater Science. Raleigh, NC. (Oral Presentation).
- Arscott, D.B., B.W. Sweeney, T.L. Bott, L.A. Kaplan, J.D. Newbold, J.K. Jackson, A.K. Aufdenkampe, C.L. Dow. 2012. Variation in water quality among streams providing drinking water for New York City. Second Catskill Environmental Research and Monitoring Conference. October 2012, Highmount, NY. (Oral Presentation)
- **Arscott, D.B.**, L.A. Kaplan, B.W. Sweeney, J.D. Newbold, J.K. Jackson, W.H. Eldridge, A.K. Aufdenkampe, T.L. Bott. 2011. Characterizing the physical chemical and biological connections between a headwater wetland complex and downstream navigable waters. Annual Conference of the North American Benthological Society. Providence, RI (Oral Presentation).
- Arscott, D.B. & S. Larned. 2010. Aquatic Invertebrate community structure in floodplain ponds along an intermittent-perennial New Zealand River. Annual Conference of the North American Benthological Society. Santa Fe, NM (Oral Presentation).
- **Arscott, D.B.,** S. Larned, L. Drummond, A. Savery. 2009. Invertebrate response to flow intermittency along a New Zealand stream. Invited seminar Department of Entomology, University of Georgia. October 2009.

- **Arscott, D.B.,** S. Larned, L. Drummond, A. Savery. 2009. Invertebrate response to flow intermittency along a New Zealand stream. Invited seminar Leibniz-Institute of Freshwater Ecology and Inland Fisheries. Sept. 2009.
- **Arscott, D.B.,** S. Larned, L.R. Drummond, D. Kelly. 2009. Invertebrate and periphyton response to flow variability and managed flushing-flows in the Opuha and Opihi Rivers, New Zealand. Annual Conference of the North American Benthological Society. Grand Rapids, MI (Oral Presentation).
- **Arscott, D.B.,** A. Savery, S. Larned. 2008. Aquatic invertebrates in a drying world: mobility, desiccation, and dissolved oxygen tolerance of 7 species. Annual Conference of the New Zealand Freshwater Sciences Society. New Plymouth, New Zealand. (Oral Presentation).
- **Arscott, D.B.,** S. Larned, D. Rupp, M. Scarsbrook, P. Lambert. 2008. Aquatic invertebrate community structure along an intermittent-perennial New Zealand River. Annual Conference of the North American Benthological Society. Salt Lake City, UT, USA. (Oral Presentation).
- Arscott, D.B., L.R. Drummond, S. Larned, J. Tunnicliff, M. Hicks, D. Kelly. 2007. Flushing-flows for the management of nuisance periphyton in the Opuha River, NZ. Annual Conference of the New Zealand Freshwater Society. Queenstown, New Zealand. (Oral Presentation).
- Arscott, D.B., J.K. Jackson, C.L. Dow, E.B. Kratzer, B.W. Sweeney, A.K. Aufdenkampe, J.D. Newbold, L.A. Kaplan, T.L. Bott. 2006. Macroinvertebrate community response along landuse gradients in the New York City drinking-water-supply watersheds. Annual Conference of the New Zealand Freshwater Sciences Society. Rotorua, New Zealand. (Oral Presentation).
- Arscott, D.B., J.K. Jackson, E.B. Kratzer, C.L. Dow, J.D. Newbold, A.K. Aufdenkampe, L.A. Kaplan, T.L. Bott, and B.W. Sweeney. 2006. Using macroinvertebrate communities to assess anthropogenic impacts in New York City's surface water supply catchments. Annual Conference of the North American Benthological Society. Anchorage, AK, USA. (Oral Presentation).
- Arscott, D.B., C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold, and B.W. Sweeney. 2005. Enhanced Water Quality Monitoring in the New York City Drinking Water Supply Watersheds. Invited Speaker Institute for Ecosystem Studies, Millbrooke, NY, USA.
- **Arscott, D.B., J.K. Jackson,** E.B. Kratzer. 2005. Order, family, genus, species: How does choice of taxonomic resolution effect multivariate statistical outcome? Annual Conference of the North American Benthological Society. New Orleans, LA, USA. (Oral Presentation)
- Arscott, D.B., C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold, and B.W. Sweeney. 2005. Enhanced Water Quality Monitoring in the New York City Drinking Water Supply Watersheds. Invited Seminar Speaker University of Minnesota, St. Paul, USA. Graduate Program of Water Resources Science.
- Arscott, D.B., E.B. Kratzer, J.K. Jackson, C.L. Dow, J.D. Newbold, A.K. Aufdenkampe, L.A. Kaplan, B.W. Sweeney. 2004. Stream macroinvertebrate communities and their relationships to dominant land cover/uses and water chemistry in the NYC source water areas. Joint Meeting of the American Entomological Society and the Entomological Society of Pennsylvania (81st Meeting). Avondale, PA, USA. (Invited Oral Presentation).
- Arscott, D.B., E.B. Kratzer, J.K. Jackson, C.L. Dow, J.D. Newbold, A.K. Aufdenkampe, L.A. Kaplan, B.W. Sweeney. 2004. Stream macroinvertebrate communities and their relationships to dominant land cover/uses and water chemistry in the NYC source water areas. 2nd Annual New York City Watershed Science and Technical Conference. Fishkill, NY, USA. (Oral Presentation).
- Arscott, D.B., C.L. Dow, A.K. Aufdenkampe, T.L. Bott, J.K. Jackson, L.A. Kaplan, J.D. Newbold, and B.W. Sweeney. 2004. Enhanced Water Quality Monitoring in the New York

- City Drinking Water Supply Watersheds. Invited Seminar Speaker University of Minnesota, Crookston Dept. of Natural Resources, Crookston, MN, USA.
- **Arscott, D.B.**, E.B. Kratzer, J.K. Jackson. 2004. Examining rarity in a macroinvertebrate bioassessment database. Annual Conference of the North American Benthological Society. Vancouver, Canada. (Oral Presentation).
- **Arscott, D.B.,** K. Tockner, & J.V. Ward. 2003. Life in a Dynamic Floodplain River: The Tagliamento River, NE Italy. Invited Seminar Speaker North Dakota State University, Fargo, ND, USA. October 2003.
- Arscott, D.B., W. Goeken, & M. MacGregor. 2003. Basin-wide water quality monitoring efforts in the Red River of the North. Red River Basin Commission Annual Summit meeting. Winnipeg, Manitoba, Canada. (Oral Presentation).
- Arscott, D.B., K. Tockner, & J.V. Ward. 2002. Zoobenthos along lateral and longitudinal gradients in the Tagliamento River (N.E. Italy). Annual Conference of the North American Benthological Society, Pittsburg, PA, USA. (Oral Presentation).
- Arscott, D.B., A. Hindakova, K. Tockner, & J.V. Ward. 2001. Periphyton diversity and dynamics along longitudinal and lateral gradients in a floodplain river. Annual Conference of the North American Benthological Society, La Crosse, WI, USA. (Oral Presentation).
- Arscott, D.B., K. Tockner, & J.V. Ward. 2001. Influence of flooding along an Alpine river corridor. First International Symposium on Landscape Dynamics of River Corridors, Ascona, Switzerland. (Poster Presentation).
- Arscott, D.B., K. Tockner, & J.V. Ward. Pattern and process along an Alpine river: incorporating the lateral dimension. Invited Seminar Speaker National Institute for Water and Atmospheric Research (NIWA), Christchurch, New Zealand. March 2001.
- Arscott, D.B., K. Tockner, & J.V. Ward. Pattern and process along an Alpine river: incorporating the lateral dimension. Invited Seminar Speaker Cawthron Institute, Nelson, New Zealand. March 2001.
- Arscott, D.B., R. Glatthaar, K. Tockner, & J.V. Ward. 2001. Larval blackfly distribution and diversity along a braided floodplain river in the Alps (Tagliamento River, Italy). Societas Internationalis Limnologiae XXVIII Congress, Melbourne, Australia. (Oral Presentation).
- Arscott, D.B., B. Keller, K. Tockner, & J.V. Ward. 2000. Habitat structure and Trichoptera diversity in 2 headwater flood plains, N.E. Italy. River Bottom V Conference Proceedings, Lunz, Austria. (Oral Presentation).
- Arscott, D.B., K. Tockner, & J.V. Ward. 2000. Aquatic habitat turnover along the corridor of an Alpine floodplain river in N.E. Italy. American Society of Limnology and Oceanography, Copenhagen, Denmark. (Poster Presentation).
- Arscott, D.B., K. Tockner, & J.V. Ward. 1999. Aquatic habitat structure along the Tagliamento River corridor (N.E. Italy). Annual Conference of the North American Benthological Society, Duluth, MN, USA. (Oral Presentation).
- Arscott, D.B., W.B. Bowden, & J.C. Finlay. 1997. Stress effects on physiologically contrasting bryophytes in an arctic stream. Annual Conference of the North American Benthological Society, San Marcos, TX, USA. 14:85. (Oral Presentation).
- Arscott, D.B., W.B. Bowden, & J.C. Finlay. 1996. Production by bryophytes in aquatic ecosystems. Annual Conference of the North American Benthological Society, Kalisbell, MT, USA. (Oral Presentation).
- Arscott, D.B., W.B. Bowden, & J.C. Finlay. 1996. A comparison of primary production by epilithic algae and bryophytes in control and fertilized reaches of a tundra stream, Alaska. Annual Conference of the North American Benthological Society, Kalisbell, MT, USA. (Oral Presentation).

Other Collaborative Presentations and Published Abstracts (chronological)

- Aufdenkampe, A.K, D.G. Tarboton, J.S. Horsburgh, E. Mayorga, M. McFarland, **D.B. Arscott**. 2017. Model My Watershed: A high-performance cloud application for public engagement, watershed modeling and conservation decision support. AGU Fall Meeting. (Oral Presentation).
- Horsburgh, J.S., A.K. Aufdenkampe, **D. Arscott**, S.G. Damiano, S.D. Hicks. 2017. Low Cost, Open-Source, and Low-Power: But What to Do with the Data? AGU Fall Meeting. (Poster Presentation).
- Bondanza, D., **D. Arscott**, A. Aufdenkampe, D. Bressler, T. Muenz, P. Wise, S. Damiano, S. Kerlin. 2016. A curriculum for advancing do-it-yourself (DIY) environmental sensing networks to monitor water quality and quantity in streams and rivers. 2016 CUAHSI Biennial Symposium. Shepherdstown, WV. (Poster Presentation)
- Hicks, S, A.K. Aufdenkampe, J.S. Horsburgh, **D.B. Arscott**, T. Muenz, D.W. Bressler. 2016. Open source hardware solutions for low-cost, do-it-yourself environmental monitoring, citizen science, and STEM education. Annual Fall Meeting of the American Geophysical Union. San Francisco, CA.(Poster Presentation).
- Hicks, S, A.K. Aufdenkampe, **D.B. Arscott.** 2016. Do-It-Yourself, real-time, low cost environmental monitoring solutions and forum EnviroDIY.org. Annual Watershed Congress on the Schuylkill River. Pottstown, PA. (Oral Presentation)
- Aufdenkampe, A.K., S.E. Gill, B. Sweeney, M. Daniels, **D. Arscott**, T. Muenz, B. Evans, R. Cheetham, E. Mayorga, D. Tarbotton, J.S. Horsburgh, N.I. Marcum-Dietrich, C. Staudt. 2015. WikiWatershed: A cyber-enabled community co-advancing knowledge & stewardship of freshwater. Invited Presenter & Panelist for the People-Power: Citizen Science and Water Quality Symposium at the North American Association for Environmental Education (NAAEE) 44th Annual Conference, Oct. 15-18, San Diego, CA. (Oral Presentation)
- Datry, T., **D.B. Arscott**, M. Bogan, K. Fritz, S.T. Larned, A. Santos, P.J. Wood. 2012. Across-continental comparison of the effects of flow intermittence on benthic invertebrate assemblages. Society for Freshwater Science. Louisville, KT. (Oral Presentation).
- Lessard, J.L., **D.B. Arscott**, D.J. Booker, D.M. Hicks, S.T. Larned, T.H. Snelder, & A.M. Suren. 2012. Dam design can impede adaptive management of environmental flows: a case study from the Opuha Dam, New Zealand. Society for Freshwater Science. Louisville, KT. (Oral Presentation).
- Achterberg, L.A., M. Redfield, D.C. Richardson, T.J. Hoellein, S. Root, **D.B. Arscott**. 2011. Macro and micronutrient influences on *Didymosphenia geminata* (didymo) growth in the newly invaded stream Esopus Creek, NY. Annual Conference of the North American Benthological Society. Providence, RI, USA. (Poster Presentation).
- Richardson, D.C., L.A. Achterberg, M. Redfield, S. Root, **D.B. Arscott**, C. Gibson, T.J. Hoellein. 2011. Rock snot in a sick river: *Didymosphenia geminata* (didymo) blooms and water chemistry in Esopus Creek, Catskill Mountains, NY. Annual Conference of the North American Benthological Society. Providence, RI, USA. (Poster Presentation).
- Richardson, D.C., L.A. Achterberg, M. Redfield, S. Root, **D.B. Arscott**, C. Gibson, T.J. Hoellein. 2010. Rock snot in a sick river: What causes didymo blooms in Esopus Creek? Catskill Conference. (Poster Presentation).
- Datry, T., S. Larned, **D.B. Arscott**, P. Lambert. 2009. Distribution of benthic and hyporheic invertebrates along a flow permanence gradient in a New Zealand alluvial river. Annual Conference of the American Society of Limnology and Oceanography. Nice, France. (Oral Presentation).
- Schmidt, J., S. Larned, **D.B. Arscott**, J. Diettrich, & D. Rupp. 2009. Hydrological indices describing longitudinal and temporal flow variations in intermittent river systems for

- quantifying hydrology ecology interactions. 2nd International Multidisciplinary Conference on Hydrology and Ecology. Vienna, Austria. (Oral Presentation).
- Datry, T., S. Larned, **D.B. Arscott**, A. Savery, & C. Robinson. 2008. Hyporheic invertebrate responses to drying and rewetting in an intermittent river: from natural to laboratory experiments. Annual Conference of the North American Benthological Society. Salt Lake City, UT, USA. (Oral Presentation).
- Hawes, I., B. Sorrell, **D.B. Arscott**, K.Safi. 2008. International Polar Year: From the heat of the summer to life in the cold and dark. Annual Antarctica New Zealand Conference. Dunedin, New Zealand. (Oral Presentation delivered by B. Sorrell)
- Hawes, I., B. Sorrell, K.Safi, J. Webster-Brown, **D.B. Arscott**, C. Howard-Williams. 2008. International Polar Year: Ecosystem processes during early winter freezing in Antarctic meltwater ponds. Annual Antarctica New Zealand Conference. Dunedin, New Zealand. (Poster Presented by **D.B. Arscott**)
- Larned, S.T., **D.B. Arscott**, J. Diettrich, David Rupp, & Jochen Schmidt. 2008. A conceptual-empirical framework for intermittent river research. Annual Conference of the North American Benthological Society. Salt Lake City, UT, USA. (Oral Presentation).
- Safi, K., I. Hawes, B. Sorrell, & **D.B. Arscott**. 2008. Antarctic pond life during the extended season: the phytoplankton and bacterial story. Annual Conference of the New Zealand Freshwater Sciences Society. New Plymouth, NZ. (Oral Presentation).
- Larned, S.T., **D.B. Arscott**, & D. Rupp. 2007. Intermittence controls ecological communities and processes in the Selwyn River, New Zealand. Annual Conference of the New Zealand Freshwater Sciences Society. Queenstown, New Zealand. (Oral Presentation).
- Rupp, D.E., **D.B.** Arscott, S.T. Larned, & J. Schmidt. 2007. Reconstructing two decades of aquatic invertebrate diversity and density along an alluvial plain river. Annual Conference of the American Geophysical Union. (Poster Presentation).
- Bott, T.L., D. Montgomery, J.D. Newbold, **D.B. Arscott**, & C.L. Dow. 2006. Algal biomass and metabolic rates in New York City drinking water reservoirs and tributary streams. Annual Conference of the North American Benthological Society. Anchorage, AK, USA. (Oral Presentation).
- Carter, L.G., A.K. Aufdenkampe, **D.B. Arscott,** & C.L. Dow. 2006. Analysis of PAH and fecal steroid patterns to distinguish contamination sources to water supplies. Annual Conference of the North American Benthological Society. Anchorage, AK, USA. (Oral Presentation).
- Dow, C.L., **D.B. Arscott**, A. K. Aufdenkampe, T.L. Bott, L.G. Carter, J.K. Jackson, L.A. Kaplan, J.D. Newbold, & B.W. Sweeney. 2006. Enhanced monitoring effort in New York City's drinking-water-supply watershed. Annual Conference of the North American Benthological Society. Anchorage, AK, USA. (Oral Presentation).
- Kratzer, E.B., J.K. Jackson, **D.B. Arscott**, A.K. Aufdenkampe, C.L. Dow, L.A. Kaplan, B.W. Sweeney. 2004. Factors affecting the distribution of macroinvertebrates in the New York City drinking water watersheds. Annual Conference of the North American Benthological Society, Vancouver, Canada. (Oral Presentation).
- Loegering, J.P., & **D.B. Arscott**. 2003. Economic impacts of nature-based recreation in northwest Minnesota. The Wildlife Society Tenth Annual Conference, Burlington, Vt, USA. (Oral Presentation).
- Schmidt, A.P., D. van der Nat, **D.B. Arscott**, K. Tockner, & J.V. Ward. 2000. Inundation dynamics in an island- and a bar-braided flood plain (Tagliamento, N.E. Italy). River Bottom V Conference Proceedings, Lunz, Austria. (Poster Presentation).
- Edwardson, K.J., W.B. Bowden, K. Slavik, **D.B. Arscott**, B.J. Peterson, & W. Schofield. 1998. Biogeochemistry of spring streams in the tundra foothills, North Slope, Alaska. Bulletin of the North American Benthological Society. Prince Edward Island, Canada. (Oral Presentation).

- Slavik, K., B.J. Peterson, **D.B. Arscott**, W.B. Bowden, & R.L. Lowe. 1998. Comparison of primary production in spring, mountain, and tundra streams on the North Slope of Alaska. Annual Conference of the North American Benthological Society. Prince Edward Island, Canada. (Poster Presentation).
- Wollheim, W.M., J.C. Finlay, B.J. Peterson, W.B. Bowden, & D.B. Arscott. 1996. Nitrogen uptake by bryophytes in reference and fertilized reaches of an arctic tundra river. Annual Conference of the North American Benthological Society. 13:120. (Oral Presentation).

Grants and Contracts

- DRWI Phase 2: Support for monitoring, citizen science, data loggers, watershed modeling, & agricultural restoration. Funded by: William Penn Foundation. Principal Investigators: M.J. Ehrhart, J.K. Jackson, and **D.B. Arscott**. \$1.45 million; 2018-2020.
- WikiWatershed: A web toolkit for advancing water quality restoration in the Delaware River Basin. Funded by William Penn Foundation. Principal Investigators: D.B. Arscott, A.K. Aufdenkampe. Collaborators: M.D. Daniels, S. Kerlin, D. Tarboton, B. Evans, S. Haag. \$1.59 million; 2018-2020.
- Supporting Citizen Science Within the Delaware River Watershed Initiative Cluster Teams. Funded by: William Penn Foundation. Principal Investigators: M.J. Ehrhart, J.K. Jackson, and **D.B. Arscott**. Collaborators: B.W. Sweeney, J. Kan, M.D. Daniels, and A.K. Aufdenkampe. \$2.5 million; 2015-2017.
- Brandywine Stream Stewards: Community Action in Support of Healthy Waters. Funded by: William Penn Foundation. Principal Investigators: J.K. Jackson and M.J. Ehrhart. Collaborators: J. Kan, M.D. Daniels, **D.B. Arscott** and A.K. Aufdenkampe; The Nature Conservancy Delaware Chapter. 2015-2017.
- 2015 Brandywine Trek at Point Lookout. Funded by: Point Lookout Foundation. Project Lead: **D.B. Arscott.** Collaborators: T. Muenz; J. Berry (Coatesville Youth Initiative); S. Prestowitz (UrbanPromise, Wilmington)
- Collaborative Research: Introducing Critical Zone Observatory (CZO) science to students and teachers. Funded by: National Science Foundation. Pls: A.K. Aufdenkampe; T.S. White (The Pennsylvania State University), S. Gill. Collaborators: T. Muenz, **D.B. Arscott,** J. Kan, M. Daniels, and H. Brooks (Stroud Water Research Center); H. Michael (University of Delaware); J. Pizzuto (University of Delaware). 2014-2016.
- Consortium for Scientific Assistance to Watersheds (C-SAW). Funded by: Pennsylvania Department of Environmental Protection's Growing Greener Program. Project Leads: D. Arscott and T. Muenz. Collaborators: Alliance for Aquatic Resource Monitoring at Dickinson College; Conemaugh Valley Conservancy; Delaware Riverkeeper Network; Pennsylvania Lake Management Society; United States Geological Survey; Pocono Northeast Resource Conservation and Development Council
- Expert Report and Witness: Characterizing Stream Connections and Physical, Chemical, Biological Influences on Downstream Navigable Waters. Funded by: U.S. Department of Justice. U.S. Dept. of Justice in the matter of Foster et al. v. EPA et al., No. 2:12-cv-16744 (S.D.W.V.). \$42,020 over 1 year. Addendum \$14,442 for 6 months. Pls: D.B. Arscott and C.L. Dow.
- Long-Term Research in Environmental Biology (LTREB): Trajectory for the Recovery of Stream Ecosystem Structure and Function During Reforestation. Funded by: National Science Foundation DEB 1052716. Principal Investigators: B.W. Sweeney, A.K. Aufdenkampe, J.K. Jackson, J. Kan, and M. Daniels. Collaborators: J.D.. Newbold, **D.B. Arscott**, C.L. Dow, S.E. Gill, L.A. Kaplan, and W.H. Eldridge. \$900,000. 2010-2020.

- Pathogen and Water-Quality Monitoring at White Clay Creek. Funded by: United Water Delaware and Suez Environment. Principal Investigators: J. Kan and D.B. Arscott. \$220,000. 2015-2016. Collaborators: J.K. Jackson; K. Jellison (Lehigh University); J. Dyksen (United Water Delaware).
- Restoring Flood Attenuation and Ecological Resiliency in the Mid-Atlantic Piedmont. Funded by: National Fish and Wildlife Foundation. Principal Investigator: M.D. Daniels. Collaborators: B.W. Sweeney, **D.B. Arscott**, M.J. Ehrhart, W.H. Eldridge, J.K. Jackson, and S.E. Gill
- Improving Stream Water Quality and Reducing Runoff by Improving Farm Soil Health Through Permanent Cover Cropping. Funded by: U.S. Department of Agriculture. Principal Investigator: B.W. Sweeney. Collaborators: M.J. Ehrhart, A.K. Aufdenkampe, and D.B. Arscott. 2015-2017.
- Greening STEM Technologies: A model for advancing do-it-yourself (DIY) environmental sensing networks to support citizen science and primary and secondary education. United States Environmental Protection Agency. Grant writers: **D.B. Arscott**, T. Muenz. \$192,175. Awarded in late 2015 or early 2016.
- Improving Infrastructure for Data Access, Storage and Recovery, and Network Communications at the Stroud Water Research Center. United States National Science Foundation. \$54,745. Pls: **D.B. Arscott**, C.L. Dow. 2015-2016. Award No. 1522479.
- Stroud Water Research Center Streamside Classroom Project. E. Kneale Dockstader Foundation \$15,000. Grant writers: **D.B. Arscott**, Y.L. Arscott, T. Muenz. Project manager: **Arscott**. 2015-2016.
- Creating a Water Quality Monitoring Network and an Online Water Atlas for the ACOSA Region. Blue Moon Fund \$250,000. Pls: W.H. Eldridge; Co-Pl: B.W. Sweeney, **D.B. Arscott**. 2013-2015.
- Evaluating threats to humans and aquatic ecosystems posed by agriculture around the Rio Sierpe, Costa Rica. Blue Moon Fund \$150,000. (PI: W.H. Eldridge; Co-PI: B.W. Sweeney, D.B. Arscott). 2011-2013
- Christina River Basin Critical Zone Observatory (CRB-CZO): Quantifying Carbon Sequestration Resulting From Human-Induced Erosion. Funded by: National Science Foundation EAR 0724971 and 1331856. Principal Investigators: A.K. Aufdenkampe and L.A. Kaplan; J. Pizzuto and H. Michael (University of Delaware); K. Yoo (University of Minnesota). Collaborators: J. Kan, M.D. Daniels, **D.B. Arscott**, C.L. Dow, and S.E. Gill (Stroud Water Research Center); R. Aalto (University of Exeter, United Kingdom); L. Slater (Rutgers University); R. Vargas, C. Chan and D.L. Sparks (University of Delaware). 2010-2015.
- Expert Report and Witness to determine the physical, chemical, and biological connections between a headwater wetland complex and downstream waters near Painesville, OH. Awarded to the Stroud Water Research Center. The Environmental Defence Section of the U.S. Department of Justice. United States vs. R.M. Osborne, Sr., DJ# 90-5-1-1-18628. PI: D.B. Arscott, B.W. Sweeney. 2011-2013.
- Ashokan Watershed Stream Management Program mini grant program. 2011-2012. Didymosphenia geminata in Esopus Creek: Identification of bloom locations and dissemination of decontamination methods to citizens and scientists. PI: D. Richardson (SUNY New Paltz) Collaborators: T. Hoellein (Baruch College); D.B. Arscott (Stroud Water Research Center); Catherine Gibson (Skidmore College). \$5,000.
- Water Resources Research Grant, NYS Water Resources Institute 2010-2011. Rock snot in sick rivers: What are the environmental drivers controlling blooms of the invasive diatom *Didymosphenia geminata* in the Northeastern and Mid-Atlantic United States? PI: D.

- Richardson (SUNY New Paltz) Collaborators: T. Hoellein (Baruch College); **D.B. Arscott** (Stroud Water Research Center); Catherine Gibson (Skidmore College). \$20,000
- Statement of Work: Development of an educational tool to better understand the physical, chemical, and biological connections between wetlands and downstream waters. The Environmental Defense Section of the U.S. Department of Justice. United States vs. Roberts, DJ# 90-5-1-1-18184. PI: **D.B. Arscott**. \$62,438 over 8 months.
- Statement of Work: Stroud Water Research Center Expert Report on the Proposed Rulemaking by the Pennsylvania Environmental Quality Board [25 PA. CODE CH. 93] for Ambient Water Quality Criterion; Chloride (Ch) [40 Pa.B. 2264] [Saturday, May 1 2010]. The School of Law, Environmental Law Clinic at the University of Pittsburgh. \$15,069 over 45 days.
- Water quality in the Rio Sierpe watershed (Costa Rica). Awarded to the Stroud Water Research Center, Avondale, PA. March 2009. A planning grant from the Blue Moon Foundation. \$30,000 over one year. Co-authors (Arscott, Sweeney and Eldridge) and carried out research.
- Expert Report and Witness to determine the physical, chemical, and biological connections between a headwater wetland complex and downstream waters in New Castle County, DE. Awarded to the Stroud Water Research Center, Avondale, PA. April 2009. The Environmental Defense Section of the U.S. Department of Justice. United States vs. David Donovan, No. 96-484. \$360,000 over 9 months. Co-authored and carried out research with collaborators (Arscott, Sweeney, Kaplan, Aufdenkampe, Eldridge, Jackson, Newbold, Bott).
- Benthic and drifting macroinvertebrate community response to the incursion of *Didymosphenia* geminata in the Opuha River (2006-2008). Awarded to **D. Arscott** (SWRC). March 2009. Subcontract in collaboration with Cathy Kilroy at the National Institute for Water and Atmosphere (NIWA), Christchurch, NZ. \$10,000 over 6 months.
- Measuring Watershed Health: training conservation planners how to use biophysical tools for monitoring streams in temperate and neo-tropical ecosystems Awarded to the Stroud Water Research Center, Avondale, PA. February 2006. The Gordon and Betty Moore Foundation. \$446,527 over one year. Assisted in developing, writing, and submitting research proposal.
- Nature Northwest Program Supplement Awarded to D.B. Arscott and J.P. Loegering. Department of Natural Resources, University of Minnesota, Crookston. December 2002. Northwest Minnesota Foundation. \$30,450 over two years. Authored, submitted, and participated in project.
- Red Lake River Corridor Enhancement Project Awarded to the Red Lake River Corridor Enhancement Workgroup (Project Manager: D.B. Arscott). October 2002. Northwest Regional Sustainable Development Partnership. \$40,000 matching. Northwest Minnesota Foundation. \$40,000. Red Lake Watershed District. \$10,000. Project collaboration with Red Lake River Communities, the College of Architecture and Landscape Architecture and the College of Natural Resources at the University of Minnesota, St. Paul, and the Natural Resources Department at the University of Minnesota, Crookston. Authored, submitted, and participated in project.

Editorial Activities

Associate Editor: Journal of the North American Benthological Society (2010-2011), Freshwater Science (2012-2016; formerly JNABS)

Guest Editor: Aquatic Sciences - Research Across Boundaries. Special issue: recent perspectives on temporary river ecology. 73 (4), November 2011.

Guest Editor: special issue on New York City drinking water supply watershed study - Journal of the North American Benthological Society - Issue 4 2006

Conference Organization and Special Sessions

Special Session Organization: Integrating remote, real-time monitoring systems with basic and applied freshwater science. 2012 Annual Meeting of the Society for Freshwater Science (previously North American Benthological Society), Louisville, Kentucky.

Special Session Organization: Research advances and conservation challenges in temporary river systems. 2012 Annual Meeting of the Society for Freshwater Science (previously North American Benthological Society), Louisville, Kentucky. Co-organizers: T. Datry, M. Bogen, K. Fritz.

Conference organization: 1st International Symposium on Landscape Dynamics of Riverine Corridors, Ascona, Switzerland. 2001. *Contributions*: Web site creation and maintenance, registration management, technology assistant.

Referee for Peer Reviewed Manuscripts and Grants (since 2002)

Annales de Limnologie

Aquatic Sciences: Research Across Boundaries

Archiv für Hydrobiologie

Canadian Journal of Fisheries and Aquatic Sciences

Earthwatch: Conservation Research Initiative Grant Program (Pacific NW Region)

Ecological Applications

Environmental Management

Freshwater Science

Freshwater Biology

Hydrological Processes

Journal of the North American Benthological Society

National Science Foundation

New Zealand Journal of Marine and Freshwater Research

River Research and Applications

U.S. Civilian Research & Development Foundation (CRDF; International Grant Program)

Water International

Water Resources Research

Society Memberships

Member, North American Benthological Society (since 1996)

Member, American Water Resources Association (since 2017)

Ph. D. Committee Advisor or Review Panel

Steward, A. Ph.D., Griffith University, Nathan, Queensland, Australia. 2012. Review Panel. Jellyman, P. Ph.D., University Canterbury, Christchurch, New Zealand. 2006-10. Advisor. Gray, D. Ph.D., University Canterbury, Christchurch, New Zealand. 2006-10. Advisor.