Leah S. Brown

125 Summer Street • Amherst, MA 01002 • (413) 549-5815 • leah_brown@usgs.gov

EDUCATION:

University of Massachusetts, Amherst, MA 01002
Master's Candidate, Wildlife & Fisheries Conservation (*March 2002 – present*)

Oregon State University, Corvallis, OR 97331 (GPA 4.0/4.0)
Management Principles of Pacific Northwest Salmon *(Fall 2000)*

University of New Hampshire, Durham, NH 03824 (GPA 3.2/4.0)
Bachelor of Science, Marine and Freshwater Biology *(1997)*

PROFESSIONAL EXPERIENCE:

U.S. Geological Survey, S.O. Conte Anadromous Fish Research Center, Turners Falls, MA & University of Massachusetts, Amherst, MA
Graduate Student (*March 2002 – present*)

- Characterizing the behavior of downstream migrant silver-phase American eels as they encounter hydroelectric facilities using three-dimensional acoustic telemetry

U.S. Geological Survey, Columbia River Research Laboratory, Cook, WA
Fisheries Biologist (*November 2000 – March 2002*)

- Assisting in the planning, development, and modification of field and laboratory research projects, performing data entry and analysis using computer programs, including SAS, tabulating field and laboratory observations and analyzing interpreted results with the preparation of graphs, charts and tables, processing data collected with Global Positioning Systems (GPS), and integrating GPS data into the Geographic Information System (GIS)
- Implanted gastric radio transmitters in juvenile chinook salmon smolts to detect fish positions in the tailrace of The Dalles Dam, The Dalles, Oregon
- Supervised five gastric tagging crew members
- Operated a variety of river research equipment, including GPS, radar, boats, and motor vehicles
- Trained new employees using various techniques, including the gastric insertion of radio tags, mobile tracking radio-tagged smolts via boat, and the use of GPS equipment and software
- Maintained laboratory fish for predation trial, including juvenile coho and chinook salmon, smallmouth bass and northern pike minnow

Johnson Controls World Services, Inc., Fort Collins, CO
Biologist (*April 2000 - November 2000*)

- Contracted for the U.S. Geological Survey, Columbia River Research Laboratory to participate in the planning, development, and modifications of field and laboratory research projects, *2000*
- Maintained detailed and accurate records of methodologies, data and analyses performed in research
- Assisted in the tagging of juvenile chinook salmon and steelhead, including anesthetizing, implanting of gastric radio transmitters, and monitoring the recovery of fish
- Monitored radio-telemetry equipment to detect fish locations from boats by programming telemetry receivers, downloading GPS fish location data, and operating receivers to detect fish locations using aerial and underwater research equipment
- Operated a variety of river research equipment, including global positioning system units, radar, boats, and motor vehicles
- Tabulated field and laboratory observations and analyzed interpreted results with the preparation of graphs, charts and tables and the post-processing of data collected with GPS and assisting with the integration of the data into a GIS

Northwest Natural Gas Company, Portland, OR

Biologist & Turbidity Specialist (*July - December 1999*)

- Independently contracted to conduct environmental inspections of streams and wetlands during the construction and installation of an underground 24-inch diameter natural gas pipeline
- Conducted state-regulated water quality and turbidity monitoring
- Monitored and documented the presence of rare, threatened, and endangered fish species located within the Nehalem River Watershed and West Dairy Creek Watershed, including the measurement of biological and physical habitat characteristics of streams and rivers
- Managed and supervised daily stream and wetland disturbances and restoration activities
- Performed data entry, analysis, and manipulation using computer programs and generated the project summary for Stream Crossings and Turbidity Monitoring Report, including the display of results using computer graphics such as graphs and charts for written reports

Northern Ecological Associates, Inc., Portland, ME, *May 1998 - July 1999*

Environmental Report Manager (*February-July 1999*)

- Wrote, edited, and reviewed Federal Energy Regulatory Commission (FERC) Weekly Construction Progress Reports for the Portland Natural Gas Transmission System (PNGTS) and Maritimes & Northeast Pipeline Project
- Tracked daily construction progress, focusing on final restoration of designated wetlands and reviewed daily PNGTS environmental inspection and non-compliance reports

Aquatic Field Technician (*May 1998 – February1999*)

- Assisted in the PNGTS Turbidity Monitoring Program, including the collection and analysis of water samples, observing and documenting daily stream crossings, and reviewing daily construction progress
- Consulted daily with PNGTS and New Hampshire Department of Environmental Services (NHDES) environmental inspectors on state and federal regulations
- Maintained detailed and accurate records of methodologies and data analyses performed
- Evaluated and monitored the presence of rare, threatened, and endangered finfish species along various cold water streams and rivers, primarily salmonids, including distribution, abundance, and habitat use
- Conducted cold water fish habitat sampling and identification on miscellaneous state and federally funded projects, including the measurement and biological and physical habitat characteristics of streams and rivers
- Sampled fish populations with standard techniques such as electro-shocking, gillnetting, and fish traps and collected biological data from fish including length, weight, and scale samples
- Tabulated field observations and analyzed the results for report writing, including generating graphs, charts and tables and assisting in the writing of federal project and grant reports
- Trained new employees in the biology and ecology of Atlantic salmonids and the collection of biological data, including sampling techniques and methodologies

New Hampshire Fish & Game Department, Marine Fisheries Division, Durham, NH

Biological Aide (*April 1997 – May 1998*)

- Participated in various projects conducting field investigations, including monitoring marine creel census for National Marine Fisheries Service, monitoring and maintaining coastal anadromous fish ladders, juvenile lobster and scallop sampling, seining and identification of juvenile finfish, electro-shocking and identification of juvenile Atlantic salmon and native trout species, and an Atlantic smelt survey.
- Sampled fish populations with standard techniques such as electro-shocking, beach seining, gillnetting and fish traps
- Collected biological data from juvenile and adult salmonids including length, weight, scale samples, and sex determination
- Tabulated field observations and analyzed results with the preparation of charts and tables and assisted in the writing, editing and reviewing of annual federal project and grant reports

- Operated outboard motor boats, motor vehicles, and a variety of field and laboratory equipment
- Provided support for office and laboratory, including the maintenance and procurement of equipment, storage, organization, and analysis of data

University of New Hampshire, Durham, NH
Biological Teaching Assistant (*January - May 1998*)
- Taught two Introductory Biology II laboratory sections a week and assisted in constructing weekly laboratory activities

PROFESSIONAL WRITING:

Allen, M. B., B. J. Hausmann, T. L. Liedtke, A. J. Daniel, L. S. Brown, J. L. Schei, and J. Beeman. 2001. An evaluation of tailrace egress of juvenile chinook salmon that pass via the sluiceway under each spill scenario tested at The Dalles Dam, 2001. Interim report to the U. S. Corps of Engineers, Portland, Oregon. Annual report to the U. S. Corps of Engineers, Portland, Oregon.

Duran, I. N., T. L. Liedtke, L. S. Brown, and J. Beeman. 2000. Monitoring tailrace egress in the stilling basin and the bypass system outfall at John Day Dam, 2000. Interim report to the U. S. Corps of Engineers, Portland, Oregon. Annual report to the U. S. Corps of Engineers, Portland, Oregon.

Brown, L. and D. McPherson. 1999. Stream Crossings and Turbidity Monitoring Report, Phase III. Report to Northwest Natural Gas Company, Portland, Oregon.

PRESENTATIONS:

- *Movement of Radio-Tagged Subyearling Chinook Salmon in the Tailrace of the John Day Dam, 2000.* Annual Salmon and Steelhead Smolt Conference, Boise, Idaho (*October 2000)*
- *Three-dimensional movement and behavior of silver-phase downstream migrant American eels at a small hydroelectric Facility.* International Eel Symposium, American Fisheries Society Annual Meeting, Quebec City, Canada (*August 2003)*

COMPUTER SKILLS:

Microsoft Office 2000 (Word, Excel, PowerPoint & Access), ArcView GIS 3.2, Pathfinder Office, GPS (Trimble software Pathfinder Office), SAS, WordPerfect, MS DOS, Internet savvy with introductory skills in Lotus Freelance Graphics

SPECIALIZED TRAINING & CERTIFICATIONS:

ArcView Advanced GIS - ESRI *(August 2001),* Dept. of Interior, Motor Boat Operator Certification *(April 2001),* Trimble ProXR/XRS with Asset Surveyor & Pathfinder Office Training *(March 2001),* SAS Programming I: Essentials *(February 2001),* Recreational Scuba Diving Certification, *(May 1998),* Boat Safety and Seamanship Certification (U. S. Coast Guard Certification), *(December 1997)*

VOLUNTEER:

Wolftree, Inc., Cascade Stream Watch, Portland, OR
Educational Mentor, *2001*

New Hampshire Fish & Game Department, Marine Fisheries Division, Durham, NH
Stocking Enhancement Volunteer, *1999*

New England Aquarium, Boston, MA
Harbor Seal Rescue & Rehabilitation Volunteer, *1994-1996*