Work experience

Area Fisheries Supervisor (NR Area Supervisor - Fisheries) Minnesota Department of Natural Resources, Bemidji, MN	2021 - present
Area Fisheries Supervisor (NR Area Supervisor - Fisheries) Minnesota Department of Natural Resources, Tower, MN	2011 - 2021
Assistant Area Fisheries Supervisor (NR Specialist Intermediate) Minnesota Department of Natural Resources, Park Rapids, M	2001 - 2011 N
Natural Resource Fisheries Specialist Minnesota Department of Natural Resources, Baudette, MN	1998 - 2001
Graduate Research Assistant - Fisheries Chesapeake Biological Lab, Solomons, MD	1996 -1997
Fisheries Creel Clerk Vermont Department of Fish and Wildlife, Essex Junction, VT	Summer 1997
Graduate Teaching Assistant - Biology University of Maryland, College Park, MD	1995 -1996
Fisheries Technician, Student Conservation Association Volunteer USDA Forest Service, Middlebury, VT	Summer 1995
First Mate and Marine Educator Living Classrooms Foundation, Baltimore, MD	1992-1994

Education

University of Maryland, College Park, MD Marine, Estuarine, and Environmental Sciences Program Fisheries Management MS 2001

Johns Hopkins University, Baltimore, MD Humanities Area BA 1986 Fulfilled requirements for Natural Sciences Area BA

Knowledge and Skills

Supervisory and budget

Prepared and managed area budgets including special project budgets.

Able to produce and edit high quality technical reports while meeting Federal Aid and internal deadlines and project timelines. Supervision, development and discipline of area staff and seasonal/temporary workers. Trained in leadership skills and experienced in conflict resolution and team building.

Knowledge and Skills (continued)

Fisheries management

Management in diverse fisheries areas across northern Minnesota (Tower and Bemidji) across a broad spectrum of habitats from the prairies to central lakes to the Iron Range to the Boundary Waters Canoe Area Wilderness. Collaboration with tribal, federal, state, and local jurisdictions. Management of Lake Vermilion, Upper Red Lake, and Cass Lake, and experience on Lake of the Woods; four of the ten large lakes of Minnesota. Supervision of walleye egg takes and hatcheries as well as walleye and muskellunge rearing ponds. Knowledgeable of comprehensive lake and river management planning, standardized fisheries sampling, special fisheries assessments used to address management challenges, emerging fisheries research, and statewide fisheries resource management and regulation issues. Current on emerging fisheries and interdisciplinary research of relevance in Minnesota: fish community, limnology, aquatic trophic/predator-prey interactions, and aquatic invasive species.

Public and media relations

Worked with multiple stakeholder groups: lake associations, guides, tourism, and statewide interest groups on complex and at times controversial fisheries issues. Lead in Lake Vermilion Fisheries Management Plan revision in 2016 with 20 member public input group. Provided information for legislative inquiries. Education of general public on fisheries and water quality topics. Wrote press releases.

Intergovernmental and government-to-government coordination

Fisheries coordination with US Forest Service (BWCA) and multiagency (MPCA, SWCD) watershed planning efforts. Experience in coordination of fisheries management with tribal governments (Red Lake, Fond du Lac, Bois Forte).

Fisheries technical knowledge

Creel census: design, evaluation, analysis, clerk supervision, report writing. Special surveys: angler creel survey, mark and recapture population estimates. Includes survey design, analysis, reports, and management recommendations. Fish production: spawn take, hatchery, rearing, harvest, and stocking of walleye and/or muskellunge. Trout stocking.

Lake and stream survey: population assessments including Index of Biotic Integrity, Rosgen stream geomorphology, stream habitat evaluation, survey design and quantitative analysis, technical report writing, management recommendations, software. Partnered with MPCA on Crow Wing River assessment in 2010. Continuing education: professional Fisheries conferences attended. Variety of equipment used: boats, snowmobiles, wide variety of specialized fisheries sampling gear, water quality testers and plankton sampling devices, land survey and GPS equipment. Able to work in adverse weather and environmental conditions.

Knowledge and Skills (continued)

Environmental review, technical and regulatory consultation

Provided technical review of potential impacts to fisheries and aquatic habitat for high-profile and small-scale projects to inform EIS and other permits (mining, watershed flood damage reduction, public waters). Assess natural resource impacts and made recommendations for local government units on permits and zoning; made recommendations on aquatic plant management permits; acted as habitat improvement project technical advisor for external partners; technical team member for watershed planning groups and aquatic invasive species COLA work group.

Habitat construction, improvement, and preservation

Lead worker on trout habitat stream structures, erosion control recommendations and restoration. Advised on lakeshore management and restoration with native plantings and bioengineering. Promoted trout easement and Aquatic Management Area acquisition to landowners and assisted in processing acquisitions. Partnered with Trout Unlimited to facilitate acquisition and habitat improvements. Cooperated with Straight River Trust Committee to improve trout habitat.

Statistical analysis and database skills

Database management and analysis: SAS, R, MARK, MS Access, GenCreel, Lake Survey; word processing and spreadsheets: MS Word, MS Excel; GIS software: ArcMap shapefile and map creation, analysis; other graphics software. Currently maintain Area Office stream database and process data (catch rates, size distribution, proportional relationships, etc) using Excel and R for reports.

Other skills

Navigation, teaching, fly fishing

Training

Diversity, Equity, and Inclusion Training 2021 Revelations in Communications Workshop 2020 Government to Government Tribal State Relations Training 2019 Elevating Feedback Workshop 2015 DNR Supervisory Development: New Supervisor Orientation 2012 Foundations of Project management 2011 DNR Aquatic Plant Identification Workshop 2007 Economics for Natural Resource Managers 2006 Blandin Community Leadership Program 2005 DNR Management Development Program 2004 Conflict Management 2004 Stream Assessment and Monitoring 2003 Use of Native Plants in Restoration Landscaping 1999 Stream Classification 1998 Licensed Pesticide Applicator with aquatics certification – current First Aid and CPR - current

ERTKA and other required safety training - current

Memberships

American Fisheries Society
Minnesota Chapter President - 2019
Nature Conservancy
Trout Unlimited

Education specifics

Graduate course background:

Fisheries population assessment, biostatistics, linear algebra, fisheries management, aquaculture, fish physiology, ecology, economics, and literature seminars.

Undergraduate course background:

General and biological sciences: animal behavior, oceanography, atmospheric sciences, earth history, chemistry, organic chemistry, molecular biology, genetics, physics, calculus, statistics. Humanities: writing and literature, media and communications, social anthropology, French.