

Robert D. Roy

Capabilities

Ecological Studies:

- Avian radar surveys and tower impact assessments
- Ecological characterizations
- Habitat mapping
- Avian, mammal, raptor, bat, amphibian and mussel surveys
- Nocturnal migration surveys using radar and sound recordings
- Aquatic studies, including freshwater and marine dive surveys
- Fisheries evaluations and fish sampling
- Ecological receptor identification
- Detailed vernal pool studies

Endangered Species Surveys and Natural Resource Evaluations:

- Endangered and Threatened Plant and Animal Species
- Rare Plants and Natural Communities
- Unusual Natural Areas
- Critical or Significant Wildlife and Fisheries Habitats
- Essential Fish Habitat evaluations
- Intertidal and Subtidal Marine Communities

Wetland Science:

- Wetland delineations
- Function value assessments
- Permitting and regulatory advising
- Wetland mitigation design, construction and monitoring
- River and coastal restoration planning and oversight

Permitting Expertise:

- FERC Hydroelectric Licensing
- Support for FERC Pipeline, Power, and Wind Projects
- Clean Water Act Secs. 401 / 404 and 404(b)(1) Analyses
- Avoidance and Minimization Support
- NEPA Compliance and Documentation
- Section 7 Biological Assessments
- State and Local Wetland Alteration Permitting
- Shoreland and Coastal Zone Management Permitting
- Natural Resources Sections of Maine DEP Site Location Permits

Education and Training

B.S. Wildlife Management, 1992, University of Maine at Orono.

40-Hour Safety Training Course for Hazardous Waste Operations in compliance with OSHA 29 CFR 1910.120

Senior Project Manager Certified Wildlife Biologist Wetland Scientist Certified SCUBA Diver

Mr. Roy is a certified wildlife biologist, ornithologist, and wetland scientist with considerable experience in wildlife resource and habitat inventories and assessments, including terrestrial, freshwater, and marine ecosystems. He has employed a variety of survey methods ranging from general reconnaissance observations to detailed, species-specific survey methods, habitat surveys, and modeling. Most of these projects have involved natural community mapping and analysis, as well as analysis of relative ecological health and the environmental effects of existing and proposed projects on natural communities and resources.

Mr. Roy has particular expertise in designing and directing field studies in support of ecological characterizations and ecological risk assessments. He has experience in providing field support for several CERCLA and RCRA projects and in developing ecological risk assessments using USEPA guidelines. He also has expertise in FERC licensing and re-licensing, having worked on hydropower and storage dam projects of all sizes in the northeastern and northwestern states.

He has conducted numerous bird migration and avian impact studies using established techniques and emerging technologies, such as marine surveillance radar, moon watching, ceilometers, and acoustic surveys. Mr. Roy has also conducted a variety of surveys targeting rare and endangered plant, animal, and natural community surveys.

Recent Publications and Presentations

Lortie, J.P., M. Thompson, R. Roy, and S. Svirsky. 2002. Monitoring Amphibian Reproductive Success at a PCB-Contaminated Site Using Fluorescent Pigments. Poster presented at Society for Environmental Toxicology and Chemistry 23rd annual meeting, Salt Lake City, UT, 2002.

Roy, R.D., M.E. Thompson, and J.L. Ragonese. 1999. Location and Status of a new dwarf wedgemussel (*Alasmidonta heterodon, bivalvia:unionidae*) population in the upper Connecticut River. Presented at First Symposium of the Freshwater Mollusk Conservation Society, 1999.

Certifications

- Certified Wildlife Biologist
- Certified SCUBA Diver
- Advanced Open Water Diving Certification
- Certified SCUBA Diver CPROX Administrator
- CPR1st Certification

Example Projects

Wind Project Migratory Bird and Bat Surveys and Impact Studies – enXco, Endless Energy, UPC Wind, US WindForce. Senior Avian Scientist. Designed and conducted ecological evaluations and avian impact assessments associated with proposed wind projects throughout the eastern United States. Avian impact studies included raptor and neo-tropical bird migration studies, bat surveys, breeding bird surveys, and rare species evaluations. Migratory bird surveys conducted using a variety of field methods, including ceilometers, customized marine surveillance radar surveys, NEXRAD weather radar, and remote acoustic receivers and computer analysis of call signatures to identify species.

Nationwide Communications Tower Avian Impact Research – CTIA and Willkie Farr & Gallagher. Senior Avian Scientist. Performed comprehensive review and analysis of scientific studies related to avian impacts at cell towers nationwide, and developed a response and comment to FCC Notice of Intent that would have required site-specific avian impact studies for communications towers. Compiled literature and research, evaluated methods, scientific soundness and statistical validity of studies, and prepared detailed narrative for submission to FCC.

Hudson River Avian Survey and NRDA Project – U.S. Fish & Wildlife Service. Senior Avian Scientist. Conducted extensive bird surveys and egg collection efforts, covering 60 miles of Hudson River in New York. Compiled regional habitat information, developed GIS maps, conducted breeding bird nest surveys, and performed egg collection sampling following chain-of-custody protocols, as part of a Natural Resources Damage Assessment evaluating impacts of contaminated sediments.

Experience

Woodlot Alternatives, Inc.

1995-Present. Senior Project Manager, Wildlife Biologist, and Wetland Scientist

Northrop, Devine and Tarbell, Inc., Portland, Maine.

1992-1995 Wildlife Biologist; 1990-1991 Wildlife Technician.

Affiliations

- Maine Chapter of The Wildlife Society, Executive Board Member
- The Wildlife Society, National, New England, and Maine Chapters
- American Ornithologists' Union
- Association of Field Ornithologists
- Wilson Ornithological Society
- Maine Association of Wetland Scientists
- Society of Wetland Scientists
- Society for the Study of Amphibians & Reptiles

Contact: broy@woodlotalt.com
(207) 729-1199

Redington Wind Farm Migratory Bird Surveys and Permit Assistance – Endless Energy, Inc. Senior Avian Scientist.

Provided ecological evaluations and permitting guidance associated with proposed 29-turbine wind farm in a mountain ridge environment. Surveys included extensive avian radar surveys and NEXRAD data analysis, natural community assessments, botanical surveys, threatened and endangered species assessments, wetland/vernal pool delineation/assessments, identification of Significant Wildlife Habitat, raptor and neotropical passerine migration studies, small mammal trapping, and breeding bird surveys.

Kennetech Wind Power Avian Impact Assessment – Maine Land Use Regulatory Commission. Senior Avian Scientist.

Conducted a peer review of diurnal raptor migration surveys and nocturnal songbird migration surveys in connection with an impact assessment for a proposed 300-tower wind farm project.

Buzzards Bay Oil Spill Avian Impact Assessment – NOAA.

Senior Avian Scientist. Assessed habitat impacts during 2003 oil spill near Cape Cod. Performed avian impact evaluations within the coastal zone, conducted intensive surveys of bird populations in the affected area and helped NOAA develop information to plan habitat restoration efforts.

Wildlife Resources Assessments and Grassland Bird

Monitoring Program – New York Power Authority. Project Manager. Performed extensive wildlife field surveys and habitat monitoring programs over 65,000-acre FERC project area in New York, Ontario, and Quebec. Designed and directed species-specific field surveys, including grassland bird monitoring program utilizing USFWS bird survey protocols.

Housatonic Avian Surveys – U.S. EPA. Senior Avian Scientist.

To help establish a baseline ecological characterization of the Housatonic River CERCLA site in western Massachusetts, conducted a wide variety of bird and habitat studies throughout a 12-mile study corridor. Fieldwork included extensive raptor surveys, reconnaissance-level breeding bird surveys, tree swallow (*Tachycineta bicolor*) and belted kingfisher nest surveys, and a waterfowl capture program.

Cabinet Gorge and Noxon Rapids Avian Surveys – Avista (formerly Washington Water Power.) Senior Avian Scientist.

Designed and directed wildlife and wetland field studies related to FERC relicensing of a hydroelectric project on the Clark Fork River in Montana and Idaho. Surveys included both qualitative and quantitative field surveys of a wide range of species, including breeding songbirds, nesting waterfowl, raptors, wintering and migrating waterbirds, mammals, reptiles, amphibians, and invertebrates.