

JOHN WILLIAM HAYSE

Ecological and Geographical Sciences Section
Environmental Science Division
Argonne National Laboratory

Education:

Ph.D. Miami University, Zoology, 1991
M.S. College of Charleston, Marine Biology, 1987
B.S. University of Kentucky, Zoology, 1983

Professional Experience:

1995-Present Environmental Scientist - Aquatic Ecologist
Environmental Science Division
Argonne National Laboratory

Currently serving as Section Manager for the Ecological and Geographical Sciences Section. Participate on multidisciplinary teams to evaluate environmental impacts, especially to freshwater and marine ecosystems, from Federal Government activities under the mandates of legislation such as NEPA, CERCLA, and RCRA. Recent project activities include evaluating impacts to aquatic ecosystems from hydropower operations; development of individual-based models to evaluate environmental influences on growth and survival of fish; training environmental project managers to prepare ecological risk assessments that conform with U.S. EPA guidance. Examples of ongoing and past EIS projects include programmatic EISs for wind energy program development by Western Area Power Administration and the U.S. Fish and Wildlife Service in the Upper Great Plains, for solar energy program development by the Bureau of Land Management and the Department of Energy in the Western U.S., and for alternative energy program development on the outer continental shelf for the Minerals Management Service EISs for licensing of nuclear power plants by the Nuclear Regulatory Commission, EISs for the Minerals Management Service's proposed oil and gas leasing program for the outer continental shelf, and an EIS for renewal of the Trans Alaska Pipeline System right-of-way.

Summary of Previous Experience:

1991-1995 Postdoctoral Appointee, Environmental Assessment Division
Argonne National Laboratory, Argonne, Illinois

Used multispectral aerial videography to evaluate changes to aquatic habitats under different operational scenarios for an environmental impact statement evaluating impacts to natural resources from proposed changes in marketing of electricity produced by 5 hydroelectric facilities on the Green, Gunnison, and Colorado Rivers in the upper

Colorado River basin. Prepared work plans, procured data collection services, coordinated and participated in ground truthing operations, identified ecological resource information from aerial videography, and analyzed results using GIS technology. Used videography in conjunction with additional information from Federal and state agencies, academic institutions, and the existing literature, to evaluate impacts to threatened and endangered fish species, various native fish species, and trout. Prepared a Biological Assessment that evaluated the potential for impacts to threatened and endangered species from remediation activities and assisted with wetland delineation for the DOE Weldon Spring Chemical Plant Site in Missouri.

1987-1991 Teaching Associate, Dept. of Zoology, Miami University,
Oxford, Ohio

Taught lecture courses in Environmental Biology, taught lecture and field laboratory portions of Field Ecology, and served as laboratory instructor for Animal Diversity, Ichthyology, and Limnology.

1986-1987 Research Assistant, Marine Resources Research Institute, South
Carolina Wildlife and Marine Resources Department,
Charleston, South Carolina

Conducted daily hydrographic sampling on the Cooper River, South Carolina as part of an environmental assessment for a proposed U.S. Navy submarine tending station. Examined the effect of habitat enhancement on juvenile clam recruitment, designed and built a new sampling device, supervised field sampling and laboratory work, and co-authored the final report.

Research Interests:

Effects of hydropower operations on aquatic biota and habitats; ecological risk assessment; fisheries biology and management; predator-prey relationships in aquatic systems

Professional Activities:

Member of the American Fisheries Society and the Ecological Society of America
Serve as referee for *Transactions of the American Fisheries Society*, *Fishery Bulletin*, and *Transactions of the Illinois State Academy of Science* and as a reviewer for the Recovery Program for the Endangered Fishes of the Upper Colorado River Basin and for the North Pacific Fishery Research Board.

Publications:

Author/co-author of 20+ journal/report/ conference publications and 20+ presentations.