

## **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 and current projects include evaluating impacts to aquatic ecosystems from hydropower operations for Western Area Power Administration; development of individual-based models to evaluate environmental influences on growth and survival of fish and on the transmission of West Nile Virus in bird populations; training environmental project managers to prepare ecological risk assessments that conform with USEPA guidance; and preparation of ecological risk assessments to evaluate risks to biota from contamination at a Superfund site at the U.S. Army's Aberdeen Proving Ground. EIS Projects include a programmatic EIS for leasing of oil shale/tar sand resources by the Bureau of Land Management, an EIS 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. Co-authored chapters for the environmental impact statement, technical reports, and two journal articles related to the project. Prepared a Biological Assessment which 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:**

Ecological risk assessment; fisheries biology and management; predator-prey relationships in aquatic systems

### **Professional Activities:**

Member of the American Fisheries Society, the American Society of Ichthyologists and Herpetologists, 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 Research Board.

Accredited training in use of necropsy methods for assessing fish health and condition

### **Publications:**

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