

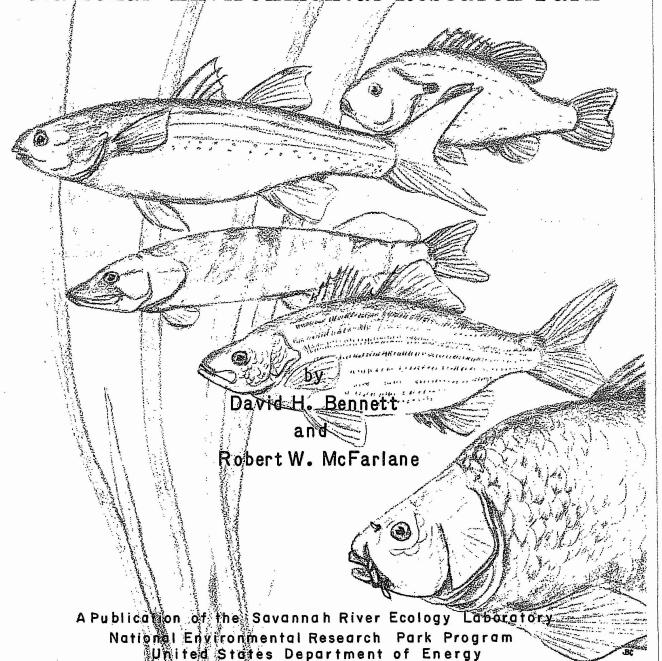
Admitted: 03/16/2009 Rejected:

Withdrawn: Stricken:

NRC000013

Pames L. Oliver SRO-NERP-12

The Fishes of the Savannah River Plant: National Environmental Research Park



-NOTICE

This report was prepared as an account of work sponsored by the United States Government. Neither the United States nor the United States Department of Energy, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.

A PUBLICATION OF DOE'S SAVANNAH RIVER PLANT NATIONAL ENVIRONMENTAL RESEARCH PARK

THE FISHES OF THE SAVANNAH RIVER PLANT:
NATIONAL ENVIRONMENTAL RESEARCH PARK

by

David H. Bennett¹
Savannah River Ecology Laboratory
University of Georgia

and

Robert W. McFarlane²
Savannah River Ecology Laboratory
and

Savannah River Laboratory

E. I. duPont de Nemours and Co.

Aiken, South Carolina 29801

¹Associate Professor, Fishery Resources, College of Forestry,
Wildlife and Range Sciences, University of Idaho, Moscow, Idaho 83843

²Environmental Scientist, Brown & Root, Inc.,
P. O. Box 3, Houston, Texas 77001

e de la companya del companya de la companya de la companya del companya de la co Se gar . s

TABLE OF CONTENTS

	Subject	Page
	Introduction	4
	The Savannah River Plant	6
÷	Groundwater and Surface Water	10
	Aquatic Habitat Types	11
Š	Historical Aspects	17
	Collection of Samples	19
	Measurements	20
6	Species Accounts	25
	List of Fishes Collected on the Savannah River National	26
	Environmental Research Park	
	Relative Abundance of Fishes in Riverine Ecosystems	30
	Relative Abundance of Fishes in Lentic Ecosystems	39
	A Key to Fish Families	46
	A Key to Species and Species Descriptions	55
	Order Acipenseriformes	55
	Acipenseridae - Sturgeon Family	55
	Order Semionotiformes	55
	Lepisosteidae - Gar Family	55
	Key to Species of <u>Lepisosteus</u>	55
	Order Amiiformes	57
	Amiidae - Bowfin Family	57
	Order Anguilliformes	57
	Anguillidae - Eel Family	57

Table of Contents (continued)

Subject	Page
Order Clupeiformes	58
Clupeidae - Herring Family	58
Key to Species of Family Clupeidae	59
Order Salmoniformes	63
Umbridae - Mudminnow Family	63
Esocidae - Pike Family	63
Key to Species of Esox	64
Order Cypriniformes	65
Cyprinidae - Minnow Family	65
Key to Species of Family Cyprinidae	. 66
Catostomidae - Sucker Family	78
Key to Species of Family Catostomidae	79
Order Siluriformes	83
Ictaluridae - Catfish Family	83
Key to Species of Family Ictaluridae	83
Order Percopsiformes	90
Amblyopsidae - Cavefish Family	90
Aphredoderidae - Pirate Perch Family	91
Order Atheriniformes	92
Belonidae - Needlefish Family	92
Cyprinodontidae - Killifish Family	93
Poeciliidae - Topminnow Family	94
Atherinidae - Silverside Family	95

Table of Contents (continued)

Subject	Page
*	
Order Perciformes	96
Percichthyidae - Temperate Bass Family	96
Key to Species of Family Percichthyidae	97
Centrarchidae - Sunfish Family	98
Key to Species of Family Centrarchidae	99
Percidae - Perch Family	113
Key to Species of Family Percidae	114
Mugilidae - Mullet Family	120
Order Pleuronectiformes	121
Soleidae - Sole Family	121
Problem Species: Possible Misidentifications	122
Glossary	124
Acknowledgments	
Annotated Bibliography	
Index	144
Appendix I	152