

**Comprehensive  
Conservation Plan**

**Table of Contents**



**Black bear and cubs**  
*by Don Anderson*  
*USFWS Photo*

<b>I. BACKGROUND</b> .....	1
Introduction .....	1
Purpose and Need for Plan .....	1
Fish and Wildlife Service .....	2
Mission .....	2
Description .....	2
National Wildlife Refuge System .....	2
Mission .....	2
Description .....	2
Legal Policy Context .....	3
Relationship to State Wildlife Agency .....	4
Ecosystem Context .....	4
Overview .....	4
Ecological Threats and Problems .....	8
Conservation Priorities and Initiatives .....	10
<b>II. THE REFUGE</b> .....	13
Introduction .....	13
Purpose .....	17
Biological Environment .....	17
Fish, Wildlife, and Plant Populations .....	17
Threatened Species and Species of Management Concern .....	18
Avian Species .....	18
Mammals .....	19
Reptiles and Amphibians .....	20
Aquatic Species .....	20
Mussels .....	20
Old Growth .....	21
Invasive Species .....	21
Habitats .....	21
Education and Visitor Services .....	25
Refuge Administration .....	26
Research Natural Areas .....	28
Land Protection and Conservation .....	28
Contaminants .....	29
Cultural Resources .....	30
Physical Environment .....	30
Social and Economic Environment .....	31
Refuge Related Problems and Issues .....	32
Forest Fragmentation .....	33
Forest Conditions .....	33
Lack of Inventory Information .....	33
Low Operation and Maintenance Funds .....	33
Refuge Conservation Priorities .....	34
<b>III. PLAN DEVELOPMENT</b> .....	35
Overview .....	35
Scoping of Issues and Concerns .....	35
Fish and Wildlife Populations .....	35
Habitats .....	36
Education and Visitor Services .....	36
Refuge Administration .....	36
Land Protection and Conservation .....	36



Bear Cub  
Don Anderson

<b>IV. MANAGEMENT DIRECTION</b> .....	37
Introduction .....	37
Vision .....	37
Goals, Objectives, and Strategies .....	37
Goal A. Fish and Wildlife Populations .....	37
A.1: Songbirds .....	38
A.2: Black Bear .....	40
A.3: Waterfowl and Shorebirds .....	41
A.4: Resident and Other Species .....	41
A.5: Integrated Pest Management .....	42
Goal B. Habitats .....	43
B.1: Contiguous Forest .....	43
B.2: Old Growth Forest Protection .....	44
B.3: Forest Management .....	45
B.4: Other Forest Management .....	46
B.5: Reforestation .....	47
B.6: Wetlands .....	47
Goal C. Education and Visitor Services .....	48
C.1: Hunting .....	48
C.2: Fishing .....	49
C.3: Wildlife Observation and Photography .....	50
C.4: Environmental Education .....	51
C.5: Interpretation .....	52
C.6: Recreation Facilities .....	53
Goal D. Refuge Administration .....	54
D.1: Staff and New Facilities .....	54
D.2: Operations and Maintenance .....	54
Goal E. Cultural Resources .....	55
E.1: Survey/Investigation .....	55
E.2: Archaeological Resources .....	55
E.3: Cooperative Management .....	55
E.4: Visitor Awareness .....	56
Goal F. Land Protection and Conservation .....	56
F.1: Land Acquisition .....	56
F.2: Private Lands Technical Assistance .....	57
F.3: Private Land Enrollment in Conservation Programs .....	58
<b>V. PLAN IMPLEMENTATION</b> .....	59
Background .....	59
Refuge Projects .....	59
Step-down Management Plans .....	75
Plan Performance .....	75
Partnership Opportunities .....	76
Monitoring and Evaluation .....	76
<b>APPENDICES</b> .....	79
A. Glossary .....	79
B. References .....	85
C. Relevant Legal Mandates .....	89
D. Biota .....	95
E. Consultation and Coordination .....	101
F. Management Methods and Procedures .....	103
G. Compatibility Determinations .....	109
H. Finding of No Significant Impact .....	123



Bear Cub  
Don Anderson

## FIGURES

1. Conservation management focus areas .....	5
2. Lower Mississippi Valley Ecosystem .....	6
3. Forest cover changes in the Lower Mississippi Valley .....	7
4. Breeding ranges and proposed critical habitat for the Louisiana black bear .....	9
5. Refuge location .....	14
6. Approved acquisition target areas .....	15
7. Planning study area .....	16
8. Habitat communities of ridge and swale topography .....	22
9. Existing habitat management .....	23
10. Refuge land use features .....	27
11. Priority bird species associated with the refuge's bottomland hardwood forest .....	39
12. Land protection priority areas .....	62
13. Habitat management (short-term projection) .....	64
14. Habitat management (long-term projection) .....	65
15. Current and proposed visitor facilities .....	67
16. Project/staff cost summary for 2001-2016 .....	73
17. Current and proposed organizational structure .....	74
18. Step-down plans .....	75
19. Refuge biota .....	92



# Guiding Principals of the National Wildlife Refuge System

We are land stewards, guided by Aldo Leopold's teachings that land is a community of life and that love and respect for the land is an extension of ethics. We seek to reflect that land ethic in our stewardship and to instill it in others.

Wild lands and the perpetuation of diverse and abundant wildlife are essential to the quality of the American life.

We are public servants. We owe our employers, the American people, hard work, integrity, fairness, and a voice in the protection of their trust resources.

Management, training from preservation to active manipulation of habitats and populations, is necessary to achieve the missions of the National Wildlife Refuge System and the U.S. Fish and Wildlife Service.

Wildlife-dependent uses involving hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, when compatible, are legitimate and appropriate uses of the National Wildlife Refuge System.

Partnerships with those who want to help us meet our mission are welcome and indeed essential.

Employees are our most valuable resource. They are respected and deserve an empowering, mentoring, and caring work environment.

We respect the rights, beliefs, and opinions of our neighbors.

