

Cypress Creek National Wildlife Refuge

Annual Narrative

Ullin, Illinois
Fiscal Year 1997



A Joint Venture Project

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Introduction

Cypress Creek National Wildlife Refuge was established June 26, 1990 in the southern Illinois counties of Alexander, Johnson, Pulaski, and Union. A temporary headquarters is located on the campus of Shawnee Community College, nine miles east of Ullin, Illinois. Approximately 14,000 acres of the 35,529 acres delineated within the Refuge boundary have been purchased. Land acquisition from willing sellers has been with Land and Water Conservation Funds.

The Refuge was authorized under the Emergency Wetlands Resources Act of 1986 (Public Law 99-645) for the primary purpose of wetlands protection and restoration: "...intensifying cooperative efforts among private interests and local, State and Federal governments for the management and conservation of wetlands;.....". 16 U.S.C. 3901. Located within the Cache River Watershed, the Refuge is part of the New Madrid Wetlands Project of the Lower Mississippi Valley Joint Venture of the North American Waterfowl Management Plan and is part of the Lower Mississippi River Ecosystem. Our cooperators in the Cache River Wetlands project include: Illinois Department of Natural Resources, The Nature Conservancy, and Ducks Unlimited.

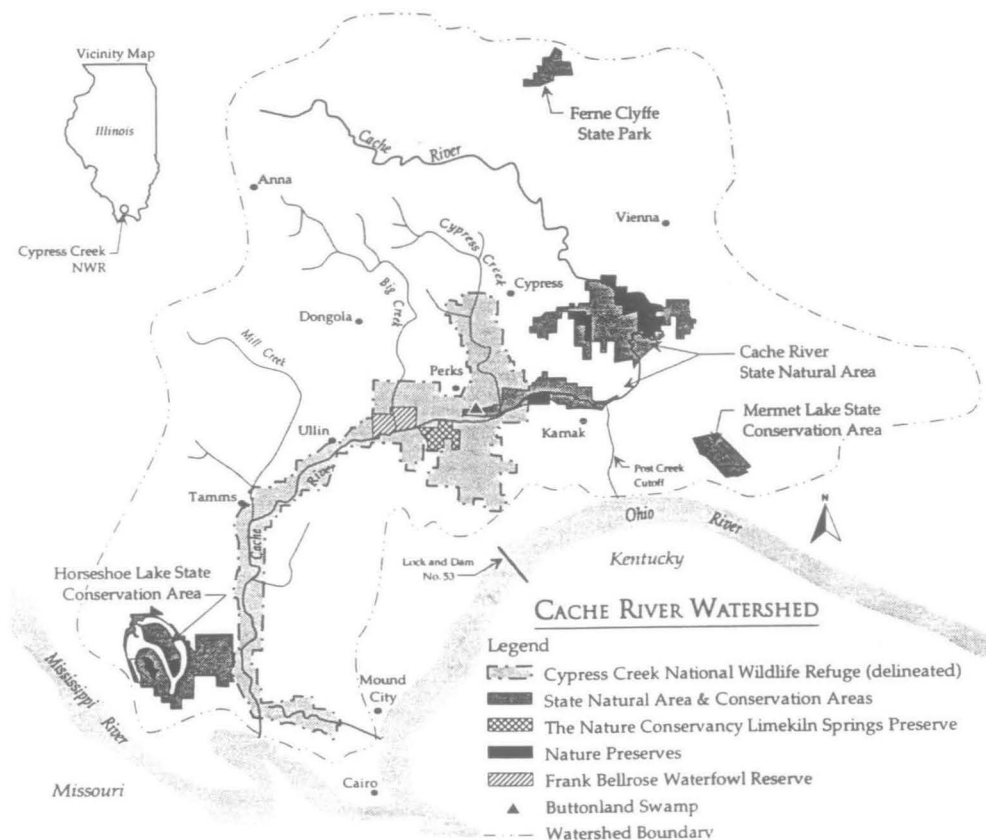


Figure 1. Map of Cache River Wetlands Joint Venture boundaries

The Cache River Watershed includes three National Natural Landmarks, is a Bioreserve, and in 1994 was designated a "Wetland of International Importance" by the Ramsar Convention. The area also features a number of ecologically sensitive flora and fauna species and includes eight federally listed and 102 state listed threatened and endangered species. Broad habitat types within the Refuge delineation include: wetlands, bottomland forests, upland forests and agriculture.

Topography of the 475,000 acre Cache River Watershed varies from 890 feet above mean sea level in the northern hills to 280 feet mean sea level at the Mississippi River. Climate consists of warm, humid, summers and cool to cold winters. Average annual precipitation is 45 inches, average annual snowfall is ten inches, and frost free days average 230 annually.

The richness and diversity of plant and animal communities is a result of four physiographic regions of the United States converging within the Refuge area. The most dramatic region is the Gulf Coastal Plain; its northern reach includes the southern tip of Illinois, providing conditions that support bald cypress and tupelo gum swamps. Historically, vast tracts of naturally-flooded bottomland hardwoods and wetlands provided resting, nesting and feeding habitat for ducks and a variety of other migratory birds and resident wildlife.

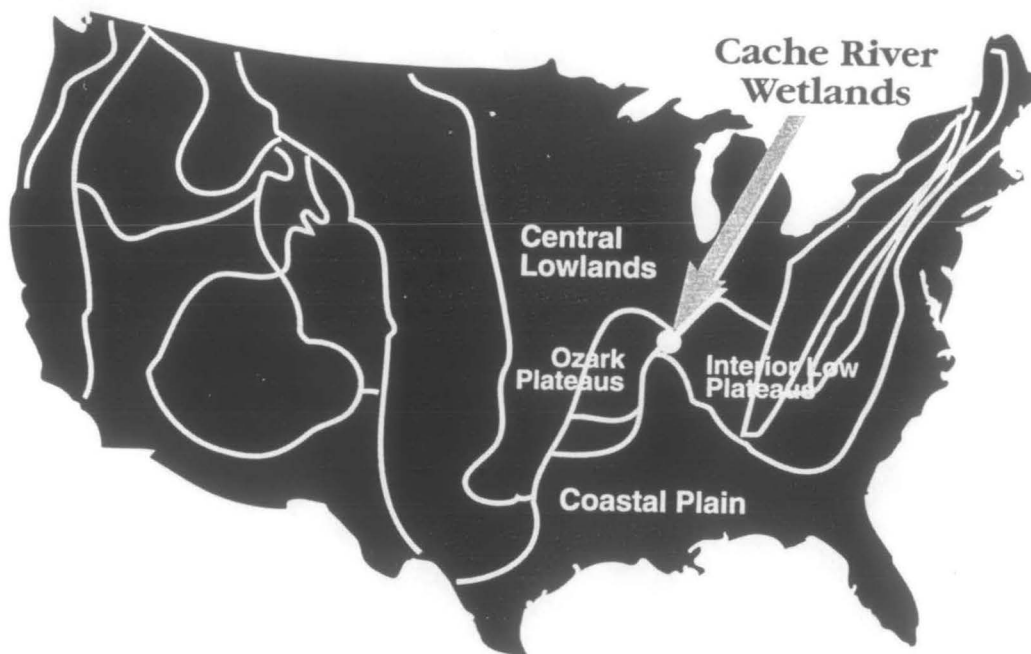


Figure 2. Four Physiographic Regions of the U.S.

Highlights

- New Refuge Manager arrives in August
- The Refuge received a grant from the National Fish and Wildlife Foundation to initiate a long-term water quality monitoring project; the project includes biological sampling and the development of a Cache River Wetlands Activity Guide. (Section 1b.)
- The sixth annual report for "Effects of Water Level, Edge Types and Plants Species on Migratory Songbirds: Implication for Floodplain Restoration" was submitted by Jeff Hoover and Scott Robinson of the Illinois Natural History Survey. (Section 1a.)
- Refuge volunteers participated in Illinois RiverWatch in an effort to learn more about life in the Cache River Wetlands and to monitor the health of five streams within the Cache River Watershed. (Section 1a.)
- Bald eagle nest at the Bellrose Waterfowl Reserve fledged two young. (Section 1a.)
- Refuge staff reforested 350 acres with 125,000 native hardwood seedlings. (Section 2b)
- Refuge staff developed a Calendar of Events highlighting programming opportunities in the Cache River Watershed. (Section 7b)

Climate Data

Table 1. Weather Data for Southern Illinois Region

MONTH	TEMPERATURE		PRECIPITATION Inches	SNOWFALL Inches
	High	Low		
January	68	-6	3.73	4.55
February	67	18	2.54	1.90
March	78	18	4.73	
April	79	26	4.75	Trace
May	86	31	10.00	
June	92	53	6.19	
July	98	51	2.55	
August	91	51	3.90	
September	92	44	2.31	
October	86	25	2.60	
November	66	12	1.89	Trace
December	61	18	3.75	1.50
High and Low Temperature			Total Precipitation	
98 (High in July)			Rain	Snow
-6 (Low in Jan.)			48.94"	8"

- Temperatures in F and Precipitation in inches (provided by Dana Cross of Jonesboro).

1 Monitoring and Studies

1a. Surveys and Censuses

Waterfowl

- Waterfowl were surveyed during periods of peak usage throughout the Refuge 1996-97. Duck counts peaked at 45,000 in March and geese totals were estimated to be 28,000 in December. The goose count consisted primarily of snows with a few white-fronted geese. Canada geese did not migrate into the area in large numbers until late January 1997; this situation was reported at most of the large Canada goose wintering areas in southern Illinois.

- In March, 45,000 ducks were documented using the Bellrose Waterfowl Reserve as a resting and feeding area, along with over 100 white pelicans.

Table 2. Estimated Peaks for Ducks and Geese on the Refuge

Year	Ducks	Geese
1990-91	5,000	80,000
1991-92	13,000	10,000
1992-93	12,000	20,000
1993-94	22,000	162,000
1994-95	25,000	45,000
1995-96	60,000	11,900
1996-97	45,000	28,000

Source - Mid-winter waterfowl counts; Christmas Bird Count; weekly waterfowl survey; weekly aerial goose survey.

- The harvest survey for the 1997 hunting seasons included: 300 hunters harvested 1,459 doves; goose hunters bagged 46 geese consisting of 41 Canada geese and five snow/blue geese. Goose migrational chronology has decline over the last two years due to extremely mild winter conditions which have contributed to lower harvest rates.

- Midwinter Waterfowl Survey included 32,378 ducks and 15,979 geese (northern migration appeared to be much earlier this year).

Shorebirds

- Shorebird usage continued to increase between April and June. During the peak week, May 4-10, 1,096 were recorded; Pectoral sandpipers and lesser yellowlegs were the most common.

-
- Twenty-five site specific shorebird surveys were conducted, on three major wetland complexes by Audubon volunteers and Refuge staff.

Threatened/Endangered Species

- The bald eagle nest, monitored daily, was successful in 1997; two eaglets fledged during July.

Christmas Bird Count

- The annual Christmas bird count was conducted with 28 volunteers. Ninety-six species of birds (98 being our highest species count occurring in 1994) and 60,650 individuals were recorded. Within the Cypress count circle, 600 greater white-fronted geese were included, an all-time high for the state.

Amphibians

- Frog Surveys have been completed for the last three years in cooperation with the Illinois DNR and Southern Illinois University. Volunteers and staff ran three survey routes five times from February through June. Although long-term trends are not discernable at this point, species diversity has been good with regular occurrence of 13 of the 21 species known to be present in this area.
- A regional amphibian monitoring project took place in June in an effort to assess potentially serious environmental problems affecting amphibians. Twenty volunteers assisted staff with the collection of 164 frogs in two wetland areas. Frogs were examined for abnormalities and released; no abnormalities were recorded.



Figure 3. The Cache River Wetlands includes 21 Species of Frogs and Toads

Geographic Information System Soil Survey Project

- The third year of the eight year project was completed. The Natural Resources Conservation Service, through the Shawnee Resource and Development Council, brought together The Nature Conservancy, Illinois Departments of Agriculture and Natural Resources, U.S. Forest Service, U.S. Fish and Wildlife Service, and seven county governments to sponsor an updated soil survey of southern Illinois. The digitized data will be put into GIS format. Total cost of this eight year project is \$1.5 million with Cypress Creek Refuge committing \$8,000 annually when funding is available.

- Illinois RiverWatch Network

Ten Joint Venture volunteers put on their waders and rubber boots and grabbed their collecting nets in an effort to learn more about aquatic life in the Cache River Wetlands. As part of the Illinois EcoWatch Network, a statewide volunteer stream monitoring program, these individuals began the process of long-term trend monitoring of five streams within the Cache River Watershed. Volunteers attended an orientation workshop to learn how to collect and identify varying forms of macroinvertebrates. Insects collected are ranked by their sensitivity to pollution; by identifying the types of insects found in a stream, the general health of the stream can be determined. Five streams within the Cache River Watershed were sampled in the spring and fall (Cache River, Sandy, Wolf, Cypress, and Porterfield Creeks).

Rainfall Monitoring

- Volunteers are assisting with monitoring rainfall gauges. This information will be used to track water flows from different parts of the watershed and monitor how reforestation affects river flows and flooding. Volunteers are responsible for checking rain gauges and filling out data sheets.

Raptor Surveys

- Volunteers have collected data on raptors and other wildlife throughout the Refuge. This survey involves 10 stops and is conducted 1 to 2 times a month. The information collected from these surveys is continuously plotted on a large map of the area. This map provides an interesting overview of hawks, owls, and other interesting birds residing or passing through the area.

1b. Studies and Investigations

Water Quality Monitoring

- The Refuge received a grant from the National Fish and Wildlife Foundation to initiate a long-term water quality monitoring project; the project includes biological sampling and the development of a Cache River Wetlands Activity Guide. The biggest challenge of the project is to gain support for restoration, education, and long-term monitoring in an area where subsistence, survival, and short-term gain are a higher priority than resource protection. One year funds from NFWF will help to initiate this program through a cooperative venture among the Refuge, other resource agencies and organizations.
- Biological sampling was conducted this spring by resource staff and Illinois RiverWatch Citizen Scientist staff. Each site (including adjacent pools and wetlands) was surveyed for macroinvertebrates (including crayfishes and mussels), fishes, amphibians, and reptiles. During the spring of 1998, Citizen Scientists will collect macroinvertebrate samples from five streams in the Cache River Watershed.

Neotropical Bird Study

- The sixth annual report for "Effects of Water Level, Edge Types and Plants Species on Migratory Songbirds: Implication for Floodplain Restoration" was submitted by Jeff Hoover and Scott Robinson of the Illinois Natural History Survey. Results of the study indicated that as the acquisition, restoration, and management of land in the Cache River Wetlands project area progresses, documentation of any immediate and long-term changes in the avifauna will be made by continuing to study Prothonotary Warblers (abundance, productivity, nest predation, and brood parasitism). The results of this research are invaluable because they provide baseline data for future comparisons to determine the success of the ongoing restoration efforts in the Cache River Wetlands area. Between April and August, the Illinois Natural History Survey staff monitored 1,100 nest boxes at 15 different sites on the Refuge and surrounding area. Nearly 500 boxes were used by Prothonotary Warblers.
- A component of this study also includes research on how neotropical migrant birds use their habitat and what keystone tree species are important to neotropical migrants. Results from this two-year study will provide valuable information to the reforestation effort on the Refuge. Preliminary results from 1997 indicated strong trends; yellow-throated warblers for example are tied closely to bald cypress for foraging and as a song perch. Cerulean warblers tended to forage high up in tall trees with pinnately compound leaves such as kingnut hickory, pumpkin ash, and green ash.

Alexander and Pulaski County Study - U.S. Army Corps of Engineers -

- The General Investigations Study of Alexander and Pulaski Counties, Illinois, is an ongoing study focusing on the Cache River between Vienna, Karnak, and Perks (which includes Little Black Slough, Heron Pond and the Lower Cache River). Two major problems are being addressed by the USCOE including sedimentation in the lower Cache River and the tremendous amount of incision in the Post Creek Cut-off which threatens Heron Pond/Little Black Slough further upstream. This study will provide an analysis of action items to address hydrological restoration, including reducing sedimentation and entrenchment of the Cache River and associated tributaries.



Figure 4. Downcutting in the Post Creek Cut-off

2 Habitat Restoration

2a. Wetland Restoration

Refuge Restoration

- Wetlands were restored on 150 acres of the Refuge (Kerley, Boutwell, and Allen tracts). Small dikes were constructed with sandbags that were donated by the Alexander County Highway Department. This temporary method offered an inexpensive alternative to heavy equipment construction plus the projects made ideal volunteer projects with almost immediate results.

Wetland Reserve Program

- Refuge staff assisted with the eligibility determinations and recommended management strategies on 4,500 acres of wetlands in the Cache River Watershed.

2b. Upland Restoration

Reforestation

- During 1997 over 350 acres were reforested using over 125,000 seedlings of native hardwoods. A bulk of these plantings were made on the Delta Lands tract in the southern portion (Old Cache Channel Unit) of the Refuge.



Figure 5. Dixon Springs Correctional Institute assisted staff with hand-planting seedlings

National Tree Trust

- National Tree Trust continued to work with the Refuge to germinate and provide seedlings from acorns collected on the Refuge. This approach insured the genetic integrity and variation of planting stock for reforestation. The initial effort during 1996 was somewhat disappointing as the swamp chestnut acorns for 1997 planting failed to germinate. However, almost all the cherrybark oak stock provided seedlings of adequate size which were used during the 1997 planting season. Through the Tree Trust Agreement, International Paper Company in Arkansas contributed staff time and resources to germinate seed stock to seedlings for the Refuge's reforestation program.

Boyd Seed Orchard

- The Boyd Seed Orchard was developed through a cooperative venture with the Illinois Department of Natural Resources, Forestry Division. More than 2,500 seedlings were planted over 50 acres with a cover crop of alfalfa. Seedlings were hand placed into augered holes. This method resulted in nearly 100% survival rate and phenomenal growth. Each seedling had a growth tube (tubex) placed over it and by mid-August about 60% of the seedlings had grown out of the tubes. Seedlings are monitored and maintained by staff and volunteers.



Figure 6. Successful growth of seedlings at the Boyd Seed Orchard

2c. Deepwater/Riverine Restoration

Nothing to report

3 Habitat Management

3a. Manage Water Levels

Nothing to report.

3b. Manage Moist Soil Units

Frank Bellrose Waterfowl Reserve

- Refuge staff manages the Bellrose Reserve which includes 380 acres of moist soil wetlands, divided into 3 management units. One hundred acres within the Reserve was renovated, removing willow and other woody growth.

3c. Graze/Mow/Hay

Hay Leases

- Hay leases were maintained at the Poole, Hileman, Fowler, and Lieb tracts to control noxious weeds, primarily Johnson grass and maintain scenic views. A total of 167 large round bales were harvested. The revenue generated, \$835, was forwarded to the Denver Finance Center. Hay prices were based on fair market value in the local area.

3d. Farming

Cooperative Farming

- This valuable program is used to control noxious weeds and improve soil fertility (nitrogen levels) for tree restoration. Basically, the farming program holds habitat "as is" until restoration measures can be implemented. The government share of the crop offsets the cost of additional fertilization to these areas and provides a valuable winter food resource for wildlife such as cottontail rabbits, whitetail deer, bobwhite quail, and other resident and migratory wildlife.

Table 3. Cypress Creek Refuge 1997 Cooperative Farming Program

Cooperator	Tract Name	Crop Acres	CRP Acres	Acres Retired in 1997
B. Harris	Earnhart/Harris	143	226 (trees planted)	89
Ray Schneider	Juncker	291		61
D. Phillips	Greenburg	303		303
D. Eddleman	V. Eddleman	100		15
R. Pittman	Schierbaum	24	36 (mowed)	
D. Stringer	Day	28		28

B. Owens	Bellrose	273		238
B. Bass	Boyd	120		49
B. McIntosh	Cross	250	100 (mowed)	28.6
M. Wolford	Wolford	27		27
R. Kerley	Smith	160		273
Doctorman	Stubblefield	95		95
TOTAL ACRES		1814	362	1206.6

3e. Forest Management

Nothing to report.

3f. Fire Management

Fire Protection

A cooperative agreement protection plan for the Refuge was secured with adjacent fire protection districts. Six different agreements were put into effect for a yearly fee, which varied according to Refuge acreage within each district.

Table 4. Fire Protection Districts

Fire Protection District	Annual Fee
Dongola Fire Department	\$700.
Horseshoe Lake Fire Department	\$700.
Karnak Fire Department	\$700.
Pulaski Fire Department	\$1000.
Tamms Fire Department	\$700.
Ullin Fire Department	\$1000.

Fire Management Plan - Prescribed burning is not conducted due to extensive reforestation. Development of a fire control management plan was completed and submitted for approval.

3g. Control Pest Plants

Noxious Weeds

- Johnson grass, monk thistle, and cocklebur are difficult noxious weeds to control on approximately 3,500 Refuge acres. Approximately 2,500 acres have been previously planted to trees. Chemical and mechanical treatments include mowing, Round-up, Fusilade, and 2,4,D.

4 Fish and Wildlife Management

4a. Bird Banding

Nothing to report.

4b. Disease Monitoring and Treatment

Nothing to report.

4c. Reintroductions

Nothing to report.

4d. Nest Structures

Nothing to report.

4e. Pest, Predator and Exotic Control

Beaver Control

- Fifteen beavers were removed from the Cache River, west of the Bellrose Waterfowl Reserve. The animals were trapped under an Illinois Department of Natural Resources nuisance wildlife permit by Refuge staff.

5 Coordination Activities

5a. Interagency Coordination

Agency Partnerships

- Although not a formal Joint Venture partner, the Natural Resource Conservation Service (NRCS) and Refuge staff share a close working relationship. Staff from NRCS share expertise on many habitat restoration projects on the Refuge. Refuge staff provide technical assistance on various NRCS programs throughout the watershed (ie. EQIP, WHIP, etc.).

5b. Tribal Coordination

Nothing to report.

5c. Private Land Activities

Private Lands - Partners for Fish and Wildlife

- The Refuge assisted with the restoration of 150 acres of wetlands on private lands.
- Egyptian School Nature Area - Refuge staff provided technical assistance in working with the Natural Resource Conservation Service, Pulaski/Alexander County Soil & Water Conservation District, Illinois Department of Natural Resources and Egyptian teachers and administration to develop a school natural area. The project included wetland restoration work, native grass and tree plantings in addition to a number of other facilities identified by teachers.

6 Resource Protection

6a. Law Enforcement

Nothing to report.

6b. Permits and Economic Use Management

Nothing to report.

6c. Contaminant Investigation

Four Level I contaminant surveys were completed in support of land acquisition.

6d. Contaminant Clean-up

Nothing to report.

6e. Water Rights Management

Nothing to report.

6f. Cultural Resources Management

Cultural Resource Survey

- Allied Archeology conducted Level I cultural resource surveys of two sites; 160 acres of the Delta Lands tract and two acres of the William Smith tract. Two significant sites were found at Delta Lands tract along the proposed exchange boundary. A Level II survey of Delta Lands resulted in no prehistoric artifacts, cultural features, or buried cultural horizons. One significant site was found at the William Smith tract near the house foundation. The house foundation was left intact and the basement was filled with dirt from off-site.

6g. Land Acquisition

Fee Title

- Realty staff, Betty Jarous (Negotiator) and Rick Johnson (Appraiser) worked with Refuge staff on various acquisitions and exchanges.
- The Refuge is number 9 out of 132 projects on the National Land Acquisition Priority List (Land and Water Conservation Fund). This list was used to evaluate fiscal year 1998 funding requests.

Table 5. Cypress Creek Refuge Acquisition Activity - 1990 through 1997

FISCAL YEAR	ACRES PURCHASED	DOLLARS SPENT	FUNDING AVAILABLE
1990	736	\$ 328,000	\$2,000,000
1991	3,263	\$2,175,863	\$2,175,760
1992	1,904	\$1,371,858	\$1,374,800
1993	4,050	\$3,087,115	\$3,400,000
1994	1,988	\$2,006,100	\$3,064,937
1995	484	\$336,200	\$1,593,229
1996	282	\$192,927	\$775,784
1997	873	\$767,400	\$993,596
TOTAL	13,580	\$10,265,463	\$15,378,10

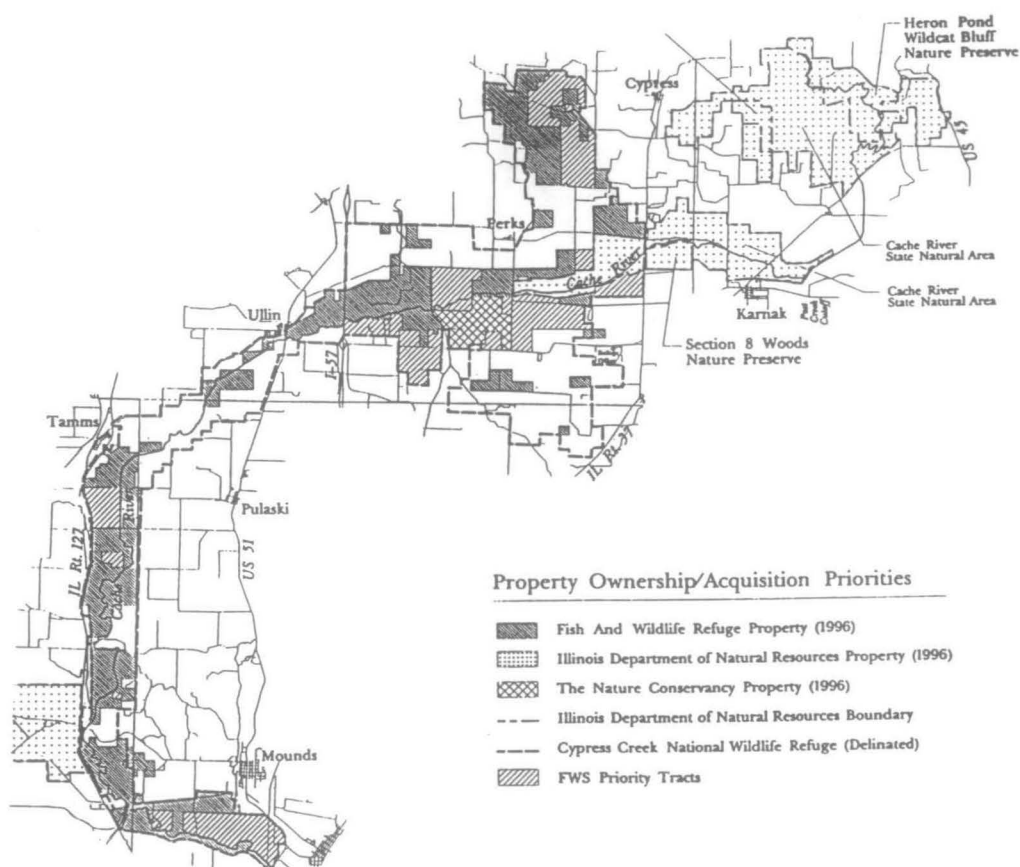


Figure 7. Refuge Land Acquisition Priorities

7 Public Education and Recreation

7a. Provide Visitor Services

Environmental Education Program

- School programs occurred throughout the year; March through May and September through mid-December were the most popular months for school field trips. Students were involved with a variety of on-site units which included sampling soil, testing water quality, collecting macroinvertebrates, conducting plant transects and identifying plants, sensory hikes, wildlife watching, canoe trips and reforestation tours.
- As part of the NFWF grant, a team of educators targeted 16 site specific activities for the Wetlands Activity Guide that focuses on water quality and associated issues within the watershed. Based on the grant criteria and teachers needs, this product will help teachers and students explore the Cache River Wetlands through activities that demonstrate the connection to water, wetlands, resource management, and a quality of life for people. Specifically, the guide will compile existing resources, tap into existing programs (ie. Illinois RiverWatch), and include site specific activities.
- Hogue Woods, Frank Bellrose Waterfowl Reserve, Heron Pond, and the Lower Cache Access have been the main areas used for activities. These sites will be further developed into outdoor classrooms.

Wetland Education Center

- Refuge staff and local community members continue to pursue support for the development of the Wetland Education Center. This facility is an essential element to accommodate visitors and provide quality experiences for schools and other interest groups. The building will also provide a permanent office space for Refuge staff and Joint Venture partners.

Partnerships in Education

- The Refuge was involved with partner schools throughout the year. The partnership program fosters ecological awareness, knowledge, and responsible action through hands-on activities. The emphasis is on directly linking classroom studies (science, social studies, English, History, Math, Art) to current resource issues in the Cache River Wetlands.
- Partnerships and cooperative activities include:
 1. *Century School* - Refuge staff are working with a new administration and teaching staff to develop an ecology curriculum for 9-12 grade students that highlights the Cache River Wetlands.
 2. *Egyptian School - School Nature Area* - The Refuge, Natural Resource Conservation Service, Pulaski/Alexander County Soil & Water Conservation District and the Illinois Department of Natural Resources are working with Egyptian teachers and administration to

develop a school natural area. The project will include wetland restoration work, native grass and tree plantings, in addition to a number of other facilities identified by teachers.

3. *Regional Superintendent Office* - The Regional Superintendent, Andrea Brown, oversees five counties in southern Illinois. The partnership includes providing training and resources to educators throughout the area. In return, the Regional Superintendent's Office publicized the Joint Venture events and news through a regional newsletter and highlights the Cache River Wetlands as a dynamic outdoor classroom.

4. *Shawnee Community College* - Refuge staff and school faculty developed a landscape plan for the college campus (Refuge office is located on the college campus). The project has strong administrative support and a landscape planning committee has been set-up to help with implementing the plan.

Teacher Workshops

- Cache River Wetlands Teacher Institute - In conjunction with the Regional Superintendent's Office, the Cache River Wetlands Joint Venture took part in the October Teacher Institute at Shawnee College. Three different field outings were offered by the Cache River Wetlands Joint Venture staff. Participants were oriented to the Cache River Wetlands and available educational resources and ideas for class field trips to the area. Outings and activities included:

- Cache River Wetlands Canoe Tour
- Wetland Hikes at Heron Pond
- River Watchers in the Cache River Wetlands

- Cache River Wetlands Environmental Education Workshop - Staff facilitated an additional workshop in November. The program was sponsored by the Regional Superintendent's office; the workshop provided opportunities for new teachers to learn about the Cache River Wetlands and site-specific programs.

Hunter Education

- Refuge staff conducted the 1st annual Waterfowl Academy at the Frank Bellrose Waterfowl Reserve. The one-day workshop highlighted waterfowl identification, hunting ethics and regulations, and an orientation to hunting locations on the Refuge. Thirty-five youth and their parents attended the program. Next year, staff from the Refuge and Mermet Lake Conservation Area (IDNR) will jointly sponsor the Waterfowl Academy.



Figure 8. Refuge staff conducted Waterfowl Academy at the Bellrose Waterfowl Reserve

Ecology Week

- Refuge staff assisted with Ecology Week which was sponsored by Johnson County Soil & Water Conservation District. This program was held for 5th grade students in Johnson County schools. Over the two days, 150 students were guided on a hike to Heron Pond. The hikes included hands-on activities that focused on natural history of the area and resource issues associated with the Cache River Wetlands.

Special Public Events

- A variety of special events were sponsored by the Joint Venture and provided opportunities for visitors to explore and experience the area.

1. National Wildlife Refuge Week - Cache River Wetlands Jaunt October 1997
The Cache River Wetlands Joint Venture celebrated National Wildlife Refuge Week with a weekend of biking, canoeing, and hiking. Guided trips and bike tours took place through the Cypress Creek National Wildlife Refuge and the Cache River State Natural Area. Bicycle rides included four routes varying in length; 18 miles, 30 miles, 60 miles, and 100 miles. Guided canoe tours meander to Eagle Pond and the State Champion bald cypress. Two guided hikes took visitors to Little Black Slough and Wildcat Bluff Trail.



Figure 9. Van tour during National Wildlife Refuge Week

2. National Rivers Month - Canoe Tours on the Cache

June 1997

In celebration of National River Month, canoe tours and interpretive hikes were led by Joint Venture staff throughout the day from the Lower Cache River Access. Activities and exhibits highlighted the swamp, resource issues and associated wetlands/animals/birds.

3. Cache River Days

September 1997

In conjunction with the Village of Ullin, the Cache River Wetlands Joint Venture hosted the 2nd Annual Cache River Days. In addition to good food, music, live animal demonstrations, over 35 craft vendors, and a variety of town festivities, tours of the Cache River Wetlands were offered to participants. These outings filled up quickly during the weekend and included guided hikes, canoe tours, and van tours of the Frank Bellrose Waterfowl Reserve.

7b. Outreach

Calendar of Events

- Refuge staff developed the Cache River Wetlands Calendar of Events which highlights a variety of programs throughout the year. Joint Venture staff (FWS, IDNR, TNC) and volunteers assisted with leading visitor programs.

Stewardship Week - Celebrate Earth Day

- Refuge staff assisted with Stewardship Week, a school event sponsored by the Forest Resource Center. The event was held April 26-29 for elementary schools within the southern counties of Illinois. Joint Venture staff ran 20 minute sessions on wetlands throughout the 4-day event. Participation included approximately 800 students in kindergarten through sixth grade.

Conservation Day

- Refuge staff assisted the Pulaski/Alexander County Soil & Water Conservation District with Conservation Day. The event was held for 300 5th grade students. Groups of 25-30 students rotated through learning stations which highlighted different natural resource topics. Staff ran 20 minute sessions on endangered species.

8. Planning and Administration

8a. Comprehensive Management Planning

Nothing to report

8b. General Administration

Funding

Table 6 Cypress Creek Refuge Funding for Fiscal Years 1991 through 1997.

Program	Fiscal Year						
	'91	'92	'93	'94	'95	'96	'97
Realty (8421)	\$92,000	\$92,000	\$60,000	\$60,000	\$ 30,000	\$ 82,000	-0-
Base (1261)	165100	189800	207960	260770	320967	320000	\$338,775
MMS (1262)	10000	17000	20600	75000	30000	30000	22,500
Fire (9120)(9110)	700	2500	110	4000	6150	6150	6,250
Private Lands (1121)	6000	5000	5000		5000	7207	13,000
Law Enforcement (1221)	800	500				500	-0-
Special Funding (1261)					50,000 (CMP)		72,152 Updike buyout/ Hills' move
TOTAL	274,600	306,800	293,670	399,770	442,117	445,857	452,677

- Acquisition Funding - Land and Water Conservation Funds for fiscal year 1997 was \$750,000.

Refuge Revenue Sharing

- Payments made during 1997 totaled \$51,531. These payments represent 3/4 of one percent of the assessed value of the land acquired for Cypress Creek Refuge through fiscal year 1996. Payments were 66.2% of the full entitlement amount. The payment to Union County included some lands of Crab Orchard Refuge.

Table 7. Cypress Creek Refuge Revenue Sharing Payments Made During 1997

COUNTY	REVENUE
Alexander	\$8,888
Johnson	\$3,173
Pulaski	\$25,211
Union	\$14,259
Total	\$51,531

Cypress Creek National Wildlife Refuge Staff

- Jerry Updike retired from the Fish and Wildlife Service after serving more than 30 years in the Refuge system. A dinner was given in his honor; Nita Fuller, ARD Refuges and Wildlife, presented Jerry with the Meritorious Service Award, the highest award within the Service.
- Marguerite Hills was selected as new Refuge Manager for Cypress Creek National Wildlife Refuge and arrived on duty July 20, 1997. Margurite Hills had spent the last years at Ventura, California heading up the Condor program for the Service.

Table 8. Fish and Wildlife Service Permanent Personnel

NAME	TITLE	SERIES/GRADE
Fry, Donald	Tractor Operator	WG-5705-02
Hinkle, Jean	Administrative Technician	GS-303-06
Hills, Marguerite	Refuge Manager	GS-485-13
Jones, Elizabeth	Refuge Operations Specialist	GS-485-11
Novara, Al	Wildlife Biologist	GS-486-11
Prosser, Dave	Maintenance Worker	WG-4749-08

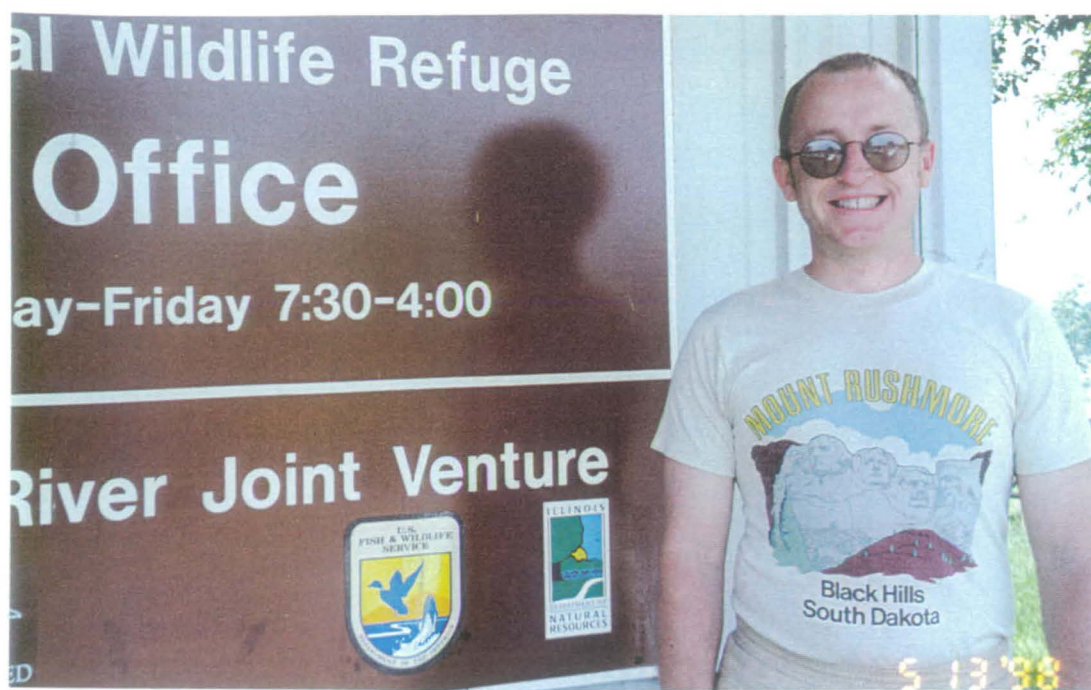


Figure 10. Gary Birch, Biological Technician with the The Nature Conservancy; assists with water quality monitoring project.



Figure 11. Cypress Creek National Wildlife Refuge Permanent Staff
(left to right: D. Fry, L. Jones, D. Prosser, J. Hinkle, A. Novara, J. Updike)

M. Hills - New Refuge Manager

The Nature Conservancy Staff

- The Nature Conservancy shares an office with the Refuge. Matt Nelson was hired as the Director of the Southern Illinois Field Office and replaced the former Director, John Penberthy.

Table 9. The Nature Conservancy Personnel - 1997

NAME	TITLE
Dresser, Mary	Program Administrator
Hutchison, Max	Ecologist
Maginel, Dave	Land Steward
Nelson, Matt	So. Illinois Area Director
Bartolo, Salvador	Seasonal Preserve Worker
Mejia, Romulo	Seasonal Preserve Worker

Illinois Department of Natural Resources Staff

- Mark Guetersloh was hired as a Biologist with the Division of Natural Heritage; Mark shares an office with the Refuge and TNC.

Volunteer Program

- Staff are especially pleased with local participation in volunteer events and school programs. Volunteers have assisted Refuge staff with tree planting, maintenance projects, school programs, frog/toad surveys, and shorebird surveys. There are many opportunities throughout the year for residents, students, and organizations to help the Joint Venture Partners.

Table 10. Cypress Creek Refuge Volunteer Program (Hours)

ACTIVITY	1992	1993	1994	1995	1996	1997
Maintenance	4,600	7,270	8,000	8,834	8,834	9,720
Resource Support	120	32	64	364	364	400
Public Use				44	44	166
Administrative	428	244	180		150	90
TOTAL HOURS	5,148	7,546	8,244	9,242	9,392	10,376
TOTAL VOLUNTEERS	78	81	78	95	96	99

- Refuge Volunteer of the Year - Kent Aspen received the 1997 "Volunteer of the Year" award for his active participation in a variety of Refuge programs.



Figure 12. Kent Aspen received the Volunteer of the Year Award
(From left to right - M.Hutchison, D.Prosser, M.Guetersloh, K.Aspen, M.Dresser, J.Waycuilis, M.Hills, L.Jones, A.Novara, J.Hinkle)

- Volunteers participated in a variety of opportunities on the Refuge:
 1. *Stewardship Saturdays* - These volunteer days were held one Saturday per month from February through October.
 2. *Frog and Toad Surveys* -Volunteers conducted a frog and toad survey between February and June along three survey routes within the Cache River Watershed.
 3. *Illinois RiverWatch Network* - Ten Joint Venture volunteers collected organisms in an effort to learn more about life in the Cache River Wetlands. Five streams within the Cache River Watershed were sampled in the spring and fall (Cache River, Sandy, Wolf, Cypress, and Porterfield Creeks).
 4. *Rainfall Monitoring* - Volunteers are assisting with monitoring rainfall gauges. This information will be used to track water flows from different parts of the watershed and monitor how reforestation affects river flows and flooding.

5. *Raptor Survey* - Volunteers collect data on hawks and other wildlife throughout the Refuge. This survey involves 10 stops and is conducted 1 to 2 times a month. The information collected from these surveys is continuously plotted on a large map of the area.

6. *Environmental Education/Public Use Programs* -Volunteers assisted with special events (Cache River Days, guided canoe tours, and hikes) and school field trips to the Refuge and the Cache River SNA.

7. *Shorebird Survey* - Volunteers surveyed 3 wetland areas on the Refuge.

8. *Christmas Bird Count* - Over 30 volunteers and staff spent December 19 participating in the Cypress Creek Area Bird Count.

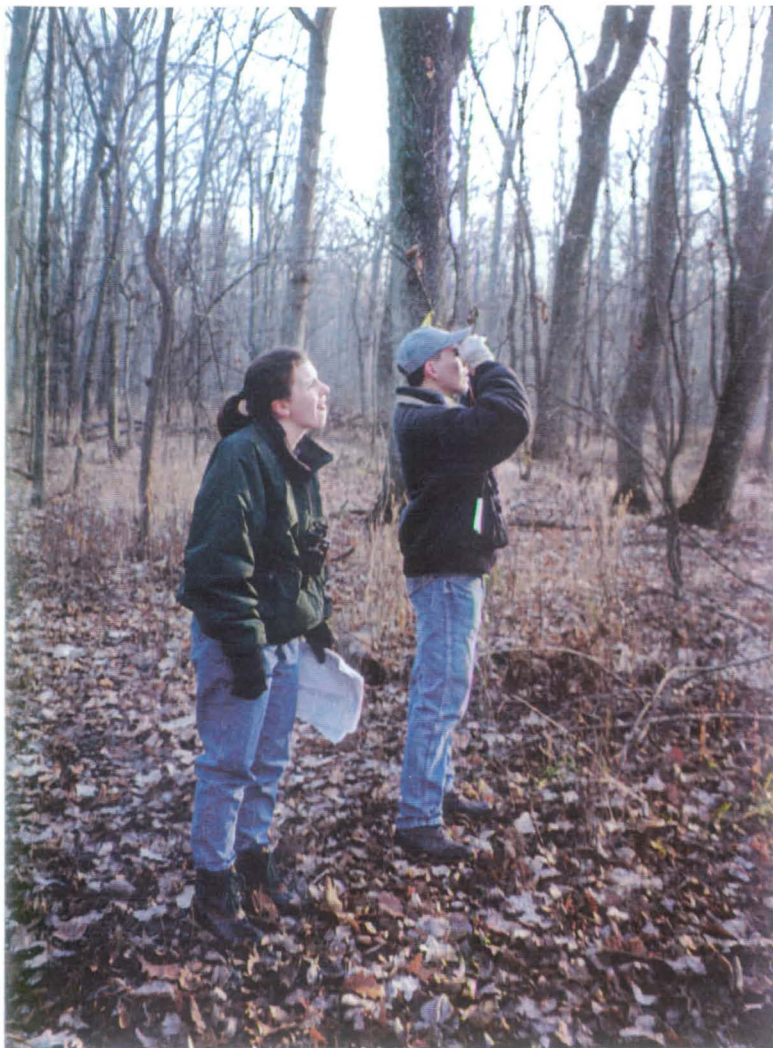


Figure 13. Volunteers assisted with the Christmas Bird Count

Internships

- Interns from Shawnee Community College worked with staff at the Cache River State Natural Area and the Cypress Creek National Wildlife Refuge. They were involved with day-to-day operations, biological surveys, education programs, and maintenance projects. The internship program is available throughout the year and provides students with field experience and exposure to the U.S. Fish and Wildlife Service and the Illinois Department of Natural Resources.



Figure 14. Catrina Macklin with the JTPA Program and intern Kent Aspen