

LONG-RANGE INTERPRETIVE PLAN

BIG CYPRESS NATIONAL PRESERVE



NATIONAL PARK SERVICE



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BIG CYPRESS NATIONAL PRESERVE

JULY 2002

prepared by

**Department of the Interior
National Park Service**

Big Cypress National Preserve

**Harpers Ferry Center
Interpretive Planning**

TABLE OF CONTENTS

BACKGROUND FOR PLANNING .....	.1
INTRODUCTION .....	.1
PRESERVE PURPOSE .....	.2
RESOURCE SIGNIFICANCE .....	.3
THEMES .....	.4
VISITOR EXPERIENCE OBJECTIVES .....	.7
EXISTING CONDITIONS .....	.9
ISSUES .....	.16
VISITATION AND VISITOR USE DATA .....	.21
INTERPRETIVE PROGRAM DESCRIPTION .....	.24
INTRODUCTION .....	.24
PRE-ARRIVAL INFORMATION AND ORIENTATION .....	.25
ARRIVAL EXPERIENCE .....	.26
PRESERVE-WIDE RECOMMENDATIONS .....	.27
Personal Services .....	.28
Education Program .....	.30
Publications .....	.33
Research and Planning .....	.34
Partnership Opportunities .....	.36
Access .....	.39
DEVELOPMENT RECOMMENDATIONS .....	.41
I-75 CORRIDOR - ALLIGATOR ALLEY .....	.43
FLORIDA 29/US 41 CORRIDOR - TAMiami TRAIL .....	.46
TURNER RIVER/BIRDON LOOP .....	.61
TURNER RIVER ROAD .....	.62

TABLE OF CONTENTS

LOOP ROAD64

BACKCOUNTRY68

SUMMARY, STRATEGIES, AND PRIORITIES71

INTRODUCTION71

PROJECT SUMMARIES73

PLANNING TEAM AND CONSULTANTS79

APPENDICES80

A. SPECIAL POPULATIONS80

B. EVALUATION94

**BIG CYPRESS NATIONAL PRESERVE
WILL BE A NATIONALLY RECOGNIZED AREA
WHERE NATURAL RESOURCES AND ECOLOGICAL
PROCESSES ARE PROTECTED, RESTORED, AND MAIN-
TAINED.**

**THE PRESERVE WILL BE
A CRITICAL PART OF A VAST, HEALTHY NATURAL SYSTEM
THAT IS A PLACE OF REFUGE AND RECREATION.**

**IT WILL BE A PLACE WHERE
PEOPLE CAN FORGE EMOTIONAL AND INTELLECTUAL TIES
TO THEIR NATURAL AND CULTURAL HERITAGE.**



BACKGROUND FOR PLANNING

INTRODUCTION

THE EMPLOYEES OF BIG CYPRESS NATIONAL PRESERVE HAVE A DUTY TO SAFEGUARD AND ENHANCE THE ECOLOGICAL PROCESSES AND THE NATURAL, SCENIC, CULTURAL, RECREATIONAL, AND EDUCATIONAL VALUES OF THE BIG CYPRESS WATERSHED

This Long-Range Interpretive Plan (LRIP) presents a visitor experience vision for the Preserve based on purpose, significance, and mission identified in the Preserve's Strategic Plan. It proposes development and management activities that prepare Preserve staff to effectively respond to current visitor experience demands; it also identifies a media and activity action plan that best meets future visitor needs and effectively tells interpretive themes and area stories.

The Long-Range Interpretive Plan sets the interpretation direction for the Preserve during the next ten years. It is a conceptual plan that lays foundation for the next phase of a comprehensive interpretive planning process - media planning, design and production, and the organization of staff and activities into annual interpretive plans. It is also a measure against which annual accomplishments can be evaluated.

The planning process facilitates participation of Preserve staff, interpretive partners and media specialists in evaluating the current interpretive program and focusing future interpretation on significant resources, themes, and issues. Goal-driven team planning develops interpretive proposals to enhance opportunities for visitors to understand, enjoy, and appreciate the reasons for which the Preserve was established.

This plan was prepared in accordance with Director's Order 12 - Conservation Planning and Environmental Impact Analysis, Director's Order 2 - Park Planning, National Park Service Management Policies, and Southeast Regional Office planning directives.

PRESERVE PURPOSE

Big Cypress National Preserve Strategic Plan defines the purpose for the establishment of the Preserve.

As part of the Big Cypress Watershed, the purpose of Big Cypress National Preserve is to assure the protection of its natural, scenic, hydrologic and recreational values and cultural resources.

Congress directed that hunting, fishing, and trapping shall be permitted in the Preserve. Congress also directed that members of the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida be permitted to continue their usual and customary use and occupancy including hunting, fishing, and trapping on a subsistence basis and traditional tribal ceremonies.

Congress further directed that limits or controls be established with respect to activities such as the use of motorized vehicles, exploration and extraction of oil, gas, and other minerals, grazing, agriculture, hunting, fishing, frogging, trapping, and new construction of structures that alter natural water flow patterns.



RESOURCE SIGNIFICANCE

The following statements from the Strategic Plan summarize the significance of Preserve resources and relate those resources to our natural and cultural heritage.

Big Cypress National Preserve:

is in a watershed that is key to the survival of Everglades National Park and the integrity of the entire South Florida ecosystem.

is a large natural wetland mosaic that supports a vast remnant of vegetation types found only in this mix of upland and wetland environments. Combined with assemblages of subtropical upland and wetlands, it contains the largest stands of dwarf cypress known.

is habitat for 34 animal and 70 plant species that receive special protection or are recognized by the state of Florida, the United States, or the Convention on International Trade in Endangered Species.

provides opportunities for the public to pursue recreational activities in a subtropical environment.

possesses significant prehistoric, historic, and contemporary cultural sites and landscapes.

remains home to the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida and sustains resources important to their cultures.



THEMES

Primary interpretive themes describe those ideas, concepts, or messages about Big Cypress National Preserve that are so important all visitors should understand them. Based on the site's purpose and significance, themes provide guidelines for making decisions concerning which interpretive stories will be told to visitors and what interpretive facilities and activities will be required to tell those stories. Primary themes do not include everything that may be interpreted; however, they do include those ideas that are critical to understanding significance of Preserve resources. All interpretive efforts (both media and personal service) should relate to one or more of the themes; moreover, each theme should be addressed by some part of the interpretive program.

WATER

Preserving the Big Cypress watershed is key to the survival of the South Florida ecosystem.

Fresh water flowing through the Big Cypress Swamp provides a steady supply of life-giving nourishment to the Ten Thousand Islands, a vital estuary system.

Wetlands are one of the most endangered ecosystems in the world. Development, recreational use and non-point source pollutants threaten the Big Cypress Swamp from all sides.

Subtle geologic features influence water flow and vegetation patterns which, in turn, affect wildlife, fire frequency, and soil compaction.

BIOLOGICAL DIVERSITY

Acting as custodian for ecological and biological processes, Big Cypress National Preserve provides habitat and protection for a great diversity of plant and animal species.

The diversity of habitat types found in Big Cypress, from pinelands, mixed hardwood hammocks, wet prairies, dry prairies, marshes, and estuarine mangrove forests provide for a diversity of plant and animal species.

Rare sub-tropical and temperate plants and animals have retreated to this remaining stronghold. Rare orchids, Florida panthers, red-cockaded woodpeckers and unusual ferns are found here and few other places in the world.

The vast biological diversity existing in Big Cypress National Preserve makes it one of the most unusual natural areas in the world.

The Big Cypress is a wetland interspersed with pine islands and hardwood hammocks. One may experience a variety of ecological communities as they are modified and characterized by the presence or absence of water depending on hydroperiod.

Fire and living things have evolved together. Fire is responsible for sculpting the landscape. Prescribed fire returns nutrients to the ecosystem and prevents excessive fuel buildup.

Exotic species such as Melaleuca (*Melaleuca quinquenervia*), Brazillian Pepper (*Schinus terebinthifolius*), Old World Climbing Fern (*Lygodium microphyllum*), Waterlettuce (*Pistia stratiotes*), Hydrilla (*Hydrilla verticillata*), Air Potato (*Dioscorea bulbifera*) and Australian pine (*Casuarina equisetifolia*) threaten native plant communities. With no natural enemies, exotics multiply rapidly and crowd out native species.

HUMAN/CULTURE

Big Cypress National Preserve reveals stories from times long past and into the future, reflecting a pattern of changing culture and human involvement.

A rich history of human involvement with the swamp spans time. The Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida, escaped slaves, land speculators, timber harvesters, hunters, fishermen, guides, cattlemen, and recreationists have all left their trails through the swamp.

The establishment of Big Cypress National Preserve is a story of cooperation and conflict between various user groups to stop a threat to a treasured place.

RECREATION/MULTI-USE

Big Cypress National Preserve manages a spectrum of human activities, recreational and commercial.

Big Cypress National Preserve provides an important oasis of wildness for recreation, reflection, and rejuvenation.

THEMES

Providing a unique environment with scenic vistas and wild areas, Big Cypress National Preserve hosts opportunities for human activities. Water birds, alligators, turkey, deer, raccoons and many other creatures call the Big Cypress their own. With increasing development in South Florida, opportunities to view such wildlife are becoming rare.

Multiple use mandates make Big Cypress National Preserve different from other National Park Service units. Oil exploration, hunting, and off-road vehicle use add challenge to the mission of preservation and protection.

Open space, quiet places, and wilderness are endangered in South Florida. Big Cypress National Preserve, along with other natural areas in the region, is vital to the quality of life in the state.

The Big Cypress is a unique expanse of cypress-dominated scenery. A windshield tour across Alligator Alley or Tamiami Trail provides vast scenic vistas.



VISITOR EXPERIENCE OBJECTIVES

Visitor experience may be described as those memories visitors accrue during their contact with a place. Often the most memorable experiences occur informally. The best experience for some visitors could be a casual drive through a cypress swamp. Others may remember the gentle pattern of flight of an egret across a marl prairie. Surprise at finding an alligator basking between the road and canal may become another visitor's most memorable experience.

Resources and facilities provide opportunity for a variety of experiences throughout the Preserve. Visitor experience objectives describe desired ends or visions for the Preserve's future to be achieved through planning, design, development and operation. The following section describes visitor experience objectives that should be facilitated by Long-Range Interpretive Plan proposals.

VISITORS WILL HAVE OPPORTUNITY TO:

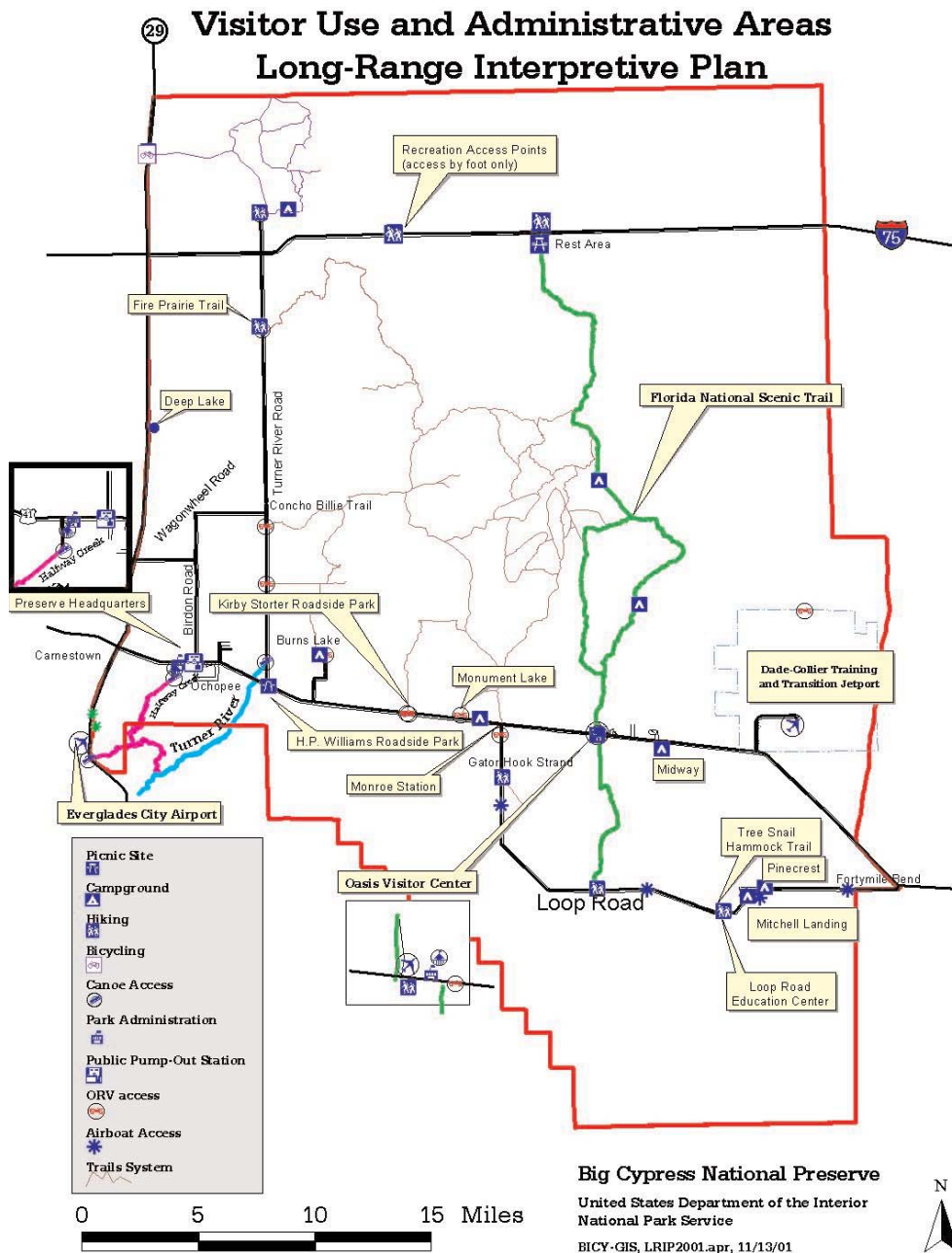
- Learn information and stories associated with primary interpretive themes to the depth that they choose and through a variety of media.
- Enjoy improved visibility and image of the Preserve with local, regional, and national communities.
- Participate in and enjoy a variety of active and inactive, safe, non-damaging recreational activities ranging the spectrum from wilderness to social, including accessibility to off-road areas for adventure, risk taking, and quiet solitude.
- Obtain information necessary to safely, enjoyably, and easily visit natural and cultural features, visitor facilities, activities, and services.
- Understand the economic, environmental, recreational, and social effects of Big Cypress on the South Florida environment and be inspired to wisely use, develop, and preserve natural resources in the future in their own sphere of influence.
- Experience current and historic lifestyles of the region to understand similarities and differences between contemporary and historic people.
- Participate in activities appropriate for audiences with differing levels of interest, ability, understanding, sophistication, and time

frames; layers of involvement provide opportunity for each activity to build on previous ones.

- Foster environmental consciousness and a sense of individual responsibility for wise stewardship of the environment in general and the Preserve resources in particular.
- Understand the interrelationships of the primary resources within the Preserve and those of the South Florida ecosystems as a whole.
- Receive current, accurate, balanced information.
- Understand that the Big Cypress landscape is the product of prehistoric, historic, and continuing changes in natural and cultural environments.
- Participate in an array of interpretive opportunities developed in cooperation with local, state, tribal, and federal agencies.
- Obtain thorough orientation to the variety and significance of resources and the opportunities to experience those resources at a variety of levels to meet the needs of most visitors.
- Experience individual media, non-personal and personal, that complements all other media; it will be obvious to visitors that all media and activities were planned, designed, produced, and presented to build upon each other rather than compete or repeat.
- Enhance their curiosity to learn more about the resources they drive through as they cross the Preserve.
- Understand and appreciate Big Cypress' natural and cultural history, and be able to relate it to the broader scope of South Florida and American experience.
- Participate in a scenic drive through a variety of landscapes representing South Florida ecosystems.
- Explore the diversity of Big Cypress' natural and cultural resources and be inspired to participate in perpetuation of the area's natural and cultural heritage.
- Find universal accessibility to resources, media, and activities that are culturally inviting to all constituents.
- Interact with National Park Service staff and programs that provide opportunity to understand and support National Park Service mission and contribute to perpetuation of Preserve values.

EXISTING CONDITIONS

Visitors to Big Cypress National Preserve currently have few options for an extended exploration of the area unless they are off-road vehicle users or backcountry hikers. The following conditions are found along each route.



INTERSTATE 75 - ALLIGATOR ALLEY

Recreational accesses allow visitors to enter the Preserve by foot from either north or south of the interstate. These recreational accesses (mile marker 70) have vault toilets and one bulletin board with standard trail information at each trailhead. An off-road vehicle trail on the south side of the interstate leads the walker into hardwood hammocks and pinelands. There is no designated trail. The north side leads the hiker into the Bear Island/Addition Lands area. There is no designated trail. Another recreational access point is planned for L-28 at mile marker 53 on I-75.

Further along the interstate to the east at mile marker 63, a Florida Department of Transportation rest area provides the visitor an opportunity to stop. There is presently no information about the Preserve at the rest area. Just east of the rest area, the Florida National Scenic Trail goes north into the Addition Lands and south into the Corndance/Turner River units of the Preserve.

Plans are underway for a series of low frequency FM radio broadcast stations for this highway. This will be a cooperative effort between the Florida Department of Transportation, National Park Service, and other interested parties.

STATE HIGHWAY 29

From just south of Sunniland to just south of Everglades City, Florida Highway 29 forms the western border of Big Cypress National Preserve. An access (walk in or bicycle in) from this road opens into the Bear Island Unit of the Preserve. Bicyclists use this route infrequently, most of those attending interpretive bicycle tours on winter weekends.

Recently purchased property near Deep Lake allows access by foot to the lake, a sinkhole, full of fish and delightful. Deep Lake is reportedly the only sinkhole of this size in South Florida. It is approximately 90 feet deep. Barron Collier had a hunting and fishing lodge here, the foundation of which can still be found. The lake has a dedicated following of people who grew up there with their families in the twenties and thirties. The property is being cleaned up and readied for public access; however, now old picnic tables are the only visitor amenities.

The Everglades Area Chamber of Commerce leases property owned by the National Park Service at the intersection of Florida 29 and US 41 to operate a visitor information center. This information center is small

and in need of major repair. The chamber has rejected offers to participate in a new facility at that site. Their lease extends another 14 years. The National Park Service is building a new facility funded with federal highways money through the Florida Department of Transportation adjacent to US 41 between Highway 29 and the national preserve headquarters building.

Boat access from the Everglades City area into the Preserve is available through Halfway Creek, Turner River, and Barron River.

HIGHWAY 41 - TAMiami TRAIL

This corridor was designated a state scenic highway in 1999, and a National Scenic Byway in 2000, but it offers few visitor amenities. The Denver Service Center has completed a Scenic Highway Improvements Conceptual Design Plan for additional safety and amenity development along the highway. The plan proposes turn lanes into areas of interest and parking lots at several locations to alleviate the problem of visitors stopping along this busy highway to look at birds and alligators.

Seagrape Drive provides a bulletin board, boat ramp, and popular fishing from shore. Dona Drive has a dump station that also operates as a visitor contact point in the winter season when volunteers staff a booth.

HP Williams roadside park at the turnoff for the Turner River Road (see below) is a popular picnic and alligator viewing area but has no interpretive facilities.

Burns Lake campground has been closed to the public to eliminate competition with a nearby privately owned campground. It is used as a hunter camp in the fall and a group camp occasionally in the winter. A bulletin board has been used in the past to post interpretive information and services.

Kirby Storter roadside park is owned by the Florida Department of Transportation. An old boardwalk previously used for access into a cypress strand has been closed for several years due to unsafe conditions. The Scenic Highway Improvements Conceptual Design Plan calls for current parking areas on the roadside to be removed. A parking area and interpretive trail will be located just west of the present Kirby Storter parking areas.

A bulletin board welcomes campers to Monument Lake Campground, the only fee campground in the Preserve. A small amphitheater with a

EXISTING CONDITIONS

fire pit, screen, and electricity hosts campfire programs on two nights in the winter season (December 15-April 1). Benches are inadequate for the number of campers using the area.

The National Park Service now owns an abandoned gas station at Monroe Station. This building has been listed on the National Register. Unfortunately, the building is in very poor condition and is beyond repair. Termites have riddled the entire structure. A nearby fenced lot formally used to store off-road vehicles will become a public parking area for backcountry users.

Big Cypress Visitor Center, the Preserve's primary and only visitor center, is located in an old gas station/airport building. A small reception area displays local wildlife (birds, snakes, and small mammals). A table case displays a Florida panther while a small exhibit case holds a collection of tree snails. A small sales area supplied by the Florida National Parks and Monument Association vends books and maps. A 50-seat theater allows on-request showing of a 12 ½-minute movie, *The Living Waters of Big Cypress*. The movie, now pressed onto laserdisc, is popular with visitors but is outdated and showing it. This facility, the movie, and the displays are sorely inadequate and do not meet NPS standards for interpretation.

The Florida National Scenic Trail travels north and south from the visitor center. Guided interpretive walks on the trail are generally wet walks with visitors often knee to waist deep in water and mud.

Midway Campground, a short distance east of the visitor center, offers free camping with a vault toilet but few other amenities. A bulletin board presents campground information and other materials. No other visitor services are available between Midway Campground and the Preserve's eastern boundary.

TURNER RIVER ROAD

This road goes north from US 41 into the Bear Island area. It does not provide access onto I-75 although it passes under the interstate. Along Turner River road a canal attracts myriad wildlife. This is where Preserve staff send visitors who want to slow down, get off main highways and actually see the Preserve.

A 17-mile loop drive follows Turner River Road to Wagonwheel Road and down Birdon Road to return to US 41. These gravel/dirt roads are generally in good repair but get washboard surface in late winter.

Two walkable trails lead off Turner River Road. Concho Billy Trail is an off-road vehicle trail that follows an old oil road to an oil pad and beyond. The trail passes through a variety of habitat types, however, it is also a primary off-road vehicle (ORV) access point potentially causing considerable conflicts between hikers and ORVs. Further up the Turner River Road, just south of I-75, the Fire Prairie Trail goes west into the Deep Lake Unit. This area is closed to off-road vehicle traffic and provides a pleasant walk into a prairie ecosystem.

At the end of the road, Bear Island Campground is a pleasant out of the way area popular with off-road vehicle users and hunters. Two designated off-road vehicle routes depart from Bear Island forming a 20-mile loop. Bicycling is allowed on any of these trails.

LOOP ROAD

This road is a rough, partially paved, mostly dirt track through wonderful cypress and prairie terrain. The west end is very wild with good wildlife viewing opportunities.

Gator Hook Nature Trail is proposed to follow an old logging tram from the Loop Road east into the Robert's Lake Strand.

At Sweetwater Strand a viewing deck is planned adjacent to the road to allow relaxed viewing of this lovely cypress strand.

The southern terminus of the Florida National Scenic Trail intersects Loop Road. The section of the trail from the visitor center to Loop Road is not heavily used due to its continuous wetness, but it is a unique experience and delightful in the driest months.

Two primitive campgrounds along Loop Road, Pinecrest and Mitchell's Landing (also known as Redbird Lane), have no amenities and are mostly used by hunters and off-road vehicle drivers.

The Loop Road Education Center is in Big Cypress National Preserve, but has been operated through Everglades National Park since its inception. Across the road from the education center the ½ mile Tree Snail Hammock Nature Trail loops through a mature hardwood hammock. Old signposts correspond to a brochure no longer maintained. Mosquitoes make this trail unbearable in all but the driest winter.

AVAILABLE VISITOR ACTIVITIES

Driving tours - Listed above.

Backcountry camping by hiking or off-road vehicle - Dispersed high ground campsites throughout the Preserve. Off-road vehicle campers must use trails where designated.

Off-road Vehicle Use - Little interpretation or education has been offered to this user group. In the implementation of the Off-Road Vehicle Management Plan an education program has been initiated. It includes orientation to the rules and regulations of the Preserve and will be modified for the future to include other information.

Canoeing/Kayaking - Popularity of Halfway Creek and Turner River continually increases as information spreads about the attractions of these tunnel creeks. Everglades National Park and Big Cypress National Preserve interpreters lead canoe trips on both waterways.

Hunting and Fishing - Hunting and fishing are allowed in the Preserve as authorized in the enabling legislation.

Birding and Wildlife Viewing - This activity is becoming very popular as ecotourism groups discover that Big Cypress has better birding than many other places in South Florida. Turner River Road is the most popular locale for this activity. If the Loop Road were in better condition it too would be very popular.

Hiking - Seasonally, Big Cypress has many opportunities for hiking. Wet season presents challenges daunting to most hikers including knee to waist deep water, mud and heat, humidity and mosquitoes. The dry season, particularly January, February, and March, provides excellent opportunities for extended hiking. The Loop and Deep Lake Units and several other units designated by the Off-Road Vehicle Management Plan do not allow off-road vehicle use. These areas are more amenable to a true wild hiking experience than many other locations. During the winter season, wet-walks are provided by National Park Service interpreters. This big adventure is popular with those who learn about it, although sporadic advertising has kept program attendance low.

Environmental Education - In 1999, the Preserve obtained a Parks as Resources for Knowledge in Science grant from the National Park Foundation and Exxon. This grant enabled the Preserve to establish a fledgling environmental education program in coordination with the

Collier County schools. Sixth grade students have the opportunity to track radio collars like panthers wear, do water quality and quantity measurements, test soil, and make other assessments of three habitat types in the Preserve. A ranger visits schools prior to the field trip to present an orientation slide program. Students are given facts about safety, including snakes and alligators, and told to be prepared to get wet and muddy. Teachers are provided with a curriculum of pre and post field trip activities for classroom work. The curriculum is closely tied to Sunshine State Standards and was developed in close coordination with teachers. A converted house on US 41 houses a temporary Environmental Education Center.

Web Pages - The current web page, www.nps.gov/bicy, provides thumbnail information about visitor services and opportunities. Draft expanded web pages are underway including hiking, fishing, off-road vehicle use, birding, kids, and panther news.

CONCLUSION

Many opportunities for development of interpretive experiences for the public exist in Big Cypress National Preserve. Observations and visitor surveys show that most of the Preserve's heavy winter visitation is drive-through visitors on their way to Everglades National Park and the Florida Keys. There is a large population on each coast interested in activities and services that are easily accessible. The main constituency for non-personal services is the drive-through visitor using US 41 and I-75 as well as the Internet visitor.

OFF-ROAD VEHICLE USE

Off-road vehicles (ORVs) such as swamp buggies and airboats have traditionally operated within the Preserve. Later three and four wheelers were added to the ORV use. This use under past management practices has resulted in significant resource damage. Sensitive habitats including prairies have been severely impacted. Current implementation of the Recreational Off-Road Vehicle Management Plan will change the character of vehicle use within the Preserve. The plan calls for designated ORV trails throughout sections of the Preserve remaining open to ORVs, closure of prairies and other areas impacted and changes the requirements for permits. Communication, education, and interpretation will be key for all users as changes occur. Great opportunity exists to reach this potential audience with conservation and stewardship messages.

LACK OF NAME RECOGNITION AND KNOWLEDGE OF RESOURCES AND AVAILABLE AMENITIES

Big Cypress National Preserve is not well-known by potential constituents who live in and visit the major population centers of each coast of South Florida. The I-75 and US 41 corridors that cross the Preserve provide visitors an opportunity to view Preserve landscapes. It is a rare opportunity for the National Park Service to have such a large potential audience to experience what is described as the critically endangered natural system in South Florida. However, most travelers speed through the resource without knowing about many opportunities to understand the significance of what they are seeing. Education and interpretation will be key in keeping public lands wild in the fast growing area.

VISITOR INFORMATION/ORIENTATION

A small information center operated by the Everglades Area Chamber of Commerce at the corner of US 41 and Florida 29 is in need of major repair. The Chamber of Commerce has rejected offers to participate in a new facility at that location. In addition, a new facility is planned between Highway 29 and the current Preserve headquarters building to provide visitor information and orientation.

FUTURE OF INTERPRETIVE PROGRAM

Big Cypress' interpretive program is young and lacks media to orient, identify, and interpret the important natural and cultural resources entrusted to the Preserve. Visitors have few opportunities to access park features, to know what they are seeing, and to understand the complexities that the Preserve faces in managing and protecting these resources. The current visitor center is inadequate to visitor needs and is not up to NPS standards for visitor facilities or interpretive media. A complete remodel of the existing building with expansion into other sections including garage bays or a new building is sorely needed.

FUTURE OF ENVIRONMENTAL EDUCATION PROGRAM

Short term grant-based funding for a Preserve environmental education program established a temporary Environmental Education Center. Funding for continuation of the program is uncertain.

FLORIDA PANTHER RECOVERY

Approximately 50 Florida panthers roam the wild areas of South Florida. Half of these use Big Cypress National Preserve regularly. Although public opinion is positive, educational efforts are still needed to protect the remaining population of panthers.

COMPREHENSIVE EVERGLADES RESTORATION PROJECT (CERP)

CERP will affect Big Cypress National Preserve in ways not yet known. The Southwest Florida Feasibility Study will have impacts on Big Cypress and vice versa. Education of the public about these issues will prepare them for changes the projects will create.

MULTI-SPECIES RECOVERY PLAN

The multi-species recovery plan addresses critical recovery of habitats and needs of species such as Cape Sable seaside sparrow and manatees. These habitat preservation efforts will be critically linked to interpretive efforts, especially outreach in the local communities.

FIRE MANAGEMENT

Fire is an ongoing issue in Florida. Public opinion for prescribed burning is positive. Education and public information must continue to provide knowledge needed to perpetuate efforts begun a decade or more ago.

HUNTING AND FISHING

Education of users and non-users enhances understanding of human impacts on the resource and ways to minimize those impacts. Many users underestimate the value of public lands in maintaining these recreational opportunities.

WATER QUALITY/QUANTITY

The Preserve, because it is an enclosed watershed for most of its area, holds some of the purest fresh water in South Florida. Surrounding waters in canals and agricultural runoff areas, however, are some of the poorest water quality in the state. Quantities on the eastern side of the Preserve are often affected by canal structures to the north and east. As south Florida begins to implement the Comprehensive Everglades Restoration Plan, changes in water flow and other issues will become a lasting legacy and challenge. Interpretation can play a major role in visitor use and perception of water and water issues in the state.

HABITAT PROTECTION

South Florida's human population is expanding rapidly. Wild places become rarer every year. The importance of protection of habitat and preservation of wild lands are messages that need to be spread. Many people take public land for granted. Eyes opened to the importance of this valuable piece of our nation's heritage will keep portions of South Florida wild.

ROAD, BRIDGE, AND CULVERT CONSTRUCTION

Construction projects create unavoidable inconvenience to Preserve visitors. Information services will alleviate some of the complaints and holdups.

DIMINISHING WADING BIRD POPULATIONS

Wood storks, roseate spoonbills, and other species have problems nesting in years when human intervention of water quantity and timing do not correspond to natural water patterns. Although the National Park Service and many other agencies have done a good job informing people about the need for compatible wildlife and human interaction, continuing efforts are needed to assure compatible interaction.

WILDLIFE SAFETY

Human, alligator, and other wildlife encounters have resulted in few injuries; however, the opportunities for negative encounters increase as the number of visitors increase. Multi-lingual safety information is needed to respond to the increase in non-English speaking visitors.

HIGHWAY SAFETY

Speed and volume of traffic on both I-75 and US 41 create unsafe conditions for visiting a National Park Service unit. Safety consideration needs to be addressed.

BACKCOUNTRY USE

Many people using backcountry areas do not understand and apply minimum impact techniques. Leave-No-Trace[®] concepts need to be taught to backcountry users.

POACHING OF PLANTS AND ANIMALS

Many visitors and local residents are not aware of Preserve rules and regulations. Others simply ignore them due to lack of enforcement. Information and interpretation are needed to educate potential innocent pilferers and to encourage those who observe rule infractions to report incidents.

EXOTIC PLANTS

Many non-native invasive plants impact native species in the Preserve. Educational efforts can assist in efforts to reduce invasive seed introduction and to increase "eyes" in the field to report outbreaks.

CULTURAL HISTORY OF THE PRESERVE

Although the Preserve has a rich cultural history, knowledge of that history is lacking. The Southeast Region Archaeology Center has done basic archaeological resource inventories, but further studies, including a paleolimnology of Deep Lake and basic secondary source research on Preserve history, need to be done.

ENCROACHMENT BY DEVELOPMENT ON ALL SIDES

Development on all sides of the Preserve threatens to create another island unit of the National Park Service. Education may assist locals in planning and zoning decisions that will make a difference in the future.

OIL AND GAS EXPLORATION

Increasing pressure to develop oil and gas resources will occur. An Oil and Gas Management Plan is being developed to replace the current Minerals Management Plan.

ACCESSIBILITY

There are very few opportunities for visitors with limited mobility to experience off-road resources in the Preserve. Many visitors are unable to access a "wilderness" experience and many "out of the way" Preserve resources because of wet, densely vegetated terrain and lack of accessible trails and boardwalks. Development of such trails would greatly enhance interpretive opportunities for a wide range of Preserve visitors.



VISITATION AND VISITOR USE DATA

The NPS Public Use Statistics Program Center in Denver records monthly and annual visitation statistics.

ANNUAL RECREATION VISITS 1992 - 2001

1992	212,682
1993	234,830
1994	294,307
1995	365,463
1996	424,920
1997	462,553
1998	474,895
1999	503,110
2000	505,062
2001	409,771

MONTHLY RECREATION VISITS - 2001

January	45,361
February	46,126
March	43,613
April	31,626
May	24,520
June	27,828
July	25,544
August	20,476
September	28,114
October	24,719
November	45,666
December	46,158

SEASONAL RECREATIONAL VISITATION PATTERNS - 2001

Spring: March - May	24.35%
Summer: June - August	18.02%
Autumn: November	24.04%
Winter: December	33.59%

VISITOR CHARACTERISTICS AND EXPECTATIONS

The Visitor Services Project, University of Idaho Cooperative Park Studies Unit, conducted a visitor study in Big Cypress National Preserve during January 2-10, 1999. Visitors returned 582 of 857 questionnaires distributed for a 68% response rate.

The following summary of this report profiles Big Cypress National Preserve visitors.

- Over one-half (62%) of the visitor groups was family groups. Sixty percent of visitor groups were groups of two. Fifty-two percent of visitors were over 50 years old.
- Sixty-one percent of visitors were making their first visit to Big Cypress National Preserve. Most of the visitor groups (81%) spent less than a day at the park. Of those groups that spent less than a day at the park, 71% spent four hours or less.
- United States visitors were from Florida (32%), New York (3%), and 42 other states including Washington D.C. International visitors comprised 21% of Big Cypress National Preserve visitors. They were from Germany (32%), Canada (21%), England (16%), and 18 other countries.
- The sources of information most used by 390 visitor groups were friends or relatives (29%), previous visits (28%), travel guide/tour book (27%), and highway information signs (23%).
- On this visit, the most common activities were sightseeing (66%), viewing birds (66%), visiting the visitor center (63%), viewing wildlife other than birds (60%), and driving through to reach another destination (60%).
- On this visit, the most commonly visited sites within Big Cypress National Preserve were the visitor center (60%) and H.P. Williams Park (28%). The least visited sites include Bear Island Campground (4%) and the Florida National Scenic Trail (4%). The visitor center was the site listed most often as the first site visited within the park (47%), followed by H.P. Williams Park (14%).
- Most of the visitor groups (90%) indicated that the issue of wildlife habitat is either "extremely important" or "moderately important" to the future of Big Cypress National Preserve. Eighty-six percent of groups rated endangered species as an "extremely important" or "very important" issue, and 83% indicated that water quality is "extremely important" or "very important" to the future of Big Cypress National Preserve.

- With regard to the use, importance, and quality of services and facilities, it is important to note the number of visitor groups that responded to each question. The services and facilities most used by 498 visitor groups were restrooms (71%), visitor center (70%), and roads (61%). According to visitors, the most important services and facilities were campgrounds (97% of 59 respondents), restrooms (89% of 332 respondents), and roads (86% of 280 respondents). The highest quality services and facilities were the visitor center movie (84% of 74 respondents), the visitor center (81% of 315 respondents), and the visitor center exhibits (81% of 199 respondents).
- Many visitor groups (78%) felt that viewing wildlife was either "extremely important" or "moderately important" to their visit. Seventy-three percent felt scenic views were "extremely important" or "moderately important" and 72% felt experiencing wilderness was "extremely important" or "moderately important" to their visit. The highest "not important" ratings were given to hunting (80%), off-road vehicle use (66%), fishing (61%), and airboating (53%). Each of these activities were "extremely important" or "moderately important" to some visitors: 7% for hunting, 16% for fishing, and 15% for airboating.
- Eighty-six percent of visitor groups rated the overall quality of visitor services at Big Cypress National Preserve as "very good" or "good." Visitors made many additional comments that are included in the appendix of the Big Cypress National Preserve Visitor Study Report 109 available for review at Big Cypress Visitor Center.



INTERPRETIVE PROGRAM DESCRIPTION

INTRODUCTION

This section of the LRIP proposes educational and informational media and personal services to enhance the interpretive future of Big Cypress National Preserve. It responds to the assessment of existing and planned visitor use programs described in the **BACKGROUND FOR PLANNING** section of the plan. Proposals are specific enough to define interpretive concepts but not so prescriptive they thwart the creativity of future media designers and Preserve interpretive staff.

Interpretive proposals will be described for each of the following: Pre-arrival Information and Orientation, Arrival Experience, Preserve-wide Recommendations, Development Recommendations, I-75 Corridor - Alligator Alley, Florida 29/US 41 Corridor - Tamiami Trail, Turner River/Birdon Loop, Turner River Road, Loop Road, and Backcountry.

Most recommendations in this plan are based on existing approved plans, such as the General Management Plan, the Off-Road Vehicle Management Plan, and the Scenic Highway Improvement Conceptual Design Plan. Recommendations for facility construction, building modifications or relocation, and landscape design concepts may be proposed in this section to achieve visitor experience objectives. The feasibility and design of these concepts will need further evaluation in implementation plans, such as schematic design plans or design concept plans.

PRE-APPRIVAL INFORMATION AND ORIENTATION

Anticipation and excitement about Big Cypress National Preserve should begin long before visitors arrive at the Preserve. Potential visitors and others seeking knowledge of the Preserve will have convenient access to adequate, accurate information and interpretation of themes, resources, activities, and programs while at home and as they travel to the Preserve.

From their homes potential visitors can find information through telephone, publications distributed by mail, local media broadcasts, and the Preserve's home page address on the Internet.

A variety of publications (see page 33) will inform potential visitors and others interested in the Preserve about what to expect, including challenges of the swamp experience and how to prepare for it.

People accessing the Preserve website on the Internet will learn about significant resources, resource management programs and special activities, programs, and visitor services. The website will include an expanded "virtual visitor center" that provides evocative interpretation for people who cannot visit the area. Electronic versions of site bulletins (see page 34) provide detailed information about specific topics. As bandwidth problems in the National Park System are solved, short digitized video clips of footage from the proposed swamp walk educational outreach video (see page 32) and new visitor center interpretive film (see page 59) can easily be incorporated into the website. Pages dedicated to each division or each function (interpretation, protection, resource management, park management and administration, etc.) may be developed and linked to a central page. Links to other South Florida websites will allow people to contact partnership entities for specific information about related sites.

The video version of interpretive film (see page 60) made available to regional tourism offices, local cable television and other closed circuit systems will reach a large number of potential visitors in urban areas on both Florida coasts.

As visitors approach the region, they will be attracted to the Preserve by cooperative promotion of visitor experience opportunities through Florida cultural and natural sites, state and local tourism media, and brochures distributed at state and regional welcome centers. Descriptions of the Preserve can create images of an intriguing natural landscape with a multitude of wildlife and many opportunities for recreational and educational experiences.

ARRIVAL EXPERIENCE

Arrival information will make visitors aware that roads across Big Cypress National Preserve are more than commuter routes between Naples and Miami. They also offer access to an array of natural and cultural features and recreational opportunities. Arrival information will encourage visitors to explore and discover the Preserve in its many expressions.

Visitors can easily identify the Preserve entrance. Changes in landscape character from that experienced on the approach create a sense of arrival at a special place. Entrance and exit signs on I-75 and US 41 need to be prominently displayed and identify Big Cypress National Preserve and National Park Service. Visitors traveling between Everglades National Park and Big Cypress National Preserve will find a clear distinction between the areas and sense that both are equally important as National Park Service units.

Immediately before or after the Preserve entrance visitors will find readily available, easily accessible and clearly stated orientation, directions and information about how to best experience resources. Signs, roads, trails, and information will make desired travel routes easy to follow, interesting to the senses, and barrier free. Location of contact facilities that provide additional information and interpretation must be clearly identified. Signs will direct visitor attention to four Travelers Information Radio Stations, one at each entrance to the Preserve on I-75 and US 41. Each station will provide information appropriate to its location with content written and narrated in an interpretive style. Each station will welcome visitors to the Preserve, describe visitor experience opportunities, encourage visitors to observe the resources as they drive through the area and identify and encourage participation in available experience opportunities. Each will invite people to escape fast paced highway travel to explore Preserve resources, introduce the concept of a South Florida ecosystem and the need for preservation of these important resources, and identify nearby visitor contact facilities as essential stops for additional visitor information. Design and installation of radio facilities will be coordinated with the National Park Service TIS Coordinator, WASO Office of Operations Engineering.

PRESERVE-WIDE RECOMMENDATIONS

Resources and facilities throughout the Preserve give visitors many opportunities to participate in a variety of activities appropriate for audiences with different levels of interest, understanding, and sophistication. Most visitors will find activities that match their preferred level of involvement with the area. Some may choose in-depth education. Others will select activities appropriate for an extensive involvement with South Florida environments. Still others can pursue a casual park driving experience. A few may only want to get away from their work for a short time or to picnic in a pleasant area. Whatever their level of interest visitors can quickly identify options and select the ones most likely to meet their needs.

Easy, convenient access to all significant Preserve resources, programs, and facilities will minimize distractions from non-preserve attractions. Interpretive programs and services contribute to clean, comfortable visitor use areas and a safe environment throughout the Preserve. Polite, sensitive, knowledgeable, courteous, professional, and efficient staff, and innovative media will provide accurate interpretation based on the best available documented research.

Entry signing, directional signing and orientation and interpretation wayside exhibits throughout the Preserve need to be coordinated. Signs and wayside exhibits need to reflect design compatibility and consistency. This long-range interpretive plan recommends an updated Preserve-wide sign plan be developed in conjunction with a wayside exhibit proposal and plan (see page 34) and the Scenic Highway Improvements Conceptual Design plan to consider location, message, and design of all signs and wayside exhibits.

Visitors who tour the area will find a variety of experience opportunities that help them acquire an understanding and appreciation of Preserve values and a sense of the importance of protecting those resources. The interpretation program will incorporate a variety of media, including personal services, exhibits, waysides, publications, audiovisuals, and web pages to meet the needs of varied existing and potential audiences. At many places in the Preserve, the drive and vistas are so powerful a formal interpretation activity may be a distraction. At other sites, media can help explain how these magnificent natural features were formed.

Wayside exhibits can play a significant role in informing visitors about resources and the management actions necessary to protect and perpetuate them for future generations. Interpretation of fire at Big Cypress is

a major story. Each year several fires burn thousands of acres. Natural fires and fires set by aborigines were an important factor in Big Cypress long before the arrival of Europeans. Now fire management concentrates on suppression and prescribed fire to reduce hazardous fuel levels and maintain habitat vitality. Movable wayside exhibits that describe the management action of prescribed fires will be developed and placed temporarily at appropriate locations within the Preserve during and following fires.

The Preserve will produce public service announcements and short audiovisuals to highlight specific management issues, especially issues significantly affected by adjacent communities. Audio spots can easily be incorporated into travelers information station messages at entrances. Video and audio spots are adaptable to visitor contact facilities on I-75, the new information center on US 41 and at Big Cypress Visitor Center. Both audio and visual spots at Everglades City, Naples, Fort Myers, Fort Lauderdale, and Miami can reach large audiences in nearby communities and as they travel through the Preserve.

PERSONAL SERVICES

Personal service activities will continue to be an essential component of the overall interpretive operation.

Personal services tailored to the needs of individuals or groups help people understand and appreciate the significance of the Preserve. Such activities have the advantage over most other media of being tailored to the needs of individuals or groups. Live interpreters, whether behind an information desk, leading a tour, conducting a children's education program in the swamp, or informally roving through sites frequented by visitors are the best interactive devices in helping people experience, understand, and appreciate the Preserve's significance. Most personal services unfortunately reach only a small number of the Preserve's total visitation. For this reason, effective use of personal services will require stationed assignments at visitor contact facilities and roving contacts at the most frequented field sites. Continued staffing at the Big Cypress Visitor Center, staffing at an information center proposed near Carnestown, roving at key contact sites, conduct of environmental education activities, and occasional talks, guided walks, bike tours, and canoe treks will constitute the Preserve's personal service program.

Frequent interaction between Preserve staff and other visitor service providers ensure that potential visitors have accurate information about experience opportunities and preparation needed for a safe and enjoyable visit.

A good training program is vital to ensure a well designed personal service interpretive program that includes consistency and high quality, especially for jointly operated interpretive activities. In addition to teaching what goes on at various sites, a training program will focus on content, accuracy, completeness, and interpretive and communication skills necessary for preparing and presenting programs and activities.

Visitation to various sections of the Preserve will be monitored regularly and personal service activities scheduled in response to changing visitation patterns to assure maximum visitor contact possible within allotted budget.

The personal service interpretive program will be routinely examined to evaluate its thematic depth and diversity. Continuous appraisal of the program should focus activities on specific resources and compelling stories. Appraisals also assure that visitor desires and management needs are met with the greatest possible effectiveness.

Preserve staff will continue to sponsor and/or assist with special events both on and offsite.

Uniformed employees, volunteers, and cooperating association sales clerks will staff visitor center information and sales desks. Staff will give directions to various points of interest in the Preserve and give information about special activities. Personal services at the visitor contact stations give personal attention to regulations, safety, resource management issues, and other matters affecting Preserve use.

Roving interpretation at roadside overlooks and developed areas provide informal visitor contact that encourages personal discussion of Preserve themes. Rangers may present a variety of short, interpretive talks at visitor contact facilities and campgrounds. Talks could focus on the Preserve landscape and cultural and natural themes to interpret specific resources in context of the entire Preserve and visitor perspectives.

Communication between Preserve staff and neighbors through outreach programs create a positive personal relationship and effectively communicates important resource based messages to local communities near the Preserve. Interpretation plays an important role in educating the public about Preserve and adjacent land issues. Interpreters are responsible for informing the public about the values of the Preserve and surrounding resources. They educate the public about the role and responsibility of the National Park Service in land conservation. They also encourage the public to accept personal responsibility in preserving the Preserve and conserving resources in their own communities.

The Preserve management team should consider establishment of a Division of Interpretation as recommended in the Draft Interpretive Plan (1993) prepared by Southeast Regional Office. The increasing specialization of disciplines across the National Park Service and the 1999 re-establishment of a Regional Chief of Interpretation in the Southeast Region support such an organizational structure. Reorganization of the Preserve management structure to include a Division of Interpretation would require minimal change to staffing needed to implement the current organization.

EDUCATION PROGRAM

The Preserve is a popular attraction for school groups and offers remarkable opportunities for visitors to acquire education. The curriculum based education program currently in place will be continued to enhance educational opportunities.

The Preserve's education program will involve a combination of onsite and offsite activities, all based on aspects of the primary interpretive themes. In order to reach as many students as possible two types of activities will be offered: multi-day residential camp and day trips. The Loop Road Environmental Education Center in the Preserve operated by Everglades National Park presents overnight programs. The environmental education program at that location will continue and become more identified with Big Cypress National Preserve.



The partnership resources in and around the Preserve create the potential for a broad-based, multi-faceted program involving numerous agencies and institutions, and aimed at multiple audiences, including children and adults. While most activities would be resource-based, some could be developed for access on computer network systems for both school and home use.

The program will fit established state curricula of Florida. Teachers from regional school districts will assist in design and implementation of activities that enhance their classroom teaching. Pre-visit materials and activities will prepare teachers and students for a beneficial visit. Post-visit activities will reinforce topics covered to extend learning experiences throughout the school year. Time spent at the Preserve will include activities in an environmental education center and a visit to primary resources in the Preserve - cypress swamps, pinelands, and prairies. Student or teacher-directed, interesting and enjoyable activities for use at the Preserve or on buses after leaving the Preserve will augment the visit.

Active and direct involvement with cooperating school districts will be necessary to assure a well-coordinated, beneficial education experience for all groups. An education specialist will coordinate the program, attend faculty meetings, in-service workshops, seminars, and other teacher gatherings. The coordinator and other rangers or volunteers may visit schools within commuting distance to encourage cooperation between the Preserve and school districts.



During school breaks, the education program may be adapted to provide teacher workshops for continuing education credits. Many self-directed activities developed for the education program may be made available to individuals and family groups visiting the Preserve year-round.

The committee that developed the education program will be expanded and continue to function as an advisory and implementation group. The committee will include representatives, especially classroom teachers, from school districts participating in the program, education associations, university professors, and state department of education. The committee may also assist with classroom and teacher workshops.

A house on US 41 - Tamiami Trail near Ochopee Post Office has been converted for temporary use as an environmental education center. A permanent environmental education facility is needed as soon as possible to add stability to the program. The permanent structure must provide adequate space to accommodate classroom and lab facility for school groups. The site will be located off the main highway to reduce safety risks for children participating in the education program. An off-road location would also enhance educational experiences by placing the program center in resources reflecting the Preserve's natural and cultural values.

The Youth Environmental Services Program, a state funded work rehabilitation and education institution, supports the Big Cypress Wilderness Institute on Turner River Road, a work camp for serious juvenile offenders. Institute managers have requested National Park Service involvement in the program including a "curriculum" of guest speakers. The Preserve can provide services that include ranger talks for orientation to the Preserve and classroom and field sessions by the Preserve wildlife biologist, exotic plant control specialist, fire suppression officer, and others. This will help fulfill the Preserve's mission of public education and the Institute's requirement to provide education to the students in order to receive state funds to operate the facility and programs.

An educational outreach video, "Swamp Walk," shot on digital video format will be developed for use in the environmental education program. It can be used as pre-visit orientation and training to prepare teachers and students in their classroom before visiting the Preserve. It can demonstrate activities that will be encountered at the Preserve to dispel unnecessary fears. Footage for the "Swamp Walk" video will be shot by camera operator accompanying a field trip school group, getting in the water with students, eavesdropping on reactions and comments,

observing as they test water and practice scientific method to show the entire education process. The primary function of the video is to support curriculum, but it could also be used effectively in fundraising activities.

PUBLICATIONS

Publications play an important role in the Preserve's interpretive program. Publication recommendations (including photographs, literature, or their electronic equivalents) can be divided into three types: general publications, general Preserve publications, and "site bulletin" topical publications.

General publications about South Florida subjects are readily available through commercial sources. The cooperating association of the Preserve offers an excellent array of high quality products for sale in the visitor center. The current product line will be continued and new products sought to improve, augment, or replace existing inventory.

The Preserve's primary information/interpretation brochure will be replaced with a larger folder. Additional space will accommodate new text, redesigned map and expanded graphics to encompass new developments proposed in this long-range interpretive plan, off-road vehicle management plan and scenic highway improvement conceptual design plan. The new folder will build from and link to the proposed wayside exhibit system, new visitor contact facility exhibits, new audiovisual program and new wayside development plan to more effectively identify interpretive opportunities available throughout the Preserve.

A small, moderately priced attractive educational booklet will provide an affordable publication desired by most visitors. High color, profuse graphics/photos and little text will encourage use as visitors tour the Preserve. It could also provide a high quality souvenir to share with friends and family and help visitors remember experiences.

A handbook describing and illustrating cultural and natural resources of the Preserve will provide the medium level of detail attractive to many visitors.

A more comprehensive treatment of the Preserve, perhaps a hard cover "coffee table" book, can provide information about changing land use in the region. Describing history of land use, establishment of the Preserve and present land use management, and questioning where we go from here, the book will encourage support for the Preserve and provide ideas for global conservation.

A series of site bulletins for many topics will be developed, printed for distribution onsite and through mail, and published on the Preserve's Internet website. A site bulletin related to canals could explain the reasons for canal construction historically and in the present and describe the effects of canal construction on natural processes. It can include a checklist and description of wildlife most likely encountered along borrow canals and may identify plants and trees associated with these human-made aquatic environments. Additional site bulletins will be developed as needs are identified. Suggestions for topics include Florida Panther, water, wildlife and safety during human/alligator interactions. Multi-lingual safety information is needed to respond to the increase in non-English speaking visitors. All park-produced publications will be designed to reflect a family resemblance.

Road Guides for Turner River-Birdon Loop and Loop Road Scenic Drive will be developed by Preserve staff to interpret significant resources and stories along those two routes. Attractive, inexpensive publications can provide visitors interesting interpretation, effective wayfinding, and an attractive souvenir.

RESEARCH AND PLANNING

Preparation of a long-range interpretive plan is the initial step in the National Park Service comprehensive interpretive planning and media planning, design, and production processes. Preserve staff will program the following specialized and detailed plans to implement proposals in this long-range interpretive plan.

A detailed wayside exhibit proposal and wayside exhibit design and production plan will be developed as soon as possible to implement the wayside exhibit concepts identified in this plan. Preserve staff can complete all or part of this planning effort in consultation with Harpers Ferry Center or they may contract with a commercial planning and design firm or with Harpers Ferry Center to complete the exhibit proposal and design/production plan. To follow either route the following steps will be necessary.

The first step toward a wayside exhibit proposal determines the scope of the project. A wayside exhibit planner and designer will work with Preserve staff to identify all the exhibits that will be developed and to establish the topic and purpose for each exhibit. The planner will prepare an exhibit proposal, which becomes the guiding outline for the project, and a project agreement, which identifies the project budget and schedule. The wayside exhibit proposal will address specific

resources, terrain, and interpretive features at road pullouts, trails, and gathering points throughout Big Cypress National Preserve. Proposed exhibits will provide continuity of theme, design, and interpretive perspective. Exhibits may use the National Park Service unigrid design to link all Big Cypress sites and to relate Big Cypress wayside exhibits to other national park sites such as Everglades and Biscayne. The design will provide a National Park Service identity at disparate sites and give visitors a consistent visual vocabulary to help them easily assimilate content of each exhibit.

The wayside exhibit proposal will recommend material for each exhibit. Most exhibit panels should be screen-printed and embedded in fiberglass that resists weathering and vandalism and can be replaced inexpensively. Some exhibits, such as major map components at trailheads and orientation panels, may be fabricated by direct digital printing to accommodate future changes in trail configuration, parking lots, and other features. Bases and hardware will be standard National Park Service design; however, design and fabrication will take into account the Preserve's special conditions that accelerate corrosion. The selected design should be compatible with the Preserve's natural and developed landscape.

The scope of the wayside exhibit design and production plan will include 50 to 60 wayside exhibits. This includes original full-size panels as well as small trailside exhibits, duplicate exhibits, and a few bulletin cases. Once the plan project is launched Preserve staff will be the subject-matter experts and will be expected to provide the bulk of reference and graphic materials for creation of the exhibits. Harpers Ferry Center or other contract designers will be the media experts. They write all exhibit text, collect all the final graphics, oversee the creation of maps, art, and contract photography, and create the full-color exhibit layouts for Preserve staff revision and approval. Harpers Ferry Center can also oversee all the production stages of the project. The plan will recommend site development for most wayside exhibits. The goal of the recommendations will be a stable, erosion-resistant area for people to stand while reading the exhibit, improved accessibility, enhanced attraction to the exhibit site, and a blend of the exhibit with the Preserve landscape and walkways. Completion of the project may take two to three years.

Coordination of the Wayside Exhibit Proposal and the Scenic Highway Improvement Conceptual Design Plan is critical. Effective and efficient implementation of wayside exhibit proposals and trail, boardwalk, parking and overlook proposals from each plan will avoid finished products of each plan appearing haphazard and arbitrary.

A visitor survey completed in 1999 provides basic data for interpretive

program planning. Additional visitor studies will routinely evaluate effectiveness of existing and proposed interpretive and visitor experience programs in meeting the needs of the visitor types profiled in the 1999 study. Because of ever changing demographics these studies should be conducted on a five to ten year cycle. More frequent, thoughtful use of focus groups and other evaluation techniques will assure that Preserve interpretive and other services are tailored to current customers. Appendix B includes analysis of evaluation techniques recommended for Big Cypress National Preserve.

The Preserve will seek funding for cultural resource studies. Ongoing archeological resources inventories will be continued. New research will be initiated to increase knowledge of Big Cypress' role in the underground railroad, the settlement period and Calusa, Miccosukee Tribe of Indians of Florida and Seminole Tribe of Florida use of the area.

PARTNERSHIP OPPORTUNITIES

The following description of partnership opportunities expresses Big Cypress National Preserve interest in and collaboration with other South Florida visitor service providers. Successful implementation of this long-range interpretive plan depends on continuation and expansion of existing partnerships and initiation of new ones, especially with visitor service providers in the immediate vicinity of the Preserve. Positive cooperation among all providers of tourism services will help each respond to the opportunities and challenges that face them. Preserve interpretation can play a major role in resource preservation by working in partnership with the Preserve's protection and resource management staff and other partners.

Many sites in the region offer visitor experience opportunities related to South Florida natural and cultural stories. Visitors traveling to Big Cypress National Preserve and other sites should find opportunities to participate in an integrated, progression program of interpretive activities produced by the National Park Service and partners to offer a complete, balanced South Florida experience.

Florida National Parks and Monument Association is a major provider of information, interpretation, and education for South Florida national parks and preserves. They sell Big Cypress, Everglades, Dry Tortugas, and Biscayne titles at National Park Service visitor centers and provide donated materials and funds to support visitor service programs.

Everglades National Park has two entrances near the Preserve. The

Shark Valley entrance offers a visitor center and a two-hour concessioner operated tram tour through the Everglades interior. It also provides an opportunity to orient visitors who are traveling west into the Preserve. Basic personal service information and publications about Preserve resources and stories can be distributed at the Shark Valley Visitor Center. At the Gulf Coast Visitor Center, an hour and a half boat tour of the Ten Thousand Islands and canoe rentals are available through private concession. Both sites offer ranger-led activities during the winter season.

Two canoe trails begin off US 41 in Big Cypress National Preserve and extend through a portion of Everglades National Park to terminate at Chokoloskee Bay. The eight-mile Turner River Canoe Trail begins a half-mile west of H. P. Williams roadside park and passes through scenery that changes from freshwater cypress forests to open prairie, to tropical saltwater mangrove swamp. Halfway Creek Canoe Trail begins at Seagrape Drive near Preserve headquarters.

Loop Road Environmental Education Center inside Big Cypress National Preserve is operated by Everglades National Park. The residential education center includes a chickee with picnic tables and food storage box, platform tents, grills, restrooms, and campfire circle. Study habitats used within the Preserve include pineland, sawgrass marsh, cypress slough, hardwood hammock, and freshwater pond. Coordination of education center overnight activities with day activities in the Preserve will result in a well-balanced regional resource education program.

Everglades Area Chamber of Commerce leases property to operate a welcome station at the US 41/Florida 29 intersection. The property and lease that was originally negotiated with the Collier Corporation have now been transferred to the National Park Service and is part of Big Cypress National Preserve.

Fakahatchee Strand State Preserve, west of Big Cypress National Preserve, claims the major drainage of southwestern Big Cypress Swamp and the largest and most unusual of the strands. Its forest of mixed bald cypress, native royal palms, and abundant epiphytic plants is extremely rare. The unusual wildlife of Fakahatchee includes threatened and endangered species such as the Florida Panther that ranges between Fakahatchee and Big Cypress preserves. A 2000-foot long boardwalk meandering through old growth cypress enables visitors to easily experience the beauty of this unusual swamp. A scenic drive leads visitors through a variety of habitats.

Florida Panther National Wildlife Refuge, administered by Ten

Thousand Islands National Wildlife Refuge, lies adjacent to the Big Cypress National Preserve's northwest boundary. The refuge manages habitat protection programs, monitors wildlife populations, and conducts research on habitat enhancement for Florida panthers. The refuge is closed to all public access and use, but the refuge office in Naples includes several exhibits.

Collier Seminole State Park features a wealth of vegetation and wildlife typical of the Everglades region. A wilderness preserve located in a mangrove swamp is a prime example of how the region looked before arrival of the first European explorers. A limited number of visitors are allowed to visit the preserve section of the park by canoe each day for wildlife and scenery observation and for primitive camping. Activities in other sections of the park include tent and recreational vehicle camping, fishing, boating and canoeing, hiking, boat tours, interpretive center, and self guided nature trail featuring a boardwalk system and observation platform overlooking a salt marsh.

The Seminole Tribe of Florida has opened a museum on the Big Cypress Seminole Indian Reservation as an educational tool for both tribal members and the non-Seminole community. The purpose of the museum is to preserve, interpret and share the culture, language and customs of the Seminole Tribe of Florida. The site features exhibits on the history of the Seminole people, a Seminole village and over one mile of boardwalk for a nature trail. The proximity of this facility to the Preserve offers opportunity for Preserve staff to refer visitors to a location where they can receive interpretation of local native culture from the Seminole people. It offers reciprocal opportunity for the museum to provide visitors information about the Preserve.

The Miccosukee Tribe of Indians of Florida operates a cultural center along the Tamiami Trail east of the Preserve boundary. A cultural center offers opportunities for visitors to experience local culture as told and lived by the Miccosukees. The proximity of this facility to the Preserve offers opportunity for Preserve staff to refer visitors to a location where they can receive interpretation of local native culture from the Miccosukee. It offers reciprocal opportunity for the cultural center to provide westbound visitors information about the Preserve.

Other partnership opportunities will be explored throughout the region. Partnerships will be sought with regional school districts to encourage education programs, with friends groups to assist interpretation and with professional/educational organizations to conduct research, resource management, and visitor surveys. Activities may include sharing of expertise and funding for training, historical and nat-

ural research, special events and seminars, exhibit planning and development, site promotion, and tours. Visitors and regional residents will benefit from expanded, multifaceted visitor experience opportunities. Integration of interpretive themes will present a more complete, balanced story, and resources of each partner will be more efficiently utilized.

ACCESS

Equal, reasonable, and universal access will be provided to the extent feasible for all people, including those with sight, hearing, learning, and mobility impairments; visitors who do not speak English; and the elderly and young children. Accommodation will be made for access to resources and most interpretive media. Guidelines and regulations are available to assist the staff and media/facility designers.

Public Law 90-480, the Architectural Barriers Act, and the American's With Disabilities Act establish standards for physical access. Any new facilities constructed, as a matter of course, will be designed for accessibility of visitors and employees.

All new interpretive media will conform to National Park Service June 1999 Programmatic Accessibility Guidelines for Interpretive Media (see Appendix A).

Existing programs and facilities will be made accessible as a high priority. A few premiere sites will be selected by interpretive and resource management staff for "Wilderness-on-Wheels" experiences. Creating, in locations where feasible, boardwalks or hard surfaced trails would allow visitors with physical disabilities a chance to leave the roadway and parking areas. Accessible trails would also appeal to visitors who have limited time in the Preserve, yet desire short walks and time-off from driving. Short trails into a variety of plant communities and several landscapes will provide most visitors relatively easy access to the diversity of Preserve resources. Kirby Storter is an example of trails that can easily be adapted for boardwalk access.

Areas that cannot be made physically accessible will be interpreted by alternative methods at nearby facilities to enable all visitors to understand and appreciate the resource. Trailhead exhibits and publications can bring distant, inaccessible sights to visitors in outdoor locations at trailheads or overlook parking areas. Examples of sites that can benefit from alternative access include Deep Lake, Gator Hook, Big Cypress Visitor Center, and Kirby Storter.

Basic orientation at Deep Lake will be provided at the parking lot for

PRESERVE-WIDE RECOMMENDATIONS

visitors who do not or cannot walk to the lake. Wayside exhibits at the parking lot can use photos to present scenes of vegetation sheltering the trail to the lake and views of the lake that are otherwise accessible only by a long walk. Deep Lake developments and encouragement to visitors need to be carefully balanced with protection of the resource until paleolimnological assessment can be done.

Distance and uneven terrain on the Gator Hook Trail leading into a quiet, beautiful section of the Preserve prevent many visitors from seeing this significant resource. Alternative accessibility should be provided through the Loop Road Guide publication and wayside media at the trailhead.

A variety of media are needed at Big Cypress Visitor Center to assure visitors an opportunity to receive essential information and interpretation when the visitor center is closed. Brochure boxes may distribute information outside the building and wayside exhibits in the landscaped plaza near the canal can provide interpretation. Access to the Florida Trail is restricted to those visitors who have time and energy for a strenuous walk. Alternative accessibility may be provided with visual orientation media in the visitor center and by wayside media at the trailhead near the visitor center.

A trailhead wayside exhibit with color photographs will encourage people to walk the proposed Kirby Storter Trail. The exhibit can also show trail and cypress scenes for those who cannot or do not walk the trail.

DEVELOPMENT RECOMMENDATIONS

Many locations have the same kinds of developments planned. This grid is followed by detailed discussions of each location, including visitor/information stations. Visitor/information stations are not included in the grid since most of their developments are not shared by other locations.

Location	Signs	Trail	Trail-Head Exhibit	Brochure Dispenser	Way-side Exhibit	Bulletin Case	Road Guide	Traveler Information Station	Board-walk	Museum Exhibit	Publication
I-75 Entrances	X							X			
I-75 Corridor								X			
I-75 Recreational Access Points			X		X	X					
I-75 Rest Area	X				X					X	
FL 29 Corridor								X			
Deep Lake		X			X				X		
Halfway Canoe Trail					X						X
Headquarters					X	X					
Turner River Canoe Launch and Trail			X								X
H.P. Williams Roadside Park/Turner River					X				X		
Kirby Storter Roadside Park					X				X		
Monument Lake Campground				X	X	X					
Midway Campground				X	X	X					
40 Mile Bend								X			
Turner River / Birdon Loop Interpretive Route							X				
Prairie Trail					X				X		
Fire Prairie Trail			X			X					
Bear Island Campground	X					X					

DEVELOPMENT RECOMMENDATIONS

Pineland Trail		X	X								
Loop Road Interpretive Route	X						X				
Gator Hook Trail			X			X					X
Florida Trail			X								
Tree Snail Hammock Trail / Education Center			X	X	X						
Slough Pullout & Trail		X									
Primitive Campgrounds	X										
Backcountry						X					X

I-75 CORRIDOR - ALLIGATOR ALLEY

As visitors travel through the Preserve on Interstate 75 they will have opportunities for an overview of an ecosystem. Visitors should be able to easily find information about the Preserve and interpretation of Preserve resources that gives them a basic understanding of the broad concept of the Everglades ecosystem. Although express interpretation treats sawgrass to cypress in a few quick exposures, visitors will be encouraged to seek further experience with Preserve resources on this or future travels across South Florida.

ENTRANCE

Entrance/exit signs and travelers information radio stations at Preserve boundaries will welcome visitors, identify the Preserve mission, encourage participation in Preserve experience opportunities and direct visitors to sources of additional information at visitor contact facilities. (See description of sign and radio proposals on page 26).

CORRIDOR

In addition to the entrance travelers information stations described above, four low frequency FM radio broadcast stations utilizing existing towers will provide short interpretive "spots." The broadcast system will be planned cooperatively by a committee including representatives from Big Cypress National Preserve, Everglades National Park, Florida Department of Transportation, Florida Gulf Coast University, and the Governor's Office.

RECREATIONAL ACCESS POINT (MILE MARKER 70)

At the eastbound facility, one of two wall mounted bulletin cases on the comfort station will be replaced with an orientation panel exhibit to help identify the Preserve and clue visitors that this is a national park site. The other bulletin case will be retained and updated to display changing information about Preserve programs, special events, and experience opportunities such as bird migrations. The existing developed walkway to the trailhead will support two or three low profile wayside exhibits to attract visitors' attention and interpret park resources. Possible topics include Big Cypress National Preserve habitat seen from this location, protection of the Florida Panther (relating to the site-specific chain link fence seen here and all along I-75 for panther protection), and the importance of the Big Cypress watershed. An upright trailhead exhibit located at the end of the walkway will introduce visitors to

the trail and encourage them to take a short walk into the Preserve along Cypress Lane, a wide vehicle track that goes all the way to Highway 41 as an ORV trail complex. Only the first two miles are above grade and stay dry most of the year.

Duplicates of most wayside exhibits proposed for the eastbound recreational access area will be placed at the westbound pull-off as well. The upright trailhead exhibit will be omitted since there is no developed trail into the Preserve from this location. If a trail is developed at this location in the future the upright panel would be appropriate at this location as well.

REST AREA (MILE MARKER 63)

The rest area near the midpoint of the I-75 traverse of the Preserve receives a high level of visitation. Existing facilities can be adapted for effective information and interpretation of Preserve and other South Florida resources and stories. After installation of enhanced interpretation and information media, signs on the interstate east and west of the rest area can inform travelers that a stop at this location offers interpretation in addition to refreshments, restrooms, and relaxation.

Wayside exhibits will be considered for three locations. Exterior rest nook areas located at the north and south entrances of the visitor building are suitable locations for a low profile exhibit identifying and orienting visitors to the Preserve. Wayside exhibits at glass alcoves on north and south sides of the building, placed either inside or outside the building to be viewed from inside, will focus visitor attention toward the Preserve and illustrate the resources and activities available to Preserve visitors. A trailhead exhibit at the Florida Trail, which can be accessed by visitors at the rest area, will introduce the expected experience, address safety precautions, and interpret significance of the trail.

The focal point of the rest area is the restroom building. The building is air conditioned and inviting. It offers opportunity to consider interior museum exhibits; however, the building belongs to Florida Department of Transportation and sits on a transportation right-of-way. National Park Service and Department of Transportation staff should explore the desirability and feasibility of installing interior exhibits to supplement the exterior wayside exhibits proposed for the rest area.

The only location available for interior exhibits under current configuration of the building is a map wall between the men and women restrooms. The best areas for exhibits are the overhead skylight area, the

window nook area that looks out toward the Preserve, and where refreshment machines are presently located. Consideration should be given to relocation of the refreshment machines to an exterior site. Placement near the parking lot would be more convenient to visitors who stop in the lot but do not enter the building. Removing the machines from the building would provide more space for dynamic interior exhibits. A secondary, less desirable location for the machines might be found inside the building, possibly at the map wall. Exhibits could then be placed in the space currently occupied by the machines. Accommodating both functions inside, however, will add to congestion and reduce the effectiveness of both functions.

If interior exhibits are deemed feasible, the Preserve will develop an exhibit plan in cooperation with FDOT. The plan would evaluate the space available for exhibits and recommend specific exhibit themes and designs. Interpretive staff at the Preserve may develop exhibit proposals or contract with commercial planners or Harpers Ferry Center Department of Exhibits for assistance of a exhibit planner and/or designer. The plan should consider murals, hanging birds and small three-dimensional exhibits that do not significantly intrude into the limited space available in the building. Audiovisual elements are not appropriate because of noise; in addition, exhibits proposed must quickly and effectively convey desired messages without creating congestion in this multiple use area.

FLORIDA 29/US 41 CORRIDOR- TAMIAMI TRAIL

Paved highway corridors allow visitors easy access to the interior of the Preserve. Designation of US 41 between Collier-Seminole State Park and the Preserve east boundary as a state and federal scenic highway and implementation of a Scenic Highway Improvement Conceptual Design plan will encourage many visitors to experience Preserve resources.

Frequent parking areas will enable visitors to escape traffic, leave their automobiles and pause to enjoy the scenes, sounds and smells of cypress, pinelands, hardwood hammocks, and freshwater marl prairies. Some pullouts may have a conspicuous absence of facilities to offer opportunities for quiet, reflective contemplation. Others may provide minimal interpretation devices, perhaps wayside exhibits, where such devices may enhance visitor understanding and appreciation of the resources surrounding the pullout. A few pullouts will offer additional development, perhaps an exhibit shelter and trails (a variety of difficulty levels, including wheelchair accessible trails) that encourage visitors to become more intimately involved with Preserve resources.

WILDLIFE FENCE AND INTER-AGENCY COOPERATION

A travelers information station radio broadcast on Florida 29 between Miles City and Deep Lake will introduce the Florida panther and related management programs. It can describe the Florida panther and its range and habitat, explain the reason for high fences bordering the highway, and identify cooperative management programs among Big Cypress National Preserve, Florida Panther National Wildlife Refuge, and Fakahatchee Strand State Preserve to assure survival of the species. The station can inform people of the opportunity to explore the panther's habitat by stopping at Deep Lake developed area.

DEEP LAKE

The metal building currently located at the Deep Lake Trailhead is being converted to a fire station. Development as a day use area with a short trail to Deep Lake is compatible with current use as a fire station. Exotic plants will need to be removed from the area and protection for native plants including orchids instituted. Archeological resources, including the foundation of the old Collier hunting lodge and any evidence of Calusa occupancy, will have to be carefully protected. Final determina-

tion of use of this area will be made in the Addition Lands General Management Plan which is being developed.

Once the General Management Plan is completed and approved, various options for visitor use, such as trail and boardwalk with viewing platform overlooking the lake could enhance visitor enjoyment of the area. Two to four interpretive wayside exhibits may be appropriate to interpret the significance of the lake, the hardwood hammock habitat surrounding the lake, and the rich wildlife found there. Wayside exhibits on the easily accessible portions of the trail near the trailhead can illustrate scenes from less accessible sections.

INFORMATION CENTER - OCHOPEE

As visitors enter the Preserve they will promptly (within three miles) find orientation to South Florida that provides information on how to experience the wild side of Florida.

Under the Scenic Highway Improvements Conceptual Design plan, a new welcome center will be built near the headquarters building in Ochopee. A new center will serve as a major information and orientation facility and a centralized first stop to introduce and integrate information about the vast resources in the south Florida region. The information center will introduce Preserve interpretive themes, orient visitors to the Preserve and provide information about nearby experience opportunities. Multi-agency representation will probably consist of some cooperative exchange of information with Everglades National Park, Fakahatchee Strand State Preserve, the U. S. Fish and Wildlife Service, and other interested parties. Guest speakers may be drawn from these and other agencies to participate in formal interpretive programming. Staffing, however, will most likely consist of Big Cypress National Preserve employees only.

Exterior Elements

Scenic Highway Improvement Conceptual Design plan recommends restrooms, picnic tables, new Preserve entrance sign, open air information kiosk in front of building, and landscaping. Signs at the Preserve entrance would direct visitors arriving from the west on US 41 and from the north on Florida 29 to the facility. A travelers information station (see page 26, **ARRIVAL EXPERIENCE**) would encourage visitors to make this facility an essential stop for information and orientation about exploring the region's resources.

Outdoor orientation/interpretation should be available at a kiosk near the parking lot with information about the Preserve and associated parks, refuges, preserves, and reservation sites. Media could include a combination of wayside exhibits with interpretive text and graphics, a bulletin case with information of a changeable nature and a brochure dispenser to distribute Preserve brochures and site bulletins. The outdoor media will summarize orientation and interpretation provided inside the center for visitors who arrive early or late in the day or at other times the building is closed.

Interior Elements

Inside the building, visitors will enter a lobby designed to give them a sense of the character of south Florida and the Preserve. A staffed information desk will be large enough to accommodate two employees, and be equipped with telephone, remote start switch for audiovisuals, and adequate storage for brochures.

A wall map adjacent to the information desk can identify nearby sites and a site brochure display near the information desk will provide additional information about those sites. Orientation exhibits in the lobby will reduce congestion at the desk by answering some of the most commonly asked questions. The exhibits will identify visitor opportunities at nearby sites to allow visitors to independently explore trip-planning options.

Interpretive exhibits located away from the information desk must effectively use the limited space available and be relevant, meaningful and interpretive, especially to children. Exhibits will be dynamic, interactive, and provide accurate information. They will introduce Preserve and nearby resources in a brief but enticing manner. Visitors can choose from a variety of options to plan an extended stay or to efficiently use limited time as they travel through the Preserve. There is a need, however, to make sure visitors are aware that highways through the Preserve are more than scenic routes connecting Naples and Miami. The highways also offer access to an array of natural and cultural features and recreational opportunities. Exhibits will encourage visitors to discover the many expressions of the Preserve to understand its purpose and significance.

An exhibit plan for the information center will be needed to determine specific orientation and interpretation exhibit needs and to guide design, production, and installation. The plan will include label copy, design elements, and graphic components for each exhibit.

A 100-seat theater separated from the information desk and exhibit area can be used to show films and also function as assembly point for Preserve staff and public meetings. A 10-15-minute film will be produced and shown in the theater to provide orientation to the area. The film can reveal the cumulative richness and depth of visitor opportunities in South Florida. It must invite visitors to further explore the Preserve and nearby sites to experience their resources.

A small sales area might be located in the information center to provide convenience items; however, sales will not be the dominant feature of the building.

Administrative space to support operation of the facility will include staff offices, unisex restroom for employees, a storage room for brochures, and two maintenance rooms, one a janitorial wet section and the other a dry maintenance storage area.

HALFWAY CREEK CANOE TRAIL

Visitors who have personal or rental canoes can escape the highway and parking area for immersion in the tranquil natural environment of a South Florida coastal marsh and mangrove.

The Preserve will consider a trailhead wayside exhibit here. It could introduce visitors to proper expectations of a canoe trip through marsh and mangrove, address safety concerns, and illustrate scenes of the water trail that visitors without canoes cannot visit. Consideration will be given to the development of a waterproof trail guide publication in partnership with Everglades National Park. The publication can provide map, interpretation, and safety messages for this trail and Turner River Canoe Trail, including the connections between the two trails through the mangroves and at Chokoloskee Bay. The publication may be produced and distributed as a sales item through the cooperating association at Everglades and Big Cypress.

PRESERVE HEADQUARTERS

With development of additional visitor use areas on US 41, a new information center at Ochopee and enhanced visitor contact at Big Cypress Visitor Center, the need for information and orientation functions at the Headquarters will diminish. An orientation exhibit and bulletin case outside the building for after-hours visitors will supplement the personal service provided at an entry desk.

TURNER RIVER CANOE LAUNCH AND TRAIL

Visitors who have access to personal or rental canoes will have opportunity to escape the highway and parking area for immersion in the tranquil natural environment of a South Florida coastal marsh and mangrove.

The Preserve plans to improve the access of this site for paddlers. The Scenic Highway Improvements Conceptual Design plan recommends construction of a new parking area screened from US 41, landscaped island in the parking area, double vault toilet, canoe rack, and concrete boat ramp.

Trailhead wayside exhibits placed here will introduce visitors to the proper expectations of the trip and address Preserve safety concerns. Wayside exhibits can also illustrate scenes of the trail that visitors without canoes cannot visit. Consideration will be given to the development of a waterproof trail guide publication developed in partnership with Everglades National Park. The publication can provide interpretation and safety messages for Turner River Canoe Trail and Halfway Creek Canoe Trail, including the connections between the two trails through the mangroves and at Chokoloskee Bay. The publication may be produced and distributed as a sales item through the cooperating association at Everglades and Big Cypress.

H P WILLIAMS ROADSIDE PARK /TURNER RIVER

The roadside park at this location and nearby reaches of Turner River Road offer travelers on US 41 the most convenient opportunity to quickly and easily see a wide variety of wildlife while picnicking and relaxing from their travels.

Proposed development of a double vault toilet, concrete sidewalk at the parking lot, and a 12 foot by 200 foot boardwalk viewing platform overlooking a borrow canal will enhance visitor experience opportunities for wildlife viewing. Two wayside exhibits will be developed for the proposed viewing platform. Appropriate topics may be alligators, including alligator safety messages, and fish identification, including fish conservation messages. A single panel wayside exhibit at the parking lot will describe three additional experience opportunities available from here: a short drive along Turner Road to view borrow canal wildlife, the Turner River - Birdon Loop drive (see page 61), and the Turner River Road drive to Bear Island Campground (see page 62). Preserve interpreters and volunteer ornithologists may provide roving contacts and

bird watching walks and photography at this site (see page 28, **PERSONAL SERVICES**).



KIRBY STORTER ROADSIDE PARK

At this roadside strand visitors will have opportunity to escape the highway and parking area for immersion in the calming cypress environment of water, trees, and wildlife. Some of their basic Big Cypress National Preserve questions can be answered here. How do alligators and people share the area? What is a strand? What are those things hanging in the trees? What are those noises?

The Scenic Highway Improvements Conceptual Design plan recommends several developments to improve visitor experience opportunities at this site. A new parking lot off US 41 west of the current developed area will have concrete sidewalks and double vault toilets. A proposed boardwalk trail six feet wide with several benches will provide easy access for most visitors into the cypress strand. A loop boardwalk at the end of the trail and two spur boardwalks to viewing platforms with benches overlooking a small "gator hole" encourages visitors to spend time enjoying the resources in this area.

Several wayside exhibits can be effective at this location. A wayside exhibit at the beginning of the boardwalk near the parking lot will introduce visitors to the opportunity here and encourage them to walk the trail. Color photos on this exhibit can provide alternative access to views of resources on the trail for visitors who cannot or choose not to walk the trail. A few small wayside exhibits along the route can identify important features. Boardwalk terminus points along the loop or spur sections can offer wayside exhibits that describe the importance of mature cypress forests and identify the protection they afford to wildlife and the watershed. This is an ideal place to present universal concepts that interpret how humans have interacted and perceived the swamp over time.

MONUMENT LAKE CAMPGROUND

Double panel wayside exhibits will replace the existing orientation exhibits at the campground entrance. One wayside exhibit panel will contain interpretive information about surrounding resources and a map of the developed area; the other will be a bulletin case for frequently changing information. A brochure dispenser can provide information about other visitor opportunities campers may want to explore. Campfire programs will continue to be offered as use demands during the visitor season.

BIG CYPRESS VISITOR CENTER

The visitor center provides visitors respite from their travels and opportunity for conveniences to make travel more enjoyable. It introduces all Preserve themes and stories and provides detailed interpretation that places Preserve resources in context with the South Florida ecosystem. It provides a central point from which to explore the Preserve for those who can spend considerable time and a vicarious experience and encouragement to return for those who cannot further explore during this visit.

Implementation of new developments proposed in the Scenic Highway Improvement Conceptual Design plan will enhance visitor experience opportunities. A new parking area east of the visitor center building with a new entry and exit from US 41 will make access to the facility much safer. A restroom facility will be conveniently located between the parking lot and visitor center. Removal of two existing driveways between US 41 and the current parking lot, reconstruction of the canal through those two sites, and establishment of new landscape elements between the visitor center and US 41 will buffer sights and sounds of the highway. Landscape around the building will facilitate access to external features,

such as wildlife viewing platforms and Florida Trail. A six-foot wide boardwalk will border the canal from the new parking lot to the west of the visitor center building. Several viewing platforms with benches will overlook the canal from the boardwalk.

Outdoor Elements

As visitors approach the visitor center on US 41 directional signs will clearly define the approach to parking areas. Immediately upon arrival in the parking lot visitors should find signs, landscape and parking lot design that focuses attention toward their primary goal, the visitor center.

A landscaped plaza with sheltered wayside exhibit kiosk adjacent to the visitor center can create an exciting visitor experience. Landscape will also contribute to a feeling of being away from the congestion of the highway and parking lot. Wayside exhibits and a brochure dispenser to distribute the Preserve folder and site bulletins can summarize orientation and interpretation provided inside the visitor center for visitors who arrive early or late in the day or during other times the facility is closed. Wayside exhibits at this location may include orientation to the Florida Trail and an interpretive loop trail described below.

New landscaping between the visitor center and borrow canal will invite visitors to view aquatic plants and wildlife from a boardwalk overlooking the canal. Wayside exhibits on the boardwalk will introduce visitors to the extensive variety of plants and wildlife in the Preserve and invite them to further explore more isolated areas.

An interpretive loop trail that links the canal viewing area to the Florida Trail near the visitor center will provide visitors an opportunity to meander a short distance through dwarf-cypress prairie. A boardwalk and combination of low profile trail origin signs and smaller trailside signs are recommended for this trail. Interpretation on the signs can present trail safety messages, clarify that the trail represents a small example of the plant and animal variety in the Preserve and explain ranger services performed to protect resources and visitors. Helicopter, fixed wing plane, fire trucks, and other equipment may frequently be seen from the trail.

Together, interpretation at the borrow canal and on the loop trail offers wonderful opportunities for visitors to compare the effects of human made canal systems and natural landscapes on plant, animal, and human populations.

A trailhead exhibit at the loop trail intersection with the Florida Trail will introduce the expected experience, address safety precautions, and interpret significance of the longer trail. The 31-mile Florida National Scenic Trail provides access into the heart of the Preserve backcountry for visitors who want more adventure on a trail often flooded and muddy. Photographs, a map of the trail, and text can describe scenes depicting experiences available for those energetic enough to walk the trail.



Visitor Center Experience

The facility should be easily identified as a National Park Service visitor center. Location and design of the building must present an attractive appearance.

All functional areas of the visitor center must effectively use the limited space available and be relevant, meaningful and interpretive, especially to children. Visitors can easily differentiate among functional areas, such as orientation/information, sales, exhibits, auditorium, and restrooms. Routes to each functional area must be visible and clearly signed.

Personal contact with Preserve staff promptly upon entering the visitor center contributes to a welcoming atmosphere. A variety of personal service and information media will orient visitors to the Preserve, explain experience opportunities, tell visitors what they can do to have a safe visit, explain how the Preserve is managed for a diversity of uses, and identify other points of interest in the region.

Visitor center interpretation can reiterate pre-visit information and provide additional information to facilitate a deeper level of understanding of the area. It will provide context for visitor experiences throughout the Preserve. It can also provide a vicarious experience for visitors who will not see backcountry areas. Upon leaving the visitor center, most visitors should understand the Preserve's primary interpretive themes.

Visitor center information needs to dispel the perception that Big Cypress National Preserve is only a scenic motor road connecting Naples and Miami. It also offers access to an array of natural and cultural features and recreational opportunities. One goal of the visitor center is to encourage visitors to explore and discover the Preserve in its many expressions.

Building Modifications

Expansion of the space dedicated to exhibits may be possible. When outside restrooms are installed as recommended by the Scenic Highway Improvements Conceptual Design plan, consideration will be given to removing interior restrooms adjacent to the lobby. The exhibit area may be expanded into space currently occupied by the restrooms. Consideration will also be given to opening the north wall currently occupied by cooperating sales, and redesign the adjacent maintenance workshop bay as a exhibit area if the maintenance operation vacates that area.

Exhibit Plan

Though space in the visitor center is limited, it is presently under utilized. An exhibit plan should be developed to recommend modification of exhibits and interior building structure to accommodate visitor use. Professional exhibit planner/designers can evaluate the space and make recommendations to improve visitor circulation, effectively accommo-

date visitor center functions (information/orientation, interpretation, sales, and restrooms) and improve quality and layout of museum exhibits. Consideration will be given to incorporating the following concepts in the exhibit plan.

Lobby

Visitor center users will first enter a lobby for information and directions. Features will include a staffed information desk, cooperating association sales area, and orientation exhibits. Location of these three functional areas will allow free visitor flow to and from the theater and a proposed exhibit area without interfering with visitors at the information desk or in the sales display area.

Location of the information desk will be directly accessible to visitors upon entry to warmly and promptly welcome them and facilitate circulation in the lobby area. The desk must be designed so it does not look like a barrier and must meet accessibility standards for employees and visitors. An orientation map must be on the north-facing wall. The desk design will accommodate, but separate, information and sales functions while enhancing proximity, visibility, and accessibility of both functions to visitors.

A permit station, either a desk or window, will be located to separate the permit process from other visitor center functions. Ideally, this function should occur in a separate facility to segregate user types, but staffing may require it to remain in the visitor center.

Current, accurate, balanced, and detailed information can be most effectively presented by personal service communication at the information desk. Visitors near the desk will receive prompt, courteous, high quality service during orientation and interpretation.

A cooperating association sales area will remain in the lobby but relocate to the space between the information desk and the west wall. That will keep the sales area within sight of the information desk staff but place it out of the main circulation path to the theater and proposed new exhibit area so visitors can conveniently enter directly into either of those areas from the lobby. A cash register will be needed at the sales desk, and a storage area, safe, and cooperating association workspace must be located nearby. Adequate display and circulation space will be provided to encourage people to browse.

Exhibits proposed for the lobby will focus on information/orientation

and basic presentation of primary interpretive themes. Location of exhibits will effectively utilize available space without impeding visitor flow toward the information desk.

Orientation exhibits mounted near the desk and tourism literature displays will identify resources and activities in the Preserve and surrounding areas. Visitors will have easy access to detailed information about things to see and do. Orientation exhibits can also answer commonly asked questions about the Preserve. For example, how is a national preserve different from a national park? An interactive compact disk component might be included in one or more of the exhibits to orient visitors to Preserve experience opportunity locations and to other sites related to the Preserve themes.

Interpretive exhibits summarizing the Preserve's primary themes must be relevant and meaningful, especially to children. They should be dynamic, visually engaging, three dimensional, possibly interactive (touchable, not necessarily computer generated), and provide accurate information. Each exhibit will provide a broad-brush presentation of its message using high graphics and minimal text.

A Discovery Station may be appropriate to efficiently use the limited space available for exhibits. It can incorporate a variety of media and elements can be easily changed to reflect changes in Preserve management concerns or to reflect seasonal changes in Preserve resources. The portable station could be transported to regional schools and community gatherings as part of the Preserve's environmental education program to encourage school system participation in the interpretive program. It can also be very effective as a temporary exhibit for display at conventions, special events, regional malls and other community gatherings to provide public information and generate support for Preserve management programs.

Sufficient circulation space will be provided for users to move among the information area, exhibits, theater, and restrooms without congesting the lobby. As much natural light as possible will be admitted into the lobby, but not into the exhibit area and theater.

Expanded Exhibit Area

If the interior of the visitor center is modified as proposed (see page 55, **Building Modifications**), an exhibit area in space currently occupied by the maintenance workshop can accommodate more interactive museum exhibits. Detailed proposals for exhibits would be included in an exhibit plan (see page 55). Consideration will be given to incorpora-

tion of the following recommendations in the exhibit plan for an expanded exhibit area.

The main goal for expanded exhibits is understanding, appreciation, and stewardship that encourage preservation of resources. Exhibits will focus on Preserve interpretive themes and reinforce, not duplicate messages in the interpretive film shown in the theater. Exhibits will focus on extant resources and encourage people to visit them to relate interior exhibits to the "real" resources of the Preserve. The exhibits will leave backcountry use, safety, and general visitor use messages to be handled by trailhead exhibits and information desk personnel.

Expanded exhibits will effectively portray the significance of the Preserve and how the Preserve fits into the South Florida environment. They will help visitors understand the complexity of the ecosystem, how the system works, its expanse and far-reaching impacts. Individual exhibits might concentrate on endangered species, the importance of Big Cypress/Everglades hydrologic relationship, and human use of the Preserve. Exhibits based on recent research will reflect the interest and sophistication of today's visitors. New exhibits would tell the story of Florida's natural resources within a larger context that includes social, economic, and cultural aspects of the region.

Simple, easy to maintain interactive exhibits would involve several levels of visitor interest. Video components would attract visitors and effectively bring resources to life for both children and adults. Ambient sound elements accompanying ecosystem exhibits are highly desirable. Sound baffling for audio in exhibit areas of high visitor flow will need to be considered in exhibit planning.

Exhibits will provide basic understanding of the natural and cultural environment for people who cannot spend a lot of time in the Preserve. Exhibits should encourage sensitive use for those who utilize Preserve resources frequently. Full size, three-dimensional dioramas will give visitors a sense of the complexity and dynamism of the South Florida ecosystem. They can provide a vicarious experience for visitors who cannot more intimately explore the Preserve resources. Three-dimensional dioramas can also unveil the hidden elements of resources that are below the surface of the waters and soils of the Preserve for all visitors. Exhibits might present models of Preserve environments, showing a cross section from the sky to surface plants and animals, down through soils to reveal secrets even visitors to backcountry areas cannot see.

Where feasible, elements of the exhibits should be positioned where vis-

itors can pick them up for closer, tactile examination. The full-scale exhibits proposed above create opportunity for interactive personal service and media interpretation that engulfs exhibit hardware, the interpreter, and the visitor in a living exhibit.

Audiovisual Theater

Several equipment upgrades are recommended for the current theater. A caption board will be added to video projection equipment to effectively provide captions of narration for visitors with hearing disabilities with less distraction from audiovisual program images. Audio elements of the theater space will be redesigned. New acoustical treatment will minimize hard surfaces to improve sound projection. Speaker alignment will be redesigned for optimum audio quality. Currently the speakers are recessed in false columns that dictate screen size and face straight out, a poor alignment. Architectural structure of the false columns will be investigated and the columns removed if feasible. The viewing screen will be enlarged and reformatted to accommodate a variety of projection equipment.

An "exit only" door opening from the west wall of the auditorium into the lobby will enhance safety and visitor convenience. An opening at that location will create an alternate escape from the room during emergencies, provide more direct access from the theater to the proposed exhibit area described above, and reduce congestion from people entering and exiting the room through a single door.

To expand effectively limited visitor center space available for exhibits, consideration will be given to placing large, colorful murals, photographs or posters on the rear half of the east and west interior walls of the theater. In this position they can easily be viewed by visitors entering the room without distracting from audiovisual programs during projection. One mural might depict a cypress swamp such as Sweetwater Strand with its dense vegetation and wildlife; the other might depict the vast open landscape of a fresh water marl prairie giving way to pinelands and hardwood hammocks. Visitors waiting for the film to begin would have a sense of the complexity and beauty of the Preserve environment as they search the images of plants, animals, and landscapes for hidden secrets.

Audiovisual Programs

The motion picture routinely shown in the auditorium will be replaced with a new program that better complements visitor experience objectives. The new interpretive film will reflect updated interpretation, science, resource management, and visitor use. The film will place Big

Cypress National Preserve in the context of the South Florida Everglades ecosystem and demonstrate the highest interpretive values. Footage for the film will be shot on 16mm film with high production value including aeriels, multiple shoots, wildlife, and wet/dry seasons to entice visitors to explore the Preserve further.

Producing two versions of the interpretive film, one for showing in-park and another for offsite use, can maximize use of the film. A 12-14-minute stereo version will be shown in the theater at the visitor center. A 26-minute stereo version can be used as a sales item, for community outreach activities and for showing on local and regional PBS broadcasts.

The interpretive film will also serve as programmatic access for those visitors who may not immerse themselves in the Preserve backcountry, but instead choose to stand on its edge and learn about it.

MIDWAY CAMPGROUND

Double panel wayside exhibits will be located near the campground entrance. A wayside exhibit panel will contain interpretive information about surrounding resources and a map of the developed area. A bulletin case for frequently changing information may also support a brochure dispenser to provide information about other visitor opportunities campers may want to explore.

FORTYMILE BEND

The general management plan for the Preserve proposed interpretive development, possibly wayside exhibits and a developed pull-off, for the Preserve east entry at Fortymile Bend. Information and interpretation is needed to introduce arriving visitors to resources along US 41 and Loop Road, each an integral part of the interpretive experience for visitors. Visitors currently do not have access to information and interpretation of these resources until they travel approximately 15 miles to Big Cypress Visitor Center almost half way across the Preserve. Since site selection and design for a development at this location was not included in the Scenic Highway Improvements Conceptual Design plan, alternative methods to inform, orient and interpret to visitors promptly upon arrival and between Fortymile Bend and the visitor center must be developed. A travelers information station radio broadcast is proposed earlier in this plan to welcome visitors (see page 26, **ARRIVAL EXPERIENCE**). At least one additional traveler information station is proposed for a location approximately five miles west of Fortymile Bend to interpret the cypress environment through which visitors are traveling.

TURNER RIVER/BIRDON LOOP

Turner River Road (839), Wagonwheel Road (837), and Birdon Road (841) offer visitors opportunities for a wildlife windshield tour near a main highway through the Preserve. Visitors can choose to stay in the privacy and comfort of their own automobile or leave the car to walk short trails for deeper immersion in the resource. Visitors will be able to experience a rural landscape and understand the human changes wrought on the landscape and how wildlife has adapted to those changes.

MOTOR INTERPRETIVE ROUTE

In addition to the wayside exhibit proposed to introduce the motor interpretive route at H P Williams roadside park (see page 50), Preserve staff will design and publish a Road Guide - Turner River/Birdon Loop to interpret significant features encountered along the route. A guide to the drive, including interpretation of cypress, pinelands, and fresh water marl prairies and identification of common wildlife frequenting the area, will offer an effective onsite interpretive and way-finding tool for visitors who want a more in-depth visit than provided by the wayside. The road guide will also provide an attractive educational souvenir for sharing with others after the visit.

The guide will be available at Big Cypress Visitor Center and Ochopee information center, and it may be distributed at the entrance to the drive at H P Williams developed area.

PRAIRIE TRAIL

A short boardwalk trail through the prairie surrounding Turner River/Birdon Loop road will provide visitors an opportunity to escape the road and their cars for immersion in a roadside prairie/pineland ecotone environment. Interpretive media and physical contact with the resource will help visitors understand the topographic story here as well as learn what a prairie is.

This seasonally wetland without trees will support the interpretation of grasses, sedges, flowering plants, and wildlife with wayside exhibits. An introductory exhibit at the entrance will be appropriate, followed by a series of small trailside exhibits that identify prairie plants and flowers along the route.

TURNER RIVER ROAD

Turner River Road offers visitors an opportunity to travel deep into the Preserve for a feeling of adventure without leaving the safety and comfort of their automobile.

FIRE PRAIRIE TRAIL

Visitors who use this trail for walking and bicycle riding can see a portion of backcountry from the convenience and relative safety of a trail. The trail surface, routing and length, and the absence of interpretive exhibits will give visitors a sense that they have left development and are truly experiencing backcountry. Location of this trail, a greater distance from routes frequently traveled by automobiles, provides visitors a greater sense of isolation and immersion in the resources of the Preserve than found at many other sites.

A trailhead wayside exhibit will introduce the desired visitor experience, describe the trail, address safety precautions, and invite visitors to step beyond the edge of the road and enjoy the Preserve's resources. A bulletin case at the trailhead can post resource notices like mosquito and snake warnings and lightening hazards in summer.

BEAR ISLAND CAMPGROUND

Bear Island offers a primitive camping experience for visitors who want to stay overnight on the fringe of Preserve backcountry areas to explore pineland, cypress, and slough environments. A durable information sign or bulletin case at the campground entrance will provide visitors essential information about regulations for the area and "Leave-No-Trace" minimum impact activities.

PINELAND TRAIL

Development of a Pineland Trail will provide another opportunity for visitors to escape their automobiles for immersion in the resource. The trail can show pine flatwoods as a product of fire. If not burned periodically, either by nature or people, pinelands will grow into hardwood forests. The absence of fire in many areas has led to advanced plant succession, shifts in wildlife habitat, and the accumulation of hazardous fuel levels. The pine flatwoods, therefore, provide a good location to interpret the role of fire in shaping the Big Cypress landscape.

A trailhead wayside exhibit will introduce the desired visitor experience, describe the trail, address safety precautions, and invite visitors to step beyond the edge of the road and enjoy the Preserve's pineland resources.

LOOP ROAD

Loop Road offers exploration and adventure by vehicle and self-guided interpretive experiences. Visitors can sense they are in the "wild" and get a feeling for the swamp. The road should continue to promote low speed travel, provide viewing stops and encourage short walks that allow visitors to escape their automobile for immersion in the resources bounding the road. Signs on US 41 must easily identify the location of Loop Road. Signs near the entrance to the scenic drive at Monroe Station and Fortymile Bend must clearly give directions, describe attractions of the resources, and indicate considerations to be taken into account before attempting the drive. Other signs and interpretive devices must be kept to a minimum to facilitate a sense of adventure and exploration.

MOTOR INTERPRETIVE ROUTE GUIDE

Preserve staff will design and publish a Road Guide - Loop Road Scenic Drive to interpret significant features encountered along the route. The guide will include interpretation of different plant communities encountered and identification of common wildlife frequenting the area. It will provide an effective onsite interpretive and wayfinding tool for visitors who want a more in-depth visit than simply driving through the area. The guide will be a less intrusive, more vandal resistant and effective method of interpreting than wayside exhibits. The road guide will also provide an attractive educational souvenir for sharing with others after the visit.

Road guides may be distributed at Big Cypress Visitor Center and Ochopee information center. They may also be distributed near the entrance to the drive at Monroe Station and Fortymile Bend when a secure area can be developed at those locations. Until security can be assured at those locations, the booklet may be distributed at the Loop Road Environmental Education Center.

GATOR HOOK TRAIL

A wilderness swamp experience at Gator Hook will give visitors opportunity, real and vicarious, to escape the highway and parking area for immersion in a quiet natural environment. Visitors can experience a sense of being "out there." History of logging, natural quiet, solitude, and a diversity of habitat types are possible interpretive stories related to Preserve themes.

Visitors hiking this trail will sense minimal human intrusion. Development at the trailhead will consist of gravel pullout parallel to the road, picnic tables, and double vault toilets. A trailhead wayside exhibit placed at this site will introduce the expected experience, address safety precautions, and interpret the historic significance of the trail. Color photos on this exhibit can provide alternative access to views of resources on the trail for visitors who cannot or choose not to walk the trail. A trail guide developed by Preserve staff for sale at visitor information centers will provide more in-depth interpretation for this experience area. Roving interpretation during periods of high visitor use can supplement trail guide and wayside interpretation. A bulletin case near the trailhead can alert visitors to seasonal information and safety considerations.

SWEETWATER OVERLOOK



At this beautiful cypress swamp even visitors who do not get out of their automobiles can feel immersed in swamp wilderness. Here visitors can see a variety of vegetation and wildlife both in and out of the water, including epiphytes, ferns, grasses, orchids, amphibians, snakes, small birds, hawks, owls, egrets, ibis, and wood storks. Some of the best opportunities in the Preserve to see large alligators and flocks of birds will occur in this swamp, especially during low water.

The Scenic Highway Improvements Conceptual Design plan proposes simple development for this site. A boardwalk viewing area 12 foot by 70

foot on each side of the road and gravel pullouts parallel to the road will make viewing easier and safer for visitors who get out of their cars. Because of the remoteness of this location and the tremendous wildlife activity present here, the long-range interpretive planning team thinks this site can speak for itself. No interpretive media will be placed here. The Road Guide - Loop Road Scenic Drive (see page 64) might include illustrations to identify some of the wildlife most often seen at this location.

FLORIDA TRAIL

The 31-mile Florida National Scenic Trail provides access into the heart of the Preserve backcountry for visitors who want more adventure on a trail often flooded and muddy.

A gravel pullout, 8 foot by 150 foot, will be developed parallel to each side of Loop Road west of the trailhead. A trailhead wayside exhibit will introduce the expected experience, address safety precautions, and interpret the significance of the trail. Photographs, a map of the trail, and text can describe scenes depicting experience available for those energetic enough to walk the trail. Trails Illustrated will be contacted to see if they would be interested in doing a map of the Preserve along the lines of those done for other parks.

TREE SNAIL HAMMOCK TRAIL/EDUCATION CENTER

This trail provides visitors a hardwood hammock experience. Visitors can take an easy walk on a loop trail through a hardwood hammock to look for tree snails and learn about the diversity to be discovered even in small habitats. Elements of the human story can also be woven into this experience.

Because the Loop Road Environmental Education Center offers protection not found on more isolated sections along Loop Road, wayside exhibits are recommended for this location. Until a site to orient visitors to Loop Road scenic drive is developed at or near Fortymile Bend, a trailhead exhibit for the Loop Road Drive may be placed at the education center to introduce visitors to the experience and features of the scenic drive. An inset map and text label can direct visitors to Tree Snail Hammock Trail and provide information about things to look for as they walk the short trail. A brochure dispenser can make available the Road Guide - Loop Road Scenic Drive publication to visitors who have not acquired one at the visitor center. A wayside exhibit describing the Loop

Road Environmental Education Center will be informative to curious visitors who are not participating in education activities. The exhibit can promote this long-term education program and give recognition for its success through the cooperative efforts of Everglades National Park and Big Cypress National Preserve. A gravel pullout parallel to the road adjacent to the education center similar to pullouts proposed for Florida Trail, Sweetwater Overlook, and Gator Hook Trail will make viewing easier and safer for visitors.

SLOUGH PULLOUT AND TRAIL

Between Pinecrest Campground and Fortymile Bend visitors pass several wonderful sloughs. They offer a great opportunity to interpret the interaction of cypress, prairies, sloughs, wildlife, and human activities.

The road guide proposed for Loop Road scenic drive will include interpretation of the resources seen as visitors drive between Pinecrest and Fortymile Bend. Preserve staff will also consider the desirability and feasibility of developing a gravel pullout parallel to the road and possibly a short trail for better viewing of one of the visible sloughs.

PRIMITIVE CAMPGROUNDS

Pinecrest and Mitchell's Landing Campgrounds offer primitive camping experiences for visitors who want to stay overnight on the fringe of Preserve backcountry areas. A durable information sign at the campground entrances will provide visitors essential information about use regulations for the area and information that encourages "Leave-No-Trace" minimum impact activities.



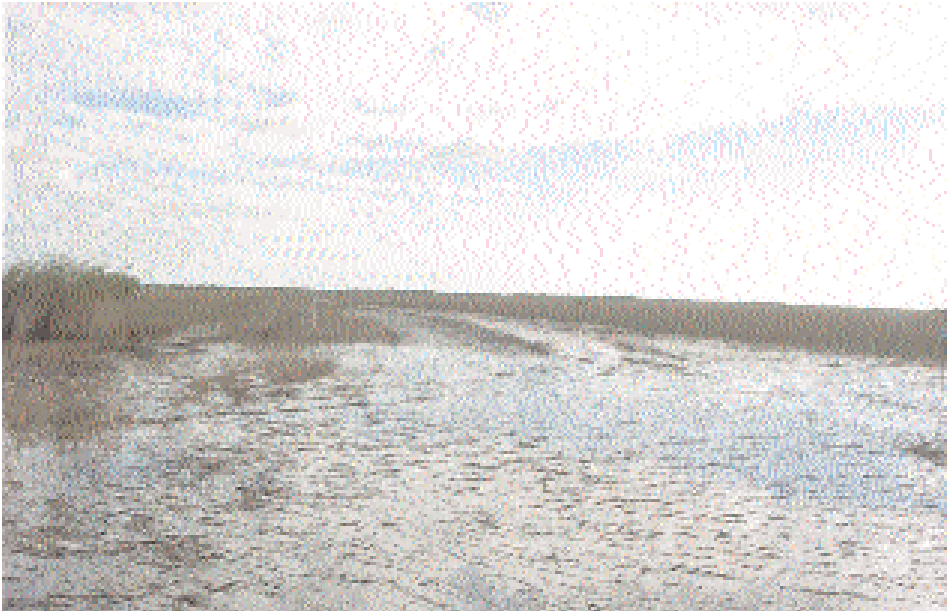
BACKCOUNTRY



Much of the Preserve is inaccessible by automobile and developed foot trails. These backcountry areas offer users a variety of experiences. Some may seek quiet and solitude in a natural area to escape life's stresses experienced elsewhere or to reflect on their personal needs. Others may seek remote areas to observe, photograph, or paint plant and animal life in more natural habitats than those found along roads and borrow canals. Still others can find active recreational opportunities such as hunting, fishing, bicycling, canoeing, hiking, or driving off-road vehicles and airboats.

Access to the Preserve backcountry areas will be by walking and biking on developed trails, cross country foot travel, non-motorized boats when water levels allow, and off-road vehicles on designated trails. Bicycles are allowed on all designated ORV trails. This opens a great deal of territory for off-road bicycle enthusiasts, as miles of ORV trails will be designated. Many of these trails will be easily bikable during the dry season. All off-road vehicles, including swamp buggies, airboats, all-terrain and four wheel drive vehicles must have a permit from the National Park Service for off-road travel in the Preserve. An Off-Road Vehicle Management Plan will designate trails that vehicles may travel in the backcountry. Permits will continue to be issued from the Big Cypress Visitor Center, the most centrally located visitor contact point in the

Preserve, but an alternative separate location should be considered to separate this function from interpretive functions. Hunting, fishing, and trapping of game animals are permitted in the Preserve under federal and state regulations managed by the National Park Service under consultation with Florida Game and Fresh Water Fish Commission.



Interpretive media used in the backcountry include personal service and publications. Staff providing personal services related to backcountry use at the visitor center and on roving assignments in backcountry areas will require thorough knowledge of permit regulations and processes. They must also possess the ability to firmly but sensitively deal with people seeking permits and backcountry users whose emotions concerning permit requirements range from sullen to hostile. Site bulletin publications describing regulations must be readily available at the visitor center and posted on bulletin cases in the Preserve. Site bulletins must be available to describe the permit process, off-road vehicle regulations, the reasons for a permit system, and low impact use activities. Information and maps clearly identifying areas that are open and closed to off-road vehicles must be available with each permit and to other people seeking information about off-road vehicle use in the Preserve. Generally, publications will be distributed by rangers in the field, at visitor contact stations and by dispenser boxes and bulletin cases at locations outside the backcountry. Additional distribution sites and methods may be required to conform to backcountry use requirements approved in the Preserve Off-Road Vehicle Management Plan.

An Off-Road Vehicle Operator Education Program is recommended. Approximately one hour in length, the program can be presented to

ORV operators when they bring their vehicle in for inspection prior to obtaining a permit to use the vehicle on the Preserve. The program presented at Big Cypress Visitor Center at Oasis or near the visitor center in a ORV permit station will include safety, tread lightly concepts, orientation to the Preserve and to the ORV program. A video or slide presentation will supplement personal services of a uniformed employee who will always be present to offer assistance and answer questions.

Bulletin cases at trailheads for designated ORV trails in the Preserve will display maps and regulations. Case design must provide easy access for changing displayed materials as the principle of flexible, adaptive management will rule this aspect of Big Cypress National Preserve for many years to come.

SUMMARY, STRATEGIES, AND PRIORITIES

INTRODUCTION

Completing all the recommendations outlined in this plan will take considerable time, energy, staff, and financial resources. The following list summarizes proposals presented in this plan, identifies possible funding/implementation strategies, assigns responsibility, and establishes prioritized phases of implementation to help focus energy of the Preserve staff and partners.

Implementation of all aspects of this plan will depend on being able to break projects down into steps that can be accomplished with incremental funding or by existing staff. The Preserve management team will prioritize and select from recommended projects and strategies annually to produce an Annual Implementation Plan based on funding and staffing availability. Analyzing and breaking each project into steps to be incorporated into Annual Implementation Plans will be the first priority for National Park Service expenditures. The project will be dependent upon satisfying applicable compliance with NPS planning policy and environmental guidance.

While phasing new projects proposed in this plan, Preserve staff will continue ongoing operations. Some of the recommendations in this plan can and will be continued or implemented with existing staff, funds, and partnerships. Some must be completed before others can be initiated. These projects are identified as Phase 1. The implementation of other projects is essential to tell stories which reflect new interpretive themes and to resolve issues identified in this plan. The National Park Service will aggressively pursue the implementation of the recommendations in this plan identified as Phase 2 as opportunities for partnership and funding permit. Phase 3 projects are ones that must be delayed until other projects are implemented, advanced planning completed, or large amounts of funding accumulated.

The Preserve staff will develop necessary funding requests to begin the federal funding process. They will also initiate contacts with potential partnership organizations to implement projects well suited to alternative funding.

This implementation section of the plan does not include funding estimates; estimates can easily become outdated during the 7-10 year life expectancy of the document. Preserve staff can develop accurate estimates when requests to fund projects are initiated or updated. Estimates for projects that may be completed by Harpers Ferry Center (audiovisual, museum exhibits, publication, and wayside exhibit advanced planning, design, production, and equipment costs) can be obtained from the HFC Manager's office. Estimated costs will also be determined by compliance issues and choice in media. Costs will be addressed in upcoming media plans as an addendum to this Long-Range Interpretive Plan under the Comprehensive Interpretive Planning Process.

PROJECT SUMMARIES

ORGANIZATION / PARTNERSHIP

Project	Strategy	Responsibility	Phase
Continue to expand cooperative promotion of Preserve through other visitor sites (Pg 25)	ONPS, partnership, state/local tourism		1
Continue and expand the role of interpretation in outreach activities that communicate resource based messages to local communities (Pg 29)	ONPS		1
Analyze desirability of management team reorganization to establish a Division of Interpretation (Pg 30)	ONPS		2
Continue to expand partnership opportunities with nearby visitor sites (Pg 36)	ONPS, fee program, volunteer		1

ACCESSIBILITY

Project	Strategy	Responsibility	Phase
Select areas and design and install facilities to create "Wilderness on Wheels" experience opportunities (Pg 39)	Fee program, volunteer donation, grants		2
Improve visual landscape and facilities surrounding trailhead at Deep Lake (Pg 46)	ONPS, fee program, volunteer		3
Develop or improve trails at Deep Lake (Pg 46), Big Cypress VC (Pg 52), Pinelands (Pg 62), Slough Pullout (Pg 67)	ONPS, volunteer, repair/rehab		3
Redesign Big Cypress Visitor Center interior to improve accessibility, circulation, and function (Pg 55)	ONPS		2

PROJECT SUMMARIES

MEDIA

Project	Strategy	Responsibility	Phase
Design, produce and install entrance and exit signs at 4 locations (Pg 26,43)	ONPS , FDOT		2
Design, produce and install 20 information and wayfinding signs (Pg 26,43,53,64,67) and TIS information signs (Pg 26, 43,46,60)	ONPS, FDOT		2
Produce and install 4 moveable wayside exhibits to interpret controlled fire (Pg 28)	ONPS, Air Quality Division, NRPP, fire program		3
Produce and install a Preserve -wide system of 50-60 interpretive/orientation wayside exhibits (Pg 35,43,44,47,49,50, 51,52,53,61,62,63,65,66)	ONPS, cooperating association, fee program, corporate partnership		3
Install brochure dispensers at 5 locations (Pg 48,52,53,60,66)	ONPS		3
Produce and install bulletin cases at 8 locations (Pg 43,48,52,60,62,65)	ONPS		2
Design and construct outdoor wayside exhibit kiosks at Ochopee (Pg 47) and Big Cypress Visitor Center (Pg 53)	ONPS, corporate partnership		3
Collaborate with Florida DOT to enhance experience, education and interpretation in visitor contact facility at I-75 rest area (Pg 44)	ONPS, FDOT		1
Produce and install orientation and interpretation exhibits/ furnishings at Ochopee visitor contact facility, including information desk/sales area,	ONPS, HFC		2

approximately ____ square feet (Pg 48)

Produce and install orientation and interpretation exhibits/ furnishings in lobby at Big Cypress Visitor Center, approximately ____ square feet (Pg 56)	ONPS, HFC	3
Produce and install new museum exhibits in Big Cypress Visitor Center to interpret the natural and cultural heritage of BICY ecosystems (Pg 57)	ONPS, HFC	3
Plan and produce a new 12-14 minute interpretive audiovisual program, including captioning, for Big Cypress Visitor Center (Pg 25,59)	ONPS, corporate partnership, HFC	2
Produce a 26 minute video version of interpretive film for outreach (Pg 60)	ONPS, corporate partnership, HFC	3
Plan and produce educational outreach "Swamp Walk" video for use in environmental education program (Pg 25,32)	ONPS, Parks-as- Classrooms, grant	2
Expand website to include "virtual" visitor center, electronic site bulletins and video clips (Pg 25,30)	ONPS, volunteer	1
Frequently update public service announcements and audiovisual clips and spot announcements (Pg 28)	ONPS, volunteer	1
Design and install 10 travelers information stations/radio transmission systems (Pg 43,46.60)	ONPS, FDOT	2
Design and install a theater, including projection equipment, in new visitor contact facility at Ochopee (Pg 48)	ONPS	2

PROJECT SUMMARIES

Plan and produce a 10-15 minute orientation video for the new Ochopee visitor contact facility (Pg 48)	ONPS,HFC, corporate partnership	2
Upgrade projection equipment at Big Cypress Visitor Center theater (Pg 59)	ONPS	1
Request new, expanded official Preserve brochure to reflect new interpretive directions and facilities (Pg 33)	HFC	2
Develop a moderately priced "souvenir" booklet (Pg 33)	Cooperating association	1
Request new official Preserve handbook (Pg 33)	HFC	2
Develop comprehensive "coffee table" book, "Changing Land Use" (Pg 33)	Cooperating association, corporate partnership	3
Develop five new site bulletins to expand site bulletin series (Pg 34)	ONPS, cooperating association, volunteer, donation	1
Write, design and print two new trail guide publications - Halfway Creek and Turner River Canoe Trails (Pg 49) and Gator Hook Trail (Pg 64)	Cooperating association	2
Write, design and print two new road guide publications - Turner River (Pg 34,61) and Loop Road (Pg 34,64)	Cooperating association	2

PERSONAL SERVICES

Project	Strategy	Responsibility	Phase
Increase staffing to maintain stationed assignments at Big Cypress Visitor Center and Ochopee Information Center (Pg 29,47,56)	ONPS, volunteer		2

Assign staff to roving interpretation at key contact sites (Pg 29,50,65,69)	ONPS	1
Talks at contact facilities and selected field areas will be offered as use demands (Pg 29,52)	ONPS, volunteer	1
Guided walks, bike tours, Canoe Treks at several locations throughout the Preserve (Pg 28,50)	ONPS, fee interpretation	1
Continually update training program in response to changing programs, staff and audience (Pg 29,70)	ONPS,SERO	1
Maintain and build a annual special events program (Pg 29)	ONPS, fee interpretation, volunteer	2
Develop and maintain cooperating association sales areas at Ochopee (Pg 29,49) and Big Cypress VC (Pg 29,56)	Cooperating association, ONPS	2
Multi-day residential environmental education camp activities will continue at Loop Road and become more identified with Big Cypress National Preserve (Pg 30)	ONPS, partnership, volunteer, Parks-as- Classrooms, grants	1
Continue environmental education day trips at various locations throughout the Preserve (Pg 30)	ONPS,Parks- as-Classrooms, grants	1
An education specialist and an advisory group will be retained to expand the curriculum based education program (Pg 31)	ONPS, volunteer, partnership	1
Offer a variety of pre-visit and post-visit materials and activities to meet needs of a varied environmental education audience (Pg 31)	Donation, Parks-as- Classrooms	2
Develop a cooperative education program with Florida's Youth Environmental Services program (Pg 32)	ONPS,YES	1

PROJECT SUMMARIES

Establish a permanent environmental education facility (Pg 32)	ONPS	2
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RESEARCH/PLANNING

Project	Strategy	Responsibility	Phase
Draft Preserve-wide wayside exhibit proposals (Pg 35)	ONPS,HFC		1
Develop Preserve-wide wayside exhibit design/production plan (Pg 35)	ONPS,HFC		2
Conduct visitor surveys and ongoing and annual evaluations of interpretive program and specific activities (Pg 36)	CPSU,ONPS, university research		1
Explore opportunity to develop exhibit plan to guide design, production and installation of exhibits at I-75 Rest Area (Pg 45)	ONPS,HFC, fee program		2
Develop exhibit plan to guide design, production and installation of exhibits at new Ochopee contact facility (Pg 48)	ONPS,HFC, fee program, cooperating association		2
Develop exhibit plan to guide design, production of information/orientation and museum exhibits at Big Cypress Visitor Center (Pg 55)	ONPS,HFC, fee program, cooperating association		2
Revise Preserve-wide sign plan to reflect recommendations approved in this long-range interpretive plan (Pg 27)	ONPS		1
Conduct cultural resource studies necessary to enhance interpretation of Preserve human/cultural theme - Archeological Inventories, Underground Railroad, Settlement Period, and Calusa, Miccosukee, Seminole Use (Pg 36)	ONPS,CPSU, SERO, partnership		2

PLANNING TEAM & CONSULTANTS

National Park Service staff, representatives of partnership organizations, and consultants completed this long-range interpretive plan.

BIG CYPRESS NATIONAL PRESERVE

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FAKAHACHEE STRAND STATE PRESERVE

Tom Bemans, Park Ranger

APPENDIX A:

Special Populations: Programmatic Accessibility Guidelines for Interpretive Media

National Park Service
Harpers Ferry Center

June 1999

Prepared by
Harpers Ferry Center
Accessibility Task Force

Contents
Statement of Purpose
Audiovisual Programs
Exhibits
Historic Furnishings
Publications
Wayside Exhibits

STATEMENT OF PURPOSE

This document is a guide for promoting full access to interpretive media to ensure that people with physical and mental disabilities have access to the same information necessary for safe and meaningful visits to National Parks. Just as the needs and abilities of individuals cannot be reduced to simple statements, it is impossible to construct guidelines for interpretive media that can apply to every situation in the National Park System.

These guidelines define a high level of programmatic access which can be met in most situations. They articulate key areas of concern and note generally accepted solutions. Due to the diversity of park resources and the variety of interpretive situations, flexibility and versatility are important.

Each interpretive medium contributes to the total park program. All media have inherent strengths and weaknesses, and it is our intent to capitalize on their strengths and provide alternatives where they are deficient. It should also be understood that any interpretive medium is just one component of the overall park experience. In some instances, especially with regard to learning disabilities, personal services, that is one-on-one interaction, may be the most appropriate and versatile interpretive approach.

In the final analysis, interpretive design is subjective, and dependent on aesthetic considerations as well as the particular characteristics and resources available for a specific program. Success or failure should be evaluated by examining all interpretive offerings of a park. Due to the unique characteristics of each situation, parks should be evaluated on a case by case basis. Nonetheless, the goal is to fully comply with NPS policy:

"...To provide the highest level of accessibility possible and feasible for persons with visual, hearing, mobility, and mental impairments, consistent with the obligation to conserve park resources and preserve the quality of the park experience for everyone."

NPS Special Directive 83-3, Accessibility for Disabled Persons

Audiovisual Programs

Audiovisual programs include video programs, and audio and interactive programs. As a matter of policy, all audiovisual programs produced by the Harpers Ferry Center will include some method of captioning. The Approach used will vary according to the conditions of the installation area and the media format used, and will be selected in consultation with the parks and regions.

The captioning method will be identified as early as possible in the planning process and will be presented in an integrated setting where possible. To the extent possible, visitors will be offered a choice in viewing captioned or uncaptioned versions, but in situations where a choice is not possible or feasible, a captioned version of all programs will be made available. Park management will decide on the most appropriate operational approach for the particular site.

Guidelines Affecting Visitors with Mobility Impairments

1. The theater, auditorium, or viewing area should be accessible and free of architectural barriers, or alternative accommodations will be provided. UFAS 4.1.
2. Wheelchair locations will be provided according to ratios outlined in UFAS 4.1.2(18a).
3. Viewing heights and angles will be favorable for those in designated wheelchair locations.
4. In designing video or interactive components, control mechanisms will be placed in accessible location, usually between 9" and 48" from the ground and no more than 24" deep.

Guidelines Affecting Visitors with Visual Impairments

Simultaneous audio description will be considered for installations where the equipment can be properly installed and maintained.

Guidelines Affecting Visitors with Hearing Impairments

1. All audiovisual programs will be produced with appropriate captions.
2. Copies of scripts will be provided to the parks as a standard procedure.
3. Audio amplification and listening systems will be provided in accordance with UFAS 4.1.2(18b).

Guidelines Affecting Visitors with Learning Impairments

1. Unnecessarily complex and confusing concepts will be avoided.
2. Graphic elements will be chosen to communicate without reliance on the verbal component.
3. Narration will be concise and free of unnecessary jargon and technical information.

Exhibits

Numerous factors affect the design of exhibits, reflecting the unique circumstances of the specific space and the nature of the materials to be interpreted. It is clear that thoughtful, sensitive design can go a long way in producing exhibits that can be enjoyed by a broad range of people. Yet, due to the diversity of situations encountered, it is impossible to articulate guidelines that can be applied universally.

In some situations, the exhibit designer has little or no control over the space. Often exhibits are placed in areas ill suited for that purpose, they may incorporate large or unyielding specimens, may incorporate sensitive artifacts which require special environmental controls, and room decor or architectural features may dictate certain solutions. All in all, exhibit design is an art which defies simple description. However, one central concern is to communicate the message to the largest audience possible. Every reasonable effort will be made to eliminate any factors limiting communication through physical modification or by providing an alternate means of communication.

Guidelines Affecting Visitors with Mobility Impairments

Note: The **Americans with Disabilities Act Accessibility Guidelines (ADAAG)** is the standard followed by the National Park Service and is therefore the basis for the accessibility standards for exhibits, where applicable.

1. Height/position of labels: Body copy on vertical exhibit walls should be placed at between 36" and 60" from the floor.
2. Artifact Cases:
 - a. Maximum height of floor of artifact case display area shall be no higher than 30" from the floor of the room. This includes vitrines that are recessed into an exhibit wall.
 - b. Artifact labels should be placed so as to be visible to a person within a 43" to 51" eye level. This includes mounting labels within the case at an angle to maximize its visibility to all viewers.
3. Touchable Exhibits: Touchable exhibits positioned horizontally should be placed no higher than 30" from the floor. Also, if the exhibit is approachable only on one side, it should be no deeper than 31".
4. Railings/barriers: Railings around any horizontal model or exhibit element shall have a maximum height of 36" from the floor.
5. Information desks: Information desks and sales counters shall include a section made to accommodate both a visitor in a wheelchair and an employee in a wheelchair working on the other side. A section of the desk/counter shall have the following dimensions:
 - a. Height from the floor to the top: 28 to 34 inches. (ADAAG 4.32.4)

- b. Minimum knee clearance space: **27" high, 30" wide and 19" deep** of clearance underneath the desk is the minimum space required under ADAAG 4.32.3, but a space **30" high, 36" wide and 24" deep** is recommended.
 - c. Width of top surface of section: at least **36 inches**. Additional space must be provided for any equipment such as a cash register.
 - d. Area underneath desk: Since both sides of the desk may have to accommodate a wheelchair, this area should be open all the way through to the other side. In addition, there should be no sharp or abrasive surfaces underneath the desk. The floor space behind the counter shall be free of obstructions.
6. Circulation Space:
- a. Passageways through exhibits shall be at least **36" wide**.
 - b. If an exhibit passageway reaches a dead-end, an area **60" by 78"** should be provided at the end for turning around.
 - c. Objects projecting from walls with their leading edges between **27" and 80"** above the floor shall protrude no more than **4"** in passageways or aisles. Objects projecting from walls with their leading edges at or below **27"** above the floor can protrude any amount.
 - d. Freestanding objects mounted on posts or pylons may overhang a maximum of **12"** from **27"** to **80"** above the floor. (ADAAG 4.4.1)
 - e. Protruding objects shall not reduce the clear width of an accessible route to less than the minimum required amount. (ADAAG 4.4.1)
 - f. Passageways or other circulation spaces shall have a minimum clear head room of **80"**. For example, signage hanging from the ceiling must have at least **80"** from the floor to the bottom edge of the sign. (ADAAG 4.4.2)
7. Floors:
- a. Floors and ramps shall be stable, level, firm and slip-resistant.
 - b. Changes in level between **1/4"** and **1/2"** shall be beveled with a slope no greater than **1:2**. Changes in level greater than **1/2"** shall be accomplished by means of a ramp that complies with ADAAG 4.7 or 4.8. (ADAAG 4.5.2)
 - c. Carpet in exhibit areas shall comply with ADAAG 4.5.3 for pile height, texture, pad thickness, and trim.
8. Seating - Interactive Stations/Work Areas: The minimum knee space underneath a work desk is **27" high, 30" wide and 19" deep**, with a clear floor space of at least **30" by 30"** in front. The top of the desk or work surface shall be between **28"** and **34"** from the floor. (ADAAG 4.32, Fig.45)

Guidelines Affecting Visitors with Visual Impairments

1. Tactile models and other touchable exhibit items should be used whenever possible. Examples of touchable exhibit elements include relief maps, scale models, raised images of simple graphics, reproduction objects, and replaceable objects (such as natural history or geological specimens, cultural history items, etc.).
2. Typography - Readability of exhibit labels by visitors with various degrees of visual impairment shall be maximized by using the following guidelines:
 - a. Type size - **No** type in the exhibit shall be smaller than **24 point**.
 - b. Typeface - The most readable typefaces should be used whenever possible, particularly for body copy. They are: Times Roman, Palatino, Century, Helvetica and Universe.
 - c. Styles, Spacing - Text set in both caps and lower case is easier to read than all caps. Choose letter spacing and word spacing for maximum readability. Avoid too much italic type.
 - d. Line Length - Limit the line length for body copy to no more than **45 to 50 characters per line**.
 - e. Amount of Text - Each unit of body copy should have a maximum of **45-60 words**.
 - f. Margins - Flush left, ragged right margins are easiest to read.
3. Color:
 - a. Type/Background Contrast - Percentage of contrast between the type and the background should be a **minimum of 70%** .
 - b. Red/Green - Do not use red on green or green on red as the type/background color combination.
 - c. Do not place body copy on top of graphic images that impair readability.
4. Samples: During the design process, it is recommended that samples be made for review of all size, typeface and color combinations for labels in that exhibit.
5. Exhibit Lighting:
 - a. All labels shall receive sufficient, even light for good readability. Exhibit text in areas where light levels have been reduced for conservation purposes should have a minimum of 10 footcandles of illumination.
 - b. Harsh reflections and glare should be avoided.
 - c. The lighting system shall be flexible enough to allow adjustments on-site.

d. Transitions between the floor and walls, columns or other structures should be made clearly visible. Finishes for vertical surfaces should contrast clearly with the floor finish. Floor circulation routes should have a minimum of 10 footcandles of illumination.

6. Signage: When permanent building signage is required as a part of an exhibit project, the ADAAG guidelines shall be consulted. Signs, which designate permanent rooms and spaces, shall comply with ADAAG 4.30.1, 4.30.4, 4.30.5, and 4.30.6. Other signs, which provide direction to or information about functional spaces of the building, shall comply with ADAAG 4.30.1, 4.30.2, 4.30.3, and 4.30.5. Note: When the International Symbol of Accessibility (wheelchair symbol) is used, **the word "Handicapped" shall not be used** beneath the symbol. Instead, use the word "Accessible".

Guidelines Affecting Visitors with Hearing Impairments

1. Information presented via audio formats will be duplicated in a visual medium, such as in the exhibit label copy or by captioning. All video programs incorporated into the exhibit, which contain audio, shall be open captioned.
2. Amplification systems and volume controls should be incorporated with audio equipment used individually by the visitor, such as audio handsets.
3. Information desks shall allow for Telecommunication Devices for the Deaf (TDD) equipment.

Guidelines Affecting Visitors with Learning Impairments

1. The exhibits will present the main interpretive themes on a variety of levels of complexity, so people with varying abilities and interests can understand them.
2. The exhibits should avoid unnecessarily complex and confusing topics, technical terms, and unfamiliar expressions. Pronunciation aids should be provided where appropriate.
3. Graphic elements shall be used to communicate non-verbally.
4. The exhibits shall be a multi-sensory experience. Techniques to maximize the number of senses used in the exhibits should be encouraged.
5. Exhibit design shall use color and other creative approaches to facilitate comprehension of maps by visitors with directional impairments.

Historic Furnishings

Historically refurbished rooms offer the public a unique interpretive experience by placing visitors within historic spaces. Surrounded by

historic artifacts visitors can feel the spaces "come alive" and relate more directly to the historic events or personalities commemorated by the park.

Accessibility is problematical in many NPS furnished sites because of the very nature of historic architecture. Buildings were erected with a functional point of view that is many times at odds with our modern views of accessibility.

The approach used to convey the experience of historically furnished spaces will vary from site to site. The goals, however, will remain the same, to give the public as rich an interpretive experience as possible given the nature of the structure.

Guidelines Affecting Visitors with Mobility Impairments

1. The exhibit space should be free of architectural barriers or a method of alternate accommodation should be provided, such as slide programs, videotaped tours, visual aids, dioramas, etc.
2. All pathways, aisles, and clearances shall (when possible) meet standards set forth in UFAS 4.3 to provide adequate clearance for wheelchair routes.
3. Ramps shall be as gradual as possible and not exceed a 1" rise in 12" run, and conform to UFAS 4.8.
4. Railings and room barriers will be constructed in such a way as to provide unobstructed viewing by persons in wheelchairs.
5. In the planning and design process, furnishing inaccessible areas, such as upper floors of historic buildings, will be discouraged unless essential for interpretation.
6. Lighting will be designed to reduce glare or reflections when viewed from a wheelchair.
7. Alternative methods of interpretation, such as audiovisual programs, audio description, photo albums, and personal services will be used in areas which present difficulty for visitors with physical impairments.

Guidelines Affecting Visitors with Visual Impairments

1. Exhibit typefaces will be selected for readability and legibility, and conform to good industry practice.
2. Audio description will be used to describe furnished rooms, where appropriate.
3. Windows will be treated with film to provide balanced light levels and minimize glare.
4. Where appropriate, visitor-controlled rheostat-type lighting will be

provided to augment general room lighting.

5. Where appropriate and when proper clearance has been approved, surplus artifacts or reproductions will be utilized as "hands-on" tactile interpretive devices.

Guidelines Affecting Visitors with Hearing Impairments

1. Information about room interiors will be presented in a visual medium such as exhibit copy, text, pamphlets, etc.
2. Captions will be provided for all AV programs relating to historic furnishings.

Guidelines Affecting the Visitors with Learning Impairments

1. Where appropriate, hands-on participatory elements geared to the level of visitor capabilities will be used.
2. Living history activities and demonstrations, which utilize the physical space as a method of providing multi-sensory experiences, will be encouraged.

Publications

A variety of publications are offered to visitors, ranging from park folders, which provide an overview and orientation to a park, to more comprehensive handbooks. Each park folder should give a brief description of services available to visitors with disabilities, list significant barriers, and note the existence of TDD phone numbers, if available.

In addition, informal site bulletins are often produced to provide more specialized information about a specific site or topic. It is recommended that each park produce an easily updatable "Accessibility Site Bulletin" which could include detailed information about the specific programs, services, and opportunities available for visitors with disabilities and to describe barriers which are present in the park. A template for this site bulletin will be on the Division of Publications website for parks to create with ease, a consistent look throughout the park service. These bulletins should be in large type, 16 points minimum and follow the large-print criteria below.

Guidelines Affecting Visitors with Mobility Impairments

1. Park folders, site bulletins, and sales literature will be distributed from accessible locations and heights.
2. Park folders and Accessibility Site Bulletins should endeavor to carry information on the accessibility of buildings, trails, and programs by visitors with disabilities.

Guidelines Affecting Visitors with Visual Impairments

1. Publications for the general public:

a. Text

- (1) Size: the largest type size appropriate for the format.
(preferred main body of text should be 10pt)
- (2) Leading should be at least 20% greater than the font size used.
- (3) Proportional letterspacing
- (4) Main body of text set in caps and lower case.
- (5) Margins are flush left and ragged right
- (6) Little or no hyphenation is used at ends of lines.
- (7) Ink coverage is dense
- (8) Underlining does not connect with the letters being underlined.
- (9) Contrast of typeface and illustrations to background is high (70% contrast is recommended)
- (10) Photographs have a wide range of gray scale variation.
- (11) Line drawings or floor plans are clear and bold, with limited detail and minimum 8 pt type.
- (12) No extreme extended or compressed typefaces are used for main text.
- (13) Reversal type should be minimum of 11 point medium or bold sans-serif type.

b. The paper:

- (1) Surface preferred is a matte finish. Dull-coated stock is acceptable.
- (2) Has sufficient weight to avoid "show-through" on pages printed on both sides.

2. Large-print version publications:

a. Text

- (1) Size: minimum 16 point type.
- (2) Leading is 16 on 20pt.
- (3) Proportional letterspacing
- (4) Main body of text set in caps and lower case.
- (5) Margins are flush left and ragged right.
- (6) Little or no hyphenation is used at ends of lines.
- (7) Ink coverage is dense.

(8) Underlining does not connect with the letters being underlined.

(9) Contrast of typeface and illustrations to background is high (70% contrast is recommended)

(10) Photographs have a wide range of gray scale variation.

(11) Line drawings or floor plans are clear and bold, with limited detail and minimum 14 pt type.

(12) No extreme extended or compressed typefaces are used for main text.

(13) Sans-serif or simple-serif typeface

(14) No oblique or italic typefaces

(15) Maximum of 50 characters (average) per line.

(16) No type is printed over other designs.

(17) Document has a flexible binding, preferably one that allows the publication to lie flat.

(18) Gutter margins are a minimum of 22mm; outside margin smaller but not less than 13mm.

b. Paper:

(1) Surface is off-white or natural with matte finish.

(2) Has sufficient weight to avoid "show-through" on pages printed on both sides.

3. Maps:

a. The less clutter the map, the more visitors that can use it.

b. The ultimate is one map that is large-print and tactile.

c. Raised line/tactile maps are something that could be developed in future, using our present digital files and a thermaform machine. Lines are distinguished by lineweight, color and height. Areas are distinguished by color, height, and texture.

d. The digital maps are on an accessible web site.

e. Same paper guides as above.

f. Contrast of typeface background is high. (70% contrast is recommended)

g. Proportional letterspacing

h. Labels set in caps and lower case

i. Map notes are flush left and ragged right.

j. Little or no hyphenation is used as ends of lines.

- k. No extreme extended or compressed typefaces are used for main text.
 - l. Sans-serif or simple-serif typeface.
4. The text contained in the park folder should also be available on audiocassette, CD and accessible web site. Handbooks, accessibility guides, and other publications should be similarly recorded where possible.
 5. The official park publication is available in a word processing format. This could be translated into Braille as needed.

Guidelines Affecting Visitors with Hearing Impairments

Park site bulletins will note the availability of such special services as sign language interpretation and captioned programs.

Guidelines Affecting Visitors with Learning Impairments

1. The park site bulletin should list any special services available to these visitors.
2. Publications:
 - a. Use language that appropriately describes persons with disabilities.
 - b. Topics will be specific and of general interest. Unnecessary complexity will be avoided.
 - c. Whenever possible, easy to understand graphics will be used to convey ideas, rather than text alone.
 - d. Unfamiliar expressions, technical terms, and jargon will be avoided. Pronunciation aids and definitions will be provided where needed.
 - e. Text will be concise and free of long paragraphs and wordy language.

Wayside Exhibits

Wayside exhibits, which include outdoor interpretive exhibits and signs, orientation shelter exhibits, trailhead exhibits, and bulletin boards, offer special advantages to visitors with disabilities. The liberal use of photographs, artwork, diagrams, and maps, combined with highly readable type, make wayside exhibits an excellent medium for visitors with hearing and learning impairments. For visitors with sight impairments, waysides offer large type and high legibility.

Although a limited number of NPS wayside exhibits will always be inaccessible to visitors with mobility impairments, the great majority are placed at accessible pullouts, viewpoints, parking areas, and trailheads. The NPS accessibility guidelines for wayside exhibits help insure a stan-

dard of quality that will be appreciated by all visitors. Nearly everyone benefits from high quality graphics, readable type, comfortable base designs, accessible locations, hard-surfaced exhibit pads, and well-landscaped exhibit sites.

While waysides are valuable on-site "interpreters," it should be remembered that the park resources themselves are the primary things visitors come to experience. Good waysides focus attention on the features they interpret, and not on themselves. A wayside exhibit is only one of the many interpretive tools which visitors can use to enhance their appreciation of a park.

Guidelines Affecting Visitors with Mobility Impairments

1. Wayside exhibits will be installed at accessible locations whenever possible.
2. Wayside exhibits will be installed at heights and angles favorable for viewing by most visitors including those in wheelchairs. For standard NPS low-profile units the recommended height is 30 inches from the bottom edge of the exhibit panel to the finished grade; for vertical exhibits the height of 6-28 inches.
3. Trailhead exhibits will include information on trail conditions which affect accessibility.
4. Wayside exhibit sites will have level, hard surfaced exhibit pads.
5. Exhibit sites will offer clear, unrestricted views of park features described in exhibits.

Guidelines Affecting Visitors with Visual Impairments

1. Exhibit type will be as legible and readable as possible.
2. Panel colors will be selected to reduce eyestrain and glare, and to provide excellent readability under field conditions. White should not be used as a background color.
3. Selected wayside exhibits may incorporate audio stations or tactile elements such as models, texture blocks, and relief maps.
4. For all major features interpreted by wayside exhibits, the park should offer non-visual interpretation covering the same subject matter. Examples include cassette tape tours, radio messages, and ranger talks.
5. Appropriate tactile cues should be provided to help visually impaired visitors locate exhibits.

Guidelines Affecting Visitors with Hearing Impairments

1. Wayside exhibits will communicate visually, and will rely heavily on graphics to interpret park resources.

2. Essential information included in audio station messages will be duplicated in written form, either as part of the exhibit text or with printed material.

Guidelines Affecting Visitors with Learning Impairments

1. Topics for wayside exhibits will be specific and of general interest. Unnecessary complexity will be avoided.
2. Whenever possible, easy to understand graphics will be used to convey ideas, rather than text alone.
3. Unfamiliar expressions, technical terms, and jargon will be avoided. Pronunciation aids and definitions will be provided where needed.
4. Text will be concise and free of long paragraphs and wordy language.

APPENDIX B: EVALUATION

INTRODUCTION

Evaluation is an essential part of planning and operating a park interpretive program. Over the years it has become increasingly evident that interpretive facilities, media, and activities benefit from evaluation during planning and development and following implementation of interpretive program components. An ongoing evaluation process should include three cycles of evaluation activities tailored to specific tasks and questions.

Front-End Evaluations are appropriate when conceptual planning considers themes, story lines, and program ideas.

Formative Evaluations are done during a process, such as early fabrication of exhibits and test run of activities. Formative evaluations are increasing in the Park Service, especially with the implementation of GPRA and value analysis.

Summative or Remedial Evaluations are performed at the end of a process. Summative evaluations have been more common in government agencies. Performance is measured and assessed at the end of a fiscal year. Achievement of media objectives is determined after the media are installed for a period of time. Achievement of short-term educational goals is measured at the conclusion of a program.

NATIONAL PARK SERVICE EVALUATION PROGRAM

Visitor Services Project assesses visitor backgrounds, preferences, activities, and opinions through surveys. The Cooperative Park Study Unit (CPSU) at the University of Idaho coordinates the program. An evaluation was conducted at the Preserve in 1999.

Government Performance and Results Act (GPRA) holds offices and parks accountable for defining and assessing desired outcomes. Preserve staff conducts evaluation of goal accomplishment annually.

Value Analysis Program assesses the cost effectiveness of design and construction projects in excess of \$500,000.

Post Occupancy Evaluation Program (POE) assesses the effectiveness of interpretive facilities and media. The program is coordinated by Denver Service Center and Harpers Ferry Center and may be applied following implementation of media proposals for Ochopee Information Center and Big Cypress Visitor Center.

Post Construction Evaluation coordinated by Denver Service Center looks at the quality of construction of facilities built by DSC. This process may be applied to projects such as construction of a Ochopee Information Center and implementation of proposals in the Scenic Highway Improvement Conceptual Design Plan.

Park Initiated Evaluations are conducted or contracted by parks with assistance from regional offices, service centers, and the Washington Office of Interpretation and Visitor Services.

TECHNIQUES

The following techniques are recommended for consideration as Park Initiated Evaluations for implementation at the Preserve. This is not intended as an all-inclusive list. These methods were selected because they can be applied with relative ease and because they represent techniques with low to moderate cost and time commitments that yield moderate to high value/benefits. [A Field Guide for Evaluating National Park Service Interpretation](#), by Brett Wright and Marcella Wells, provides a complete description of these and other techniques.

Importance/Performance Analysis

Cost-Low

Time-Moderate

Value/Benefit-High

This analysis, more quantitative than qualitative, is an empirical test used to obtain assessments of visitor satisfaction. The analysis helps determine which areas of a program require the most resources and attention, which resources could be reduced or eliminated from particular areas of a program, or which efforts should be maintained. This technique is easily understood, easily displayed, easily interpreted to obtain data that can be applied readily to program decisions. It can be used to evaluate both overall program as well as single activities.

Auditing

Cost-Moderate

Time-Moderate

Value/Benefit-Moderate/High

Auditing helps supervisors guide development of interpretive activities

and interpreters improve their performance. The auditor and interpreter set and discuss objectives prior to the audit. The auditor then conducts the formal audit using checklists adapted to the program being audited. A post-audit conference, a direct two-way communication, must take place as soon as possible after the formal audit. It provides prompt feedback to the interpreter being audited and establishes a basis for follow-up coaching. The evaluator is able to assess interpreter's actual performance in terms of content and technique. Coaching aspects of the audit lessen intimidation of the evaluation process and provide opportunity to correct inconsistencies before they become habit.

Interviewing

Cost - Low/Moderate Time - High Value/Benefit - High

There are three approaches to interviewing. In each a single interviewer facilitates the conversation. Data gathered reveals the interviewees perspective by allowing them to express their understanding of a situation in their own words. The Informal Conversational Interview, or unstructured interview, presents open-ended questions in spontaneous, free-flowing conversation. The Interview Guide Approach, or semi-structured interview, uses predetermined questions or issues, but the interviewer adapts wording and sequence flexibly during the interview. This approach may be used effectively for group interviews where the facilitator focuses the conversation. The Standardized Open-Ended Interview presents the same carefully worded questions in the same sequence to all interviewees. This method reduces interviewer bias and makes data analysis easier than other methods. Regardless of the approach to interviewing, response rates for interviews are usually higher than with a questionnaire and more complex issues can be addressed.

Focus Groups

Cost - Low Time - Moderate Value/Benefit - High

Small focus groups are formed to discuss a specific question, concern, or problem. A well-trained discussion leader uses a study guide to facilitate the topic of discussion. Focus groups are helpful as formative and summative evaluations. They capitalize on the value of group dynamics to assure a high level of validity while examining issues and concerns in a social context. This technique yields qualitative information often missed in statistical studies. It can be used to evaluate the message transmitted, determine visitor perceptions, measure strengths and weaknesses, or anticipate visitor needs for both personal and non-personal interpretation. Focus Groups: A Tool for Evaluating Interpretive Services, a

National Park Service training package, describes procedures for conducting focus group evaluations.

Observation

Cost - Low

Time - Moderate/High

Value/Benefit -
Moderate/High

This qualitative technique can effectively evaluate interpretive episodes as they occur. Observing people in a natural setting can reveal high quality information not revealed by more quantitative techniques. Observational data helps understand the impacts of interpretive programs without encumbering visitors. It can be applied to interpretation in a variety of overt and covert observation strategies (direct, indirect, unobtrusive, interactive) to gather observational data. The evaluator might observe Statistical Evidence such as program attendance and other visitor use data. Physical Evidence of tile and carpet wear around exhibits, trail wear and wear on exhibit material can expose visitor interests and desires. Archival Evidence includes permits, sales records, number of complaints and compliments, and trail logs. Observation reveals interests through non-participation, time dedicated to a particular activity, body language and language and conversation reveals interests. Use of video or audio tape, still photography, or time-lapse photography illustrate Contrived Observation techniques.

Connoisseurship and Criticism

Cost - Moderate

Time - Low/Moderate

Value/Benefit -
Moderate

The strength of this technique lies in its capability to turn trained observation into statements about interpretive quality through interpretation and evaluation of what is observed. This qualitative method yields valuable information about content, quality, and presentation of interpretive activities. An evaluator with training, experience, and refined perceptual capabilities conducts the evaluation. A critical narrative prepared by the evaluator help interpreters see, understand, and appraise situations being critiqued. The written critique includes three components. A descriptive section presents a vivid and factual description of the situation. An interpretive section accounts for the interactions perceived in the situation by interpreting processes observed. The evaluator presents value judgements based on criteria related to the specific situation and the needs of the creator or presenter of the interpretive experience.

