CONNECTING PEOPLE

Paynes Prairie Preserve
STATE PARK

Visitor Center Improvements

TO INFORM

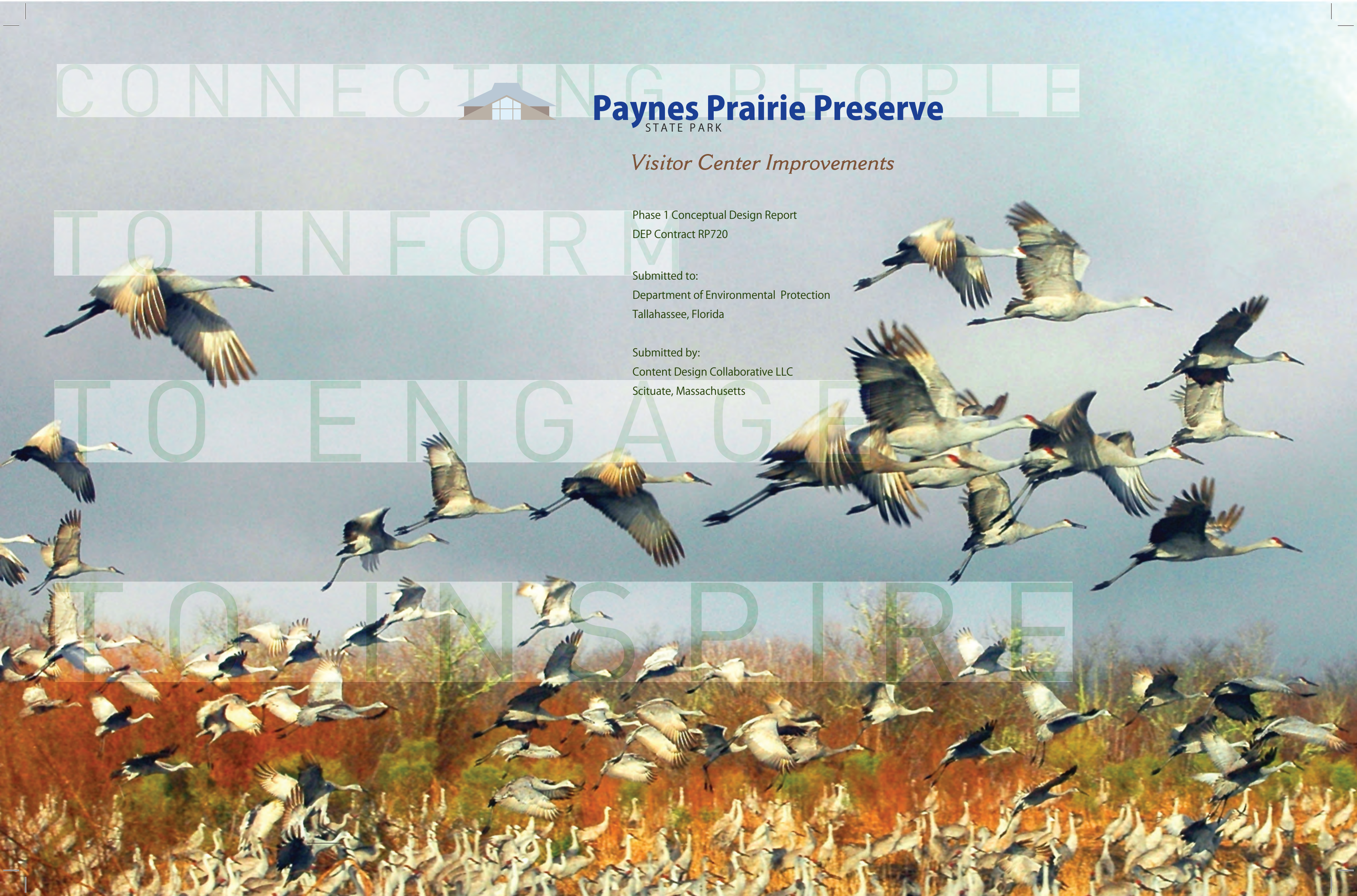
Phase 1 Conceptual Design Report
DEP Contract RP720

Submitted to:
Department of Environmental Protection
Tallahassee, Florida

Submitted by:
Content Design Collaborative LLC
Scituate, Massachusetts

TO ENGAGE

TO INSPIRE



Cover photo by Marijka Willis

"Literally, thousands of Sandhill Cranes come south to Paynes Prairie and the surrounding fields in Gainesville for the Winter. It may have been a record. Over 5,000 Cranes where counted. What a great sight to see these birds and to hear them. Their honking can be heard for miles. I can't wait to see them again."

observations by Marijka Willis,
The La Chua Trail, Paynes Prairie Preserve,
January 2009

Partners

Florida Department of Environmental Protection

Florida Park Service

National Scenic Byways Program

Florida Department of Transportation

Florida Scenic Highway

Old Florida Heritage Highway

Friends of Paynes Prairie, Inc.

This project was made possible because of the support and cooperation of the following

Table of Contents

Introduction 2

Connecting People to Place 4

Architectural Improvements 6

Exhibit and Interior Plans 8

Area 1.0 Site Identity 10

Area 2.0 & 3.0 Welcome & Naturalists Nook 12

Area 4.0 Witness to Change Theater 14

Area 5.0 Living With Change Gallery 18

Area 6.0 Life on the Edge Gallery 22

Area 7.0 Alachuan Rhythms 24

Budget and Schedule 25, 26

Public meetings gave the community, staff and volunteers an opportunity to shape the exhibit plan to meet their needs.

During numerous site visits, workshops, and public meetings, the consultants learned about the significance of Paynes Prairie, including observing the healthy effects of a prescribed burn.

Introduction

Paynes Prairie Preserve State Park became Florida's first state preserve in 1971, and was designated a National Natural Landmark in 1974. Paynes Prairie is located in Micanopy, Florida and is the heart of the Old Florida Heritage Highway. Visitors to the Preserve enjoy wildlife viewing including alligators, sandhill cranes, bald eagles and migrating waterfowl on more than 22,000 acres with 30 miles of multi-use trails. Seasonally, dazzling displays of marsh marigolds, American lotus, and pickerelweed paint the Great Alachua Savannah just as described by naturalist and artist William Bartram, in 1774, in his book *Travels*.

Located in a sinkhole-rich region of North Central Florida, Paynes Prairie was formed when a number of sinkholes coalesced into a 16,000-acre basin of internal drainage. The basin and the Alachua Sink are a significant point of recharge for the Floridan Aquifer, the major source of fresh water in this part of Florida. Wetland vegetation, in Florida's largest freshwater marsh, helps purify runoff water as it flows across the flat basin into the Alachua Sink.

Waves of diverse people settled across the area for over 12,000 years, each wave eager to utilize the lush land. Paleoindian, Cades Pond, and Alachua people were followed by the historic Potano Indians, Spanish adventurers, Seminole Indians, African Americans, and finally Americans arriving from the north. The prairie has seen them come and go, yet still abounds with the plant and animal diversity for which it has always been known.

Paynes Prairie not only protects natural and cultural resources, but also contributes millions of dollars to the state and local economies. Residents and businesses in the communities near Paynes Prairie understand how important the Preserve is to their lives and livelihoods. They benefit from access to recreational opportunities, and from the tourists who come to visit. Nearly 220,000 people visit Paynes Prairie each year with an economic benefit of $8.3 million dollars, illustrating the importance of the Paynes Prairie Visitor Center Improvements Project.

The Project

Winner of the Governor's Award for Architectural Design in 1981, the Alachua Savannah Visitor Center is intended to serve as an information and orientation portal for visitors to Paynes Prairie, the local community, and travelers on the Old Florida Heritage Highway. In its present state, the visitor center is unable to effectively and efficiently deliver on its overall function as an "information and orientation portal" in the following ways:

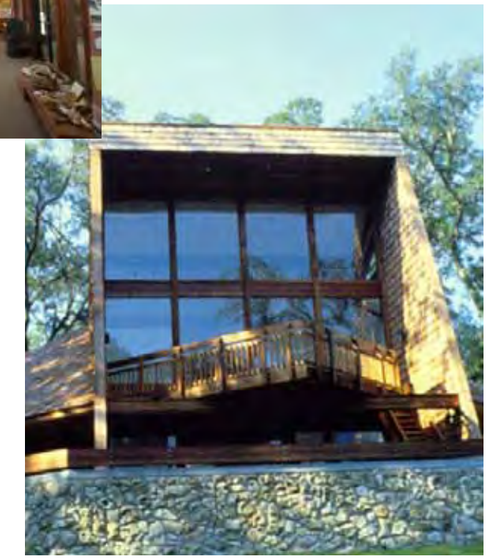
- The present exhibits are worn, outdated, and uninspiring.
- Use of the interior space is inefficient, and in many cases does not meet American with Disabilities Act (ADA) standards.
- The visitor center auditorium has been under utilized in terms of its large size, and the audio-visual equipment used in daily video presentations is obsolete.
- Retail items have invaded the exhibit space competing for visitors' attention and diluting the exhibits' messages.
- The information desk is chest-high and forms a barrier between staff and the visitor. This structural impediment works against the need for welcoming and sharing that should take place at this critical location.

Goals of the Project

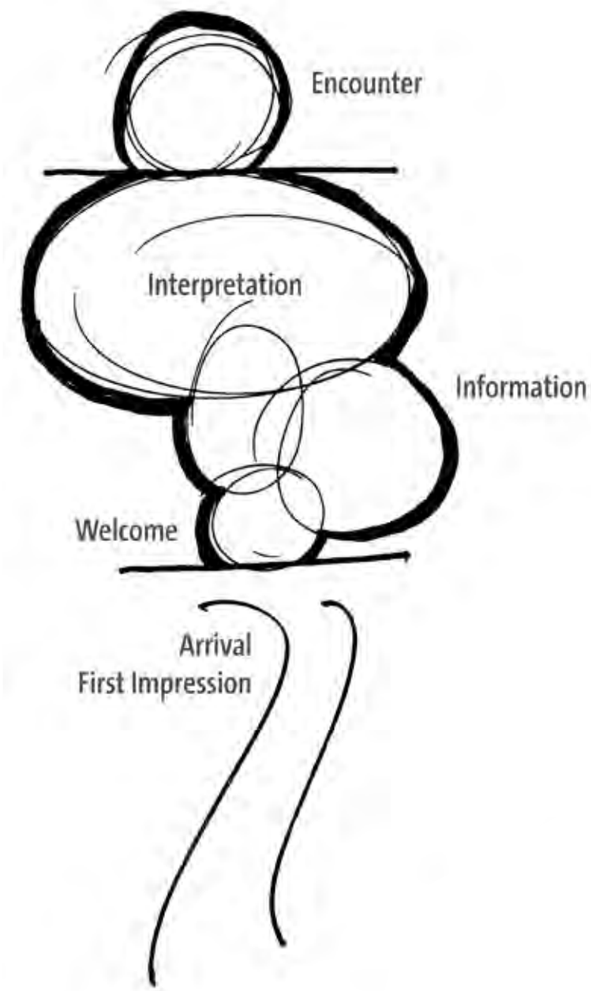
- Create a Final Design Plan for engaging and interactive, interpretive exhibits that will attract local residents and tourists, and inspire repeat visitation.
- Address the project themes on the next page.
- Suggest creative, efficient use of the interior space.
- Approach design with environmentally conscious and sensitive methods.
- Provide a way-finding plan that integrates satellite locations across Paynes Prairie Preserve State Park.

Process

- Funding for Phase I: Conceptual Design and Phase II: Design Development has been provided through a National Scenic Byways Grant with assistance from the Florida Department of Transportation, Florida Department of Environmental Protection, and the Friends of Paynes Prairie. Funding is currently being sought for Phase III: Fabrication and Implementation.
- This Conceptual Design Report has been developed as a guide for future design and implementation of this exciting and much needed project. Specific design elements included are for illustration only.



Connecting People and Place



The visitor center is a place that is attractive and useful to people of many differing motivations. Some arrive to get information for trip planning. They want to know more about the expansive Preserve — trail conditions, key destinations, and what they might encounter that will be memorable and emblematic of Paynes Prairie. These people are hikers, bird watchers and carriers of field guides and binoculars.

Some come for a greater immersion. They arrive seeking answers to questions like "how did the Alachua Sink form?" or "where did the sandhill cranes migrate from?" These visitors are likely to engage the exhibits to their fullest capabilities. They are readers and film-watchers, and appreciate history and stories.

Some come in large, organized groups - part of a classroom experience or a heritage tour program like Road Scholars. Others come in small family groups in order to collaborate on a preferred way of seeing the Preserve. And some come as soloists, seeking quiet encounters with the natural world.

Serving as museum, map, and mentor, a well-designed facility will meet all visitors' needs. It is a place of welcome and interpretation that encourages exploration and encounters with nature— a place where visitors can build their personal relationship to this extraordinary place and all it has to offer.

Project Goals for Interpretation

Theme 1: Orientation and Information

The visitor center will function as an information portal that encourages exploration of the many areas and features of the Preserve.

The visitor will understand that the Preserve is large enough and varied enough to provide a unique experience at different locations.

A way-finding system will integrate all aspects of the Preserve using symbols developed for the purpose.

Information on membership, donations, volunteering, and guided programs will be available.

These themes are included in content Areas 1-4.

Theme 2: Hydrology and Geology

The visitor will learn that Paynes Prairie is Florida's largest basin marsh and will understand how it formed from a geologic perspective.

In addition, the visitor will understand such concepts as the formation of sinkholes and the role of Alachua Sink, watershed and sheetflow across wetlands, as well as the effects of stormwater.

The visitor will acquire raised awareness of the need for active engagement in water issues beyond the Preserve boundaries.

These themes are included in content Areas 4, 5 and 7.

Theme 3: Landscape of Disturbance and Change

The visitor will better appreciate that without fire, flood, and other disturbances much of what makes Paynes Prairie a unique natural area with rich diversity would be lost.

The visitor will understand Paynes Prairie is managed not for single species protection, but for the protection and restoration of overall natural processes — keeping the common things common, protecting the cute and cuddly, as well as the ugly and grotesque.

The visitor will understand how people manage the Preserve.

These themes are included in content Areas 4, 5, 6 and 7.

Theme 4: Long Cultural History and Resilience

The visitor will understand Paynes Prairie has been used and altered for many purposes — that 300 generations of humans have collided with the natural history of this site — but through active, dynamic management it still abounds with the diversity of plants and wildlife that has always been its lure and fame.

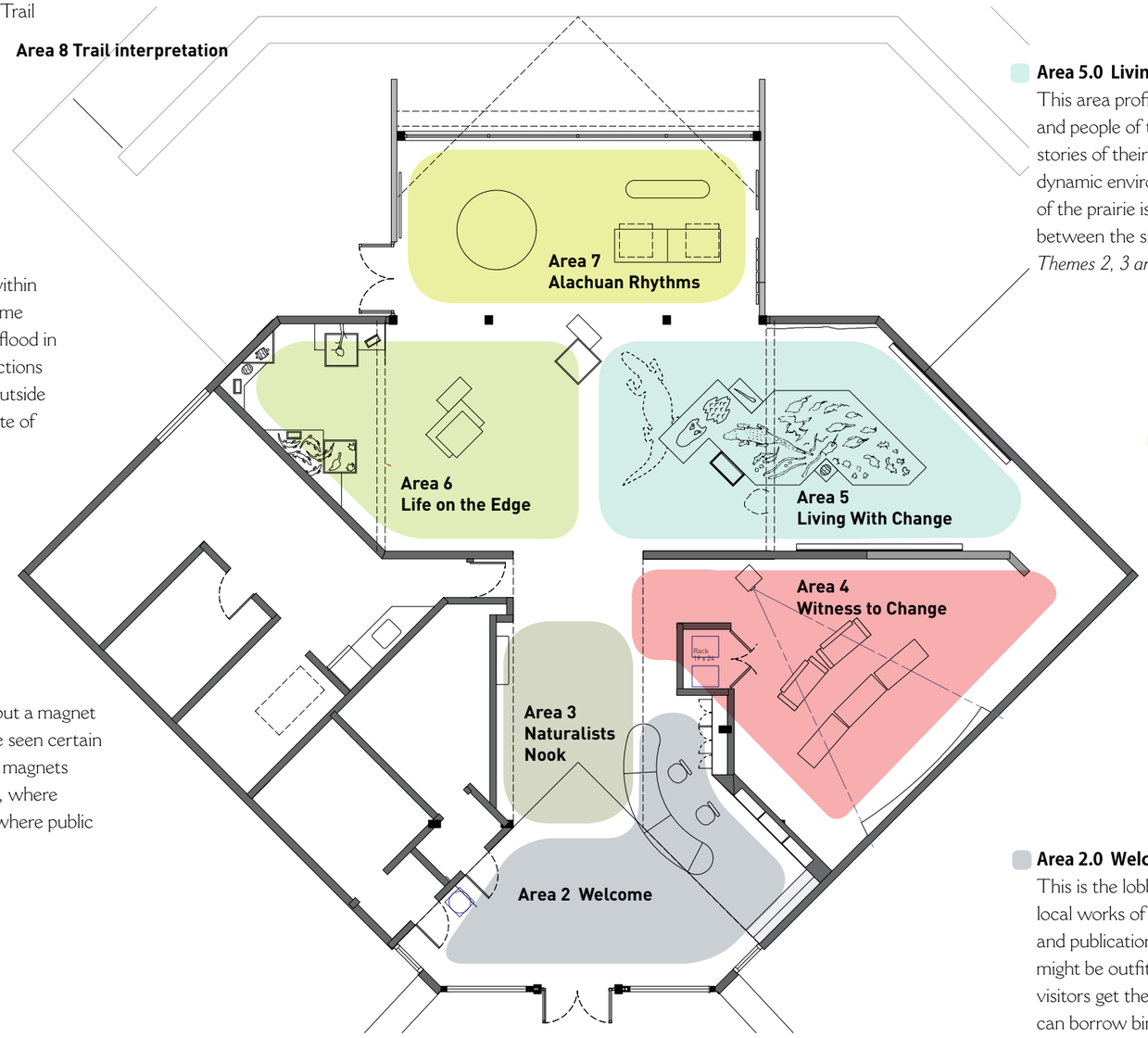
Visitors will appreciate the juxtaposition of being in the shadow of the City of Gainesville, yet at a place that functions essentially as it has for 100,000 years, where one can come face to face with the full wildness of the landscape and experience it as Florida's first people did — with awe, wonder and amazement.

These themes are included in content Areas 3, 4, and 5.

Content Plan

Area 8.0 Trailhead and Site Interpretation
At the rear of the building, a trailhead marker and map of the preserve shows options for hiking and sightseeing in the immediate vicinity of the Visitor Center. Highlights include the Wacahoota Trail and its 40-foot observation tower.

Area 7.0 Alachuan Rhythms
A contemplative experience, Alachuan Rhythms takes visitors on a auditory journey through some of the cycles of the prairie. Visitors hear the seasonally-shifting frog chorus, the arrival of song birds to the hammocks, or a deluge of rain. An interactive watershed map and a graphic about hydrology are also part of this experience. *This area includes Themes 3 and 4.*



Area 5.0 Living With Change
This area profiles specific communities of plants, animals and people of the savannah and tells the stories of their unique ways of making a living in a dynamic environment. Also, the underlying geology of the prairie is revealed in order to build a relationship between the site and its residents. *This area includes Themes 2, 3 and 4.*

Area 6.0 Life on the Edge
This area highlights the interactive edges within the Preserve where distinct ecosystems come together. It also reveals the role of fire and flood in creating edge communities, and the connections that Paynes Prairie Preserve has to areas outside of the Preserve and even outside of the state of Florida. *This area includes Theme 3.*

Area 4.0 Witness to Change
In the theater visitors are immersed in the beauty and dynamism of the prairie. Visitors see the landscape from a variety of perspectives — past and present — and observe some of the prairie's most spectacular moments. In this exciting production, visitors appreciate that change is the one true constant on the prairie. *This area includes Themes 1, 2, 3 and 4.*

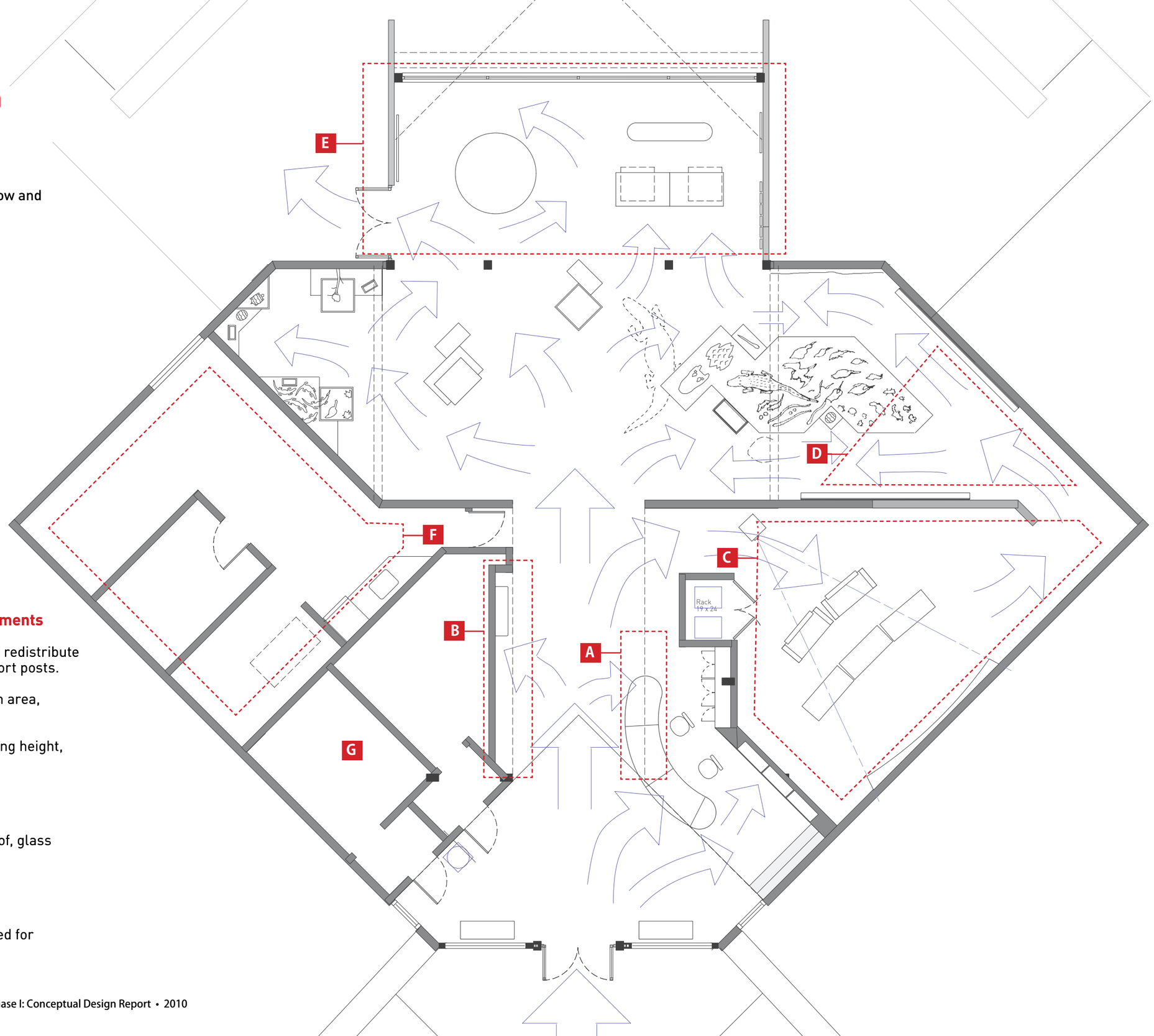
Area 3.0 Naturalists Nook
Here visitors can sign the guest book and put a magnet on a large metal map to post where they've seen certain wildlife. The staff at the Preserve can post magnets as well to show where plants are blooming, where prescribed burns are being conducted, or where public programs are being hosted.
This area includes Themes 1 and 4.

Area 2.0 Welcome
This is the lobby and welcome desk. Here, visitors can purchase T-shirts, local works of art (including photographic cards and prints), field guides, and publications about Florida's cultural history. The surface of the desk might be outfitted with a map so that staff can point to locations and help visitors get the most out of the expansive preserve. Additionally, visitors can borrow binoculars and pick up trail maps and wildlife checklists.
This area includes Theme 1.

Area 1.0 Site Identity
The graphic identity of the Paynes Prairie Visitor Center.

Architectural Plan and Visitor Flow

Building plan showing visitor flow and architectural improvements



Major Architectural Improvements

- **A** Remove existing counter and redistribute load to remove vertical support posts.
- **B** Remove existing cases, finish area, extend floor, relocate vent.
- **C** Fill and level floor, raise ceiling height, add acoustic material.
- **D** Relocate wall.
- **E** Extend gallery space, add roof, glass window wall.
- **F** Staff area improvements.
- **G** Restrooms are to be evaluated for ADA compliance.

Architectural Improvements

For 29 years the Visitor Center structure has provided orientation, education and inspiration to the visitors of Paynes Prairie. It is structurally sound and has no major problems with the HVAC, plumbing or electrical systems. The project's design task was to evaluate the building from the perspective of the contemporary visitor and determine what architectural adjustments were needed — if any — that would enhance the visitor experience.

Upon completion of an initial workshop the design team conducted site measurements, reviewed the overall structural support system, and evaluated the visitors' experience. Three opportunities became immediately apparent:

1. Creating a more open and welcoming entry and orientation experience by relocating two vertical supports that currently obstruct the interaction between the visitor and staff. The posts could be relocated and the load redistributed.
2. Raising the ceiling height in the theater area.
3. Capturing the outdoor space that exists under the north overlook, thus expanding the indoor footprint.

Visitors will flow from the entrance of the building into the central corridor — the Naturalists Nook — the "hub" of the center. Staff and signage will encourage visitors to enter the theater first, for it is a fitting introduction to the exhibits and the prairie overall. Visitors exit the theater into the galleries via a dedicated theater exit portal. The main view through the facility has been maintained, and visitors may flow directly into the exhibits from the central corridor. Once in the exhibit galleries, the flow is quite freeform. Exhibits are arranged thematically, not chronologically, to facilitate free choice circulation.

2,800 square feet (sf) total building area including exterior walls

Mechanical **83 sf** 3%	Circulation **510 sf** 18%	Exhibit **1290 sf** 46%
Storage **54 sf** 2%	Information **154 sf** 6%	Theater **444 sf** 16%
Staff **340 sf** 12%	Facilities **287 sf** 10%	

Exhibit Plan

Area 1.0 Building Approach
Parking site orientation, directional signage, and building identification.

Area 2.0 Welcome Area
Visitor welcome desk and merchandise area.

Area 3.0 Naturalists Nook
Changeable map and sign-in area.

Area 4.0 Witness to Change
Multi-use theater space.

Area 5.0 Living With Change
Graphic exhibit cases with dimensional species exhibit, surrounded by simple touchable interactives.

Area 6.0 Life on the Edge
Graphic mural, naturalistic dioramas and digital and hands-on interactives or touchables.

Area 7.0 Alachuan Rhythms
Immersive audio zone with reading material and changeable visitor gallery.

Area 8.0 Trailhead and Site Interpretation
Trail interpretation adjacent to the visitor center.

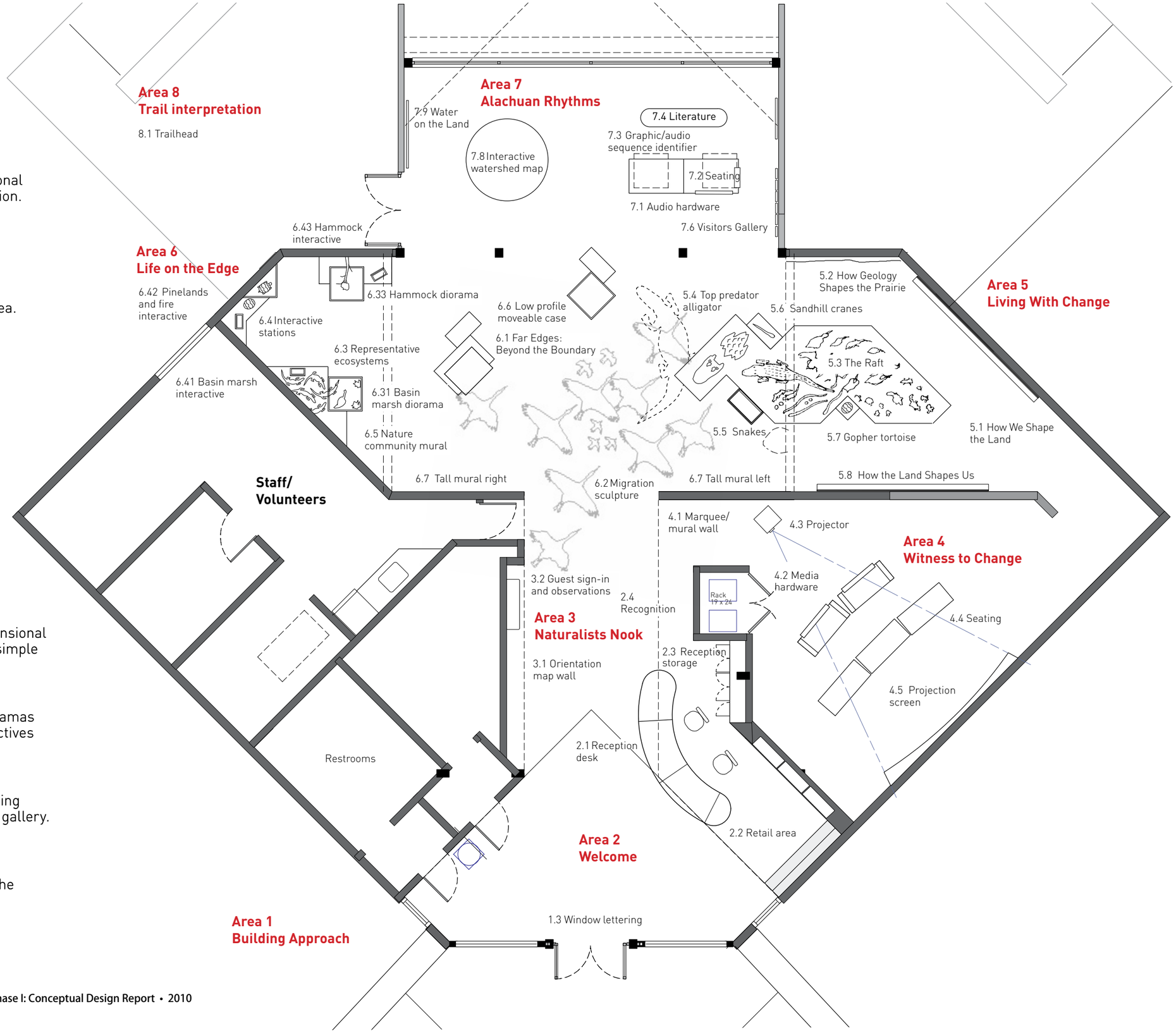


Exhibit & Interior Design

During the conceptual design phase the team considered the alternatives for colors and finishes for the visitor center improvements. Our scheme builds on the existing interior architecture by proposing lightly stained wood to complement the deep color of the existing structural wood, shown by the narrow specimen at the right. This finish would form the walls of the exhibit cases and furniture. It would have a satin clearcoat for durability and ease of cleaning. The wall color is designed to create a restful ambience in the gallery and orientation areas. It will provide contrast to the graphics, providing a good field for both light elements and dark elements. The other colors are for graphic accents. The carpet evokes the texture of the prairie basin, and the lines of the live oak hammock.

Interior Finish Samples

These are Benjamin Moore colors chosen both to reflect and complement the rich green color of the environment of the Prairie.

Complementary color 1
Abington Putty
HC -99

Complementary color 2
Costa Rica Blue
2064-50

Complementary color 3
Spring Valley Green
438

Exhibit cabinet wood finish

Existing wood

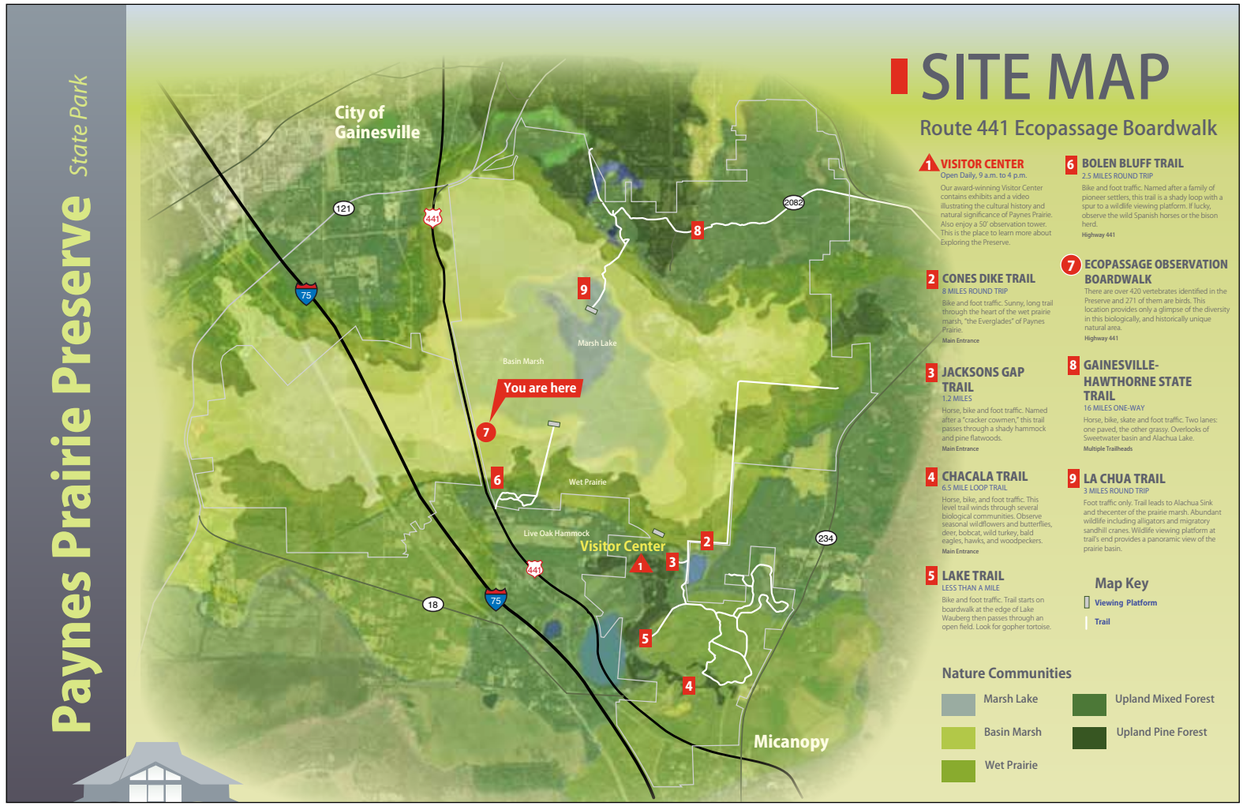
Interface carpet tile
Prairie Grass

Wall color
Abington Putty
HC -99

Accent color
Red Parrot
1308

Exhibit Cross-section

Longitudinal section through visitor center showing key exhibit areas.



Sitemap

The visitor center is given prominence as well as satellite locations. The Old Florida Heritage Highway will also be indicated. Background graphic evokes natural communities and shows proximity to the large population center of Gainesville to the north.

Exhibit Typography

Different letterstyles were reviewed for style, legibility, and longevity for the project

Life on the Edge

Where Land, Water & Sky Meet

This area highlights the interactive edges within the Preserve where distinct ecosystems come together. It also reveals the role of fire and flood in creating edge communities, and the connections that Paynes Prairie Preserve has to areas outside of the Preserve and even outside of the state of Florida..

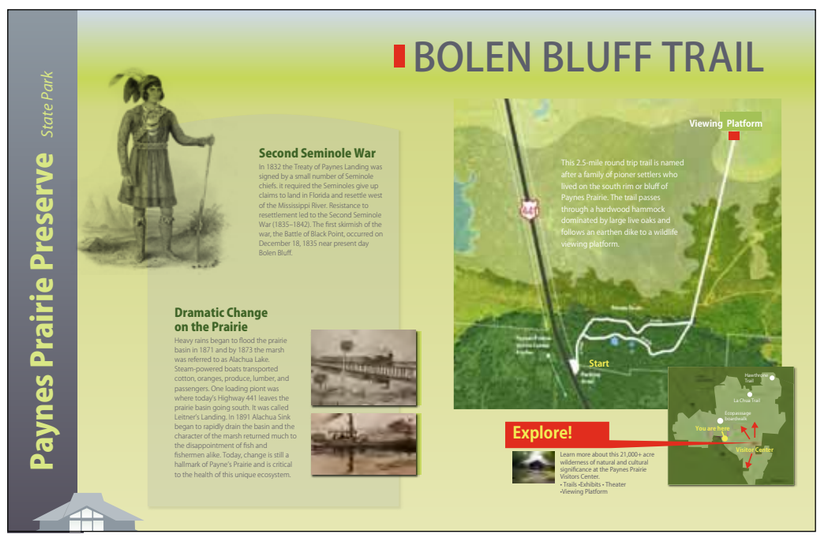
Title: ITC Leawood Medium
Subtitle: Frutiger 46 Light Italic
Text: Kozuka Gothic Pro

Life on the Edge

Where Land, Water & Sky Meet

This area highlights the interactive edges within the Preserve where distinct ecosystems come together. It also reveals the role of fire and flood in creating edge communities, and the connections that Paynes Prairie Preserve has to areas outside of the Preserve and even outside of the state of Florida.

Title: Kozuka Heavy
Subtitle: Ruzicka Freehand
Text: Cantoria MT Light

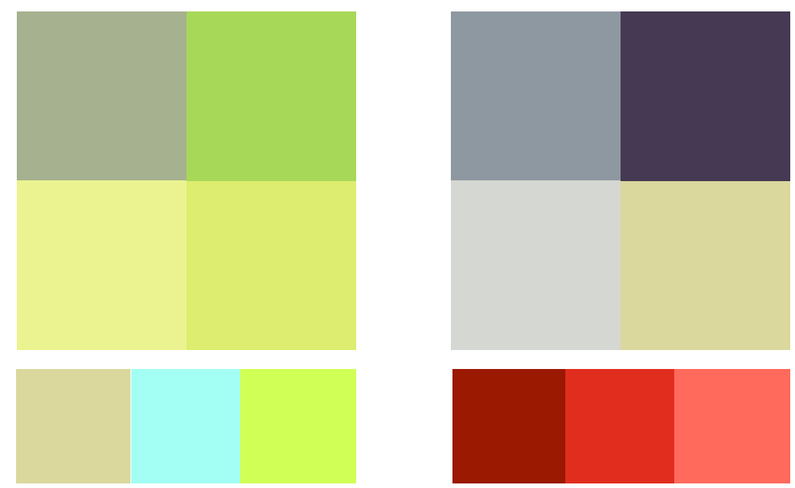


Trailmap and history panel

Smaller trailhead maps also have historical information.

Graphic Color Palate

Inspired by colors in the surrounding flora and fauna.



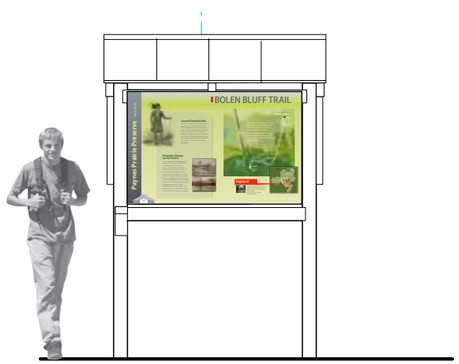
Area 1.0

Site Identity

Presently, only a small percentage of the visitors who walk the trails or stop at the Highway 441 boardwalk go to the visitor center. This important project seeks to change that. Satellite locations across the preserve were identified and, using a consistent graphic system will link back to the visitor center.

The basis for this graphic system is the site map. It includes a clear indication of the location of the visitor center, major natural plant communities, urban areas and nearby historic towns, and the diversity of recreational options. This map will be prominent at the visitor center, and the trail maps at satellite locations will be based on this design. The satellite location trailheads will also include interpretive information, photography, and illustrations that are most meaningful to that site.

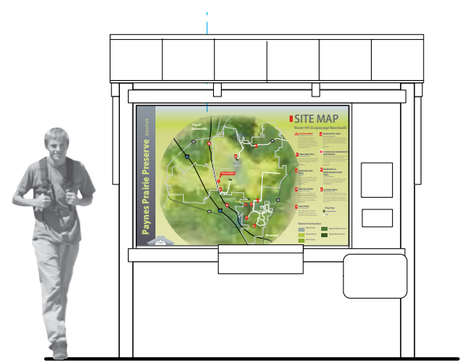
These pages include preliminary site identity examples. Natural community descriptions, trail descriptions and labels, and colors will be determined in the next phase of this project. Further work will address issues of legibility and will be tested for color-challenged visitors.



Secondary trailhead
1/4" = 1' - 0"

Trail map and natural and/or cultural resources interpretation

Bolens Bluff
Cones Dike and Jackson's Gap
Chacala Trail
Lake Wauberg
Campground Kiosks
Gainesville-Hawthorne Trail (destinations and overlooks)

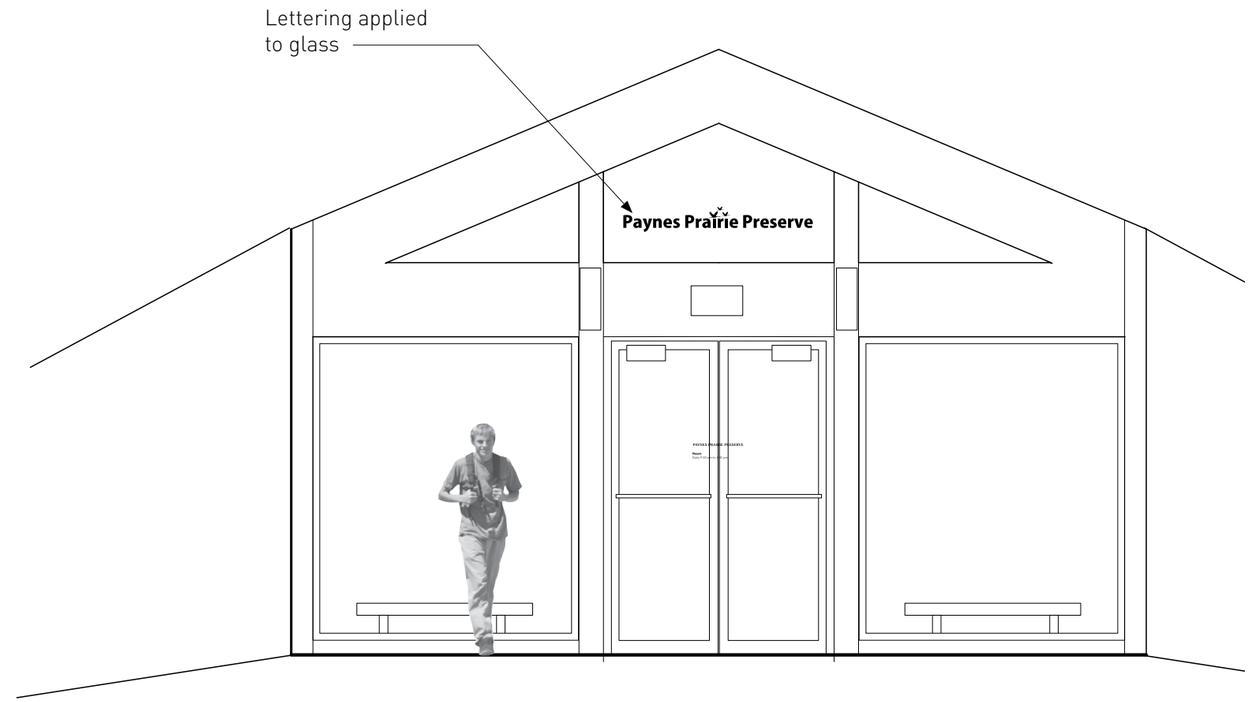


Major trailhead

Site map and natural and/or cultural resources interpretation

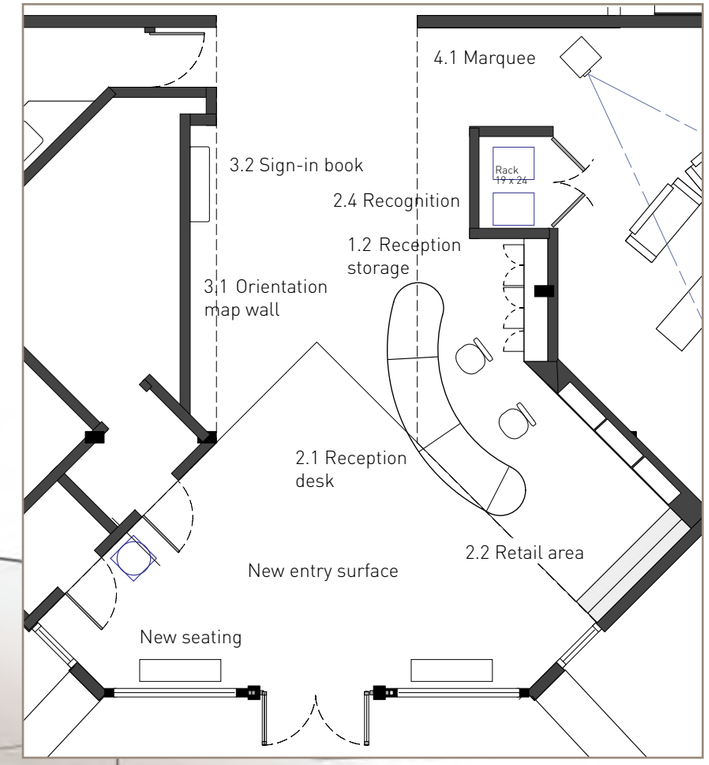
Highway 441 Ecopassage Boardwalk
Visitor Center
La Chua
Gainesville-Hawthorne Trail (main entrance)

Site and Building Entry Graphic Elevations



Sample graphic banner
These graphic banners might be used on the site map and printed material. Here are two of the different typographic approaches being considered.

Area 2.0 Welcome, Area 3.0 Naturalists Nook



The Visitor Center will be painted in a new color scheme that enhances the exhibits, provides a cool restful ambience for visitors, and works well with the large amount of outdoor light entering the space.

6.2 Migration sculpture

Agency identification

2.2 Retail area

New seating on either side of the entry

4.1 Theater marquee graphic

2.1 New reception desk,
posts eliminated

Area 2.0 - 3.0

Welcome & Naturalists Nook

Upon arrival, visitors are welcomed by trained staff at a fully equipped and more open welcome desk. Here, visitors receive information about trip planning, they can borrow binoculars, and pickup trail maps and wildlife checklists. The surface of the desk might be outfitted with a map so staff can point to locations and help visitors get the most out of the expansive Preserve and local area. In addition, visitors can purchase t-shirts, photography, field guides, and books about Florida natural and cultural history.

At the Naturalists Nook, visitors can sign the guestbook and contribute to the observation list. A large site map will highlight the diversity of destinations, identify what makes these destinations unique, and illuminate the time commitments for recreation options. This is also the place to learn about what's happening on the prairie now. The site map will be magnetic and staff/volunteers/visitors can post markers indicating recent wildlife sightings, wildflowers blooming, prescribed burns and flooding. A post-up surface features announcements of late-breaking news and upcoming ranger-led activities. The Naturalists Nook suggests the dynamism of the Prairie and underscores the idea that we are all naturalists.

Exhibit Specifications

2.1 New visitor center reception desk has an open plan creating staff/visitor interaction. The removal of two vertical supports are critical for this plan.

3.1 Full wall orientation map graphic laminated to steel for use with magnets.

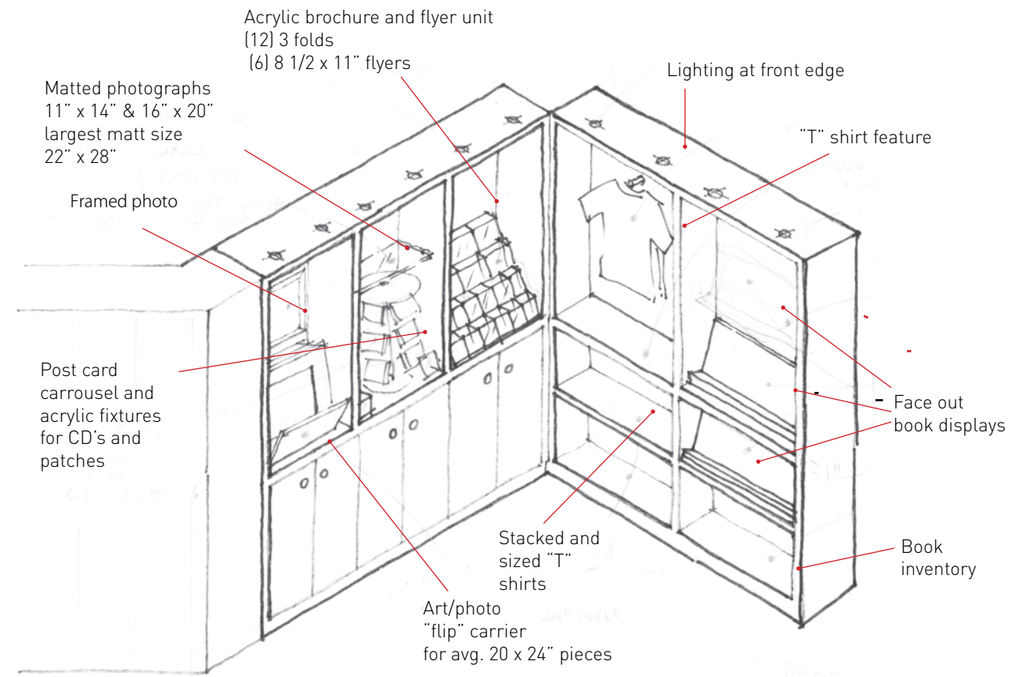
2.2 Merchandise area contains all items to be sold, creating a clear division between exhibit and retail.

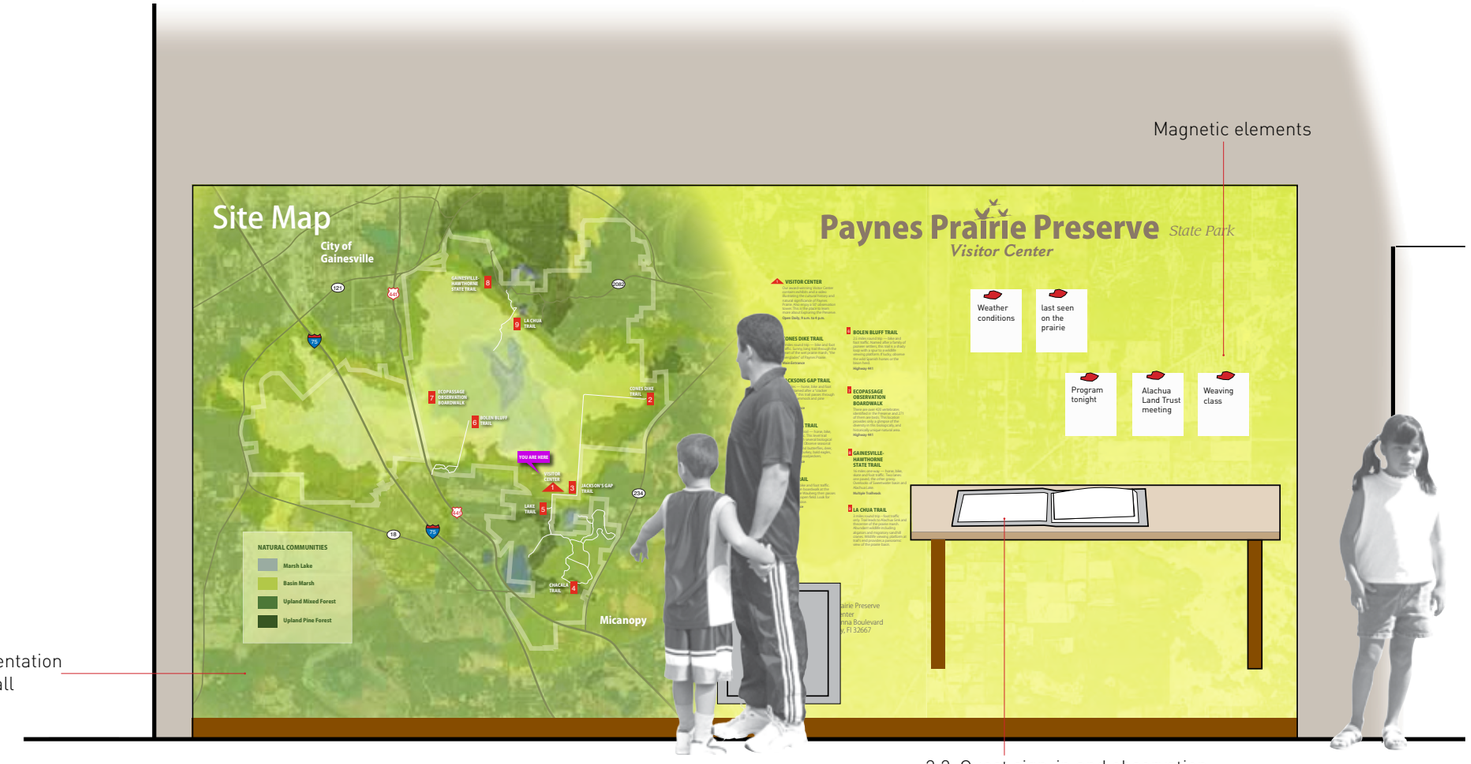
Accessibility

Spatial: Increased circulation when existing artifact cases are removed; sign-in desk is cantilevered on wall for chair access; low section of reception desk for wheeled or young visitors.

Devices provided at reception desk may include audio devices for the hard of seeing and hearing.

2.2 Retail area





Area 4.0 Witness to Change

4.1 Theater Marquee

Theater marquee and back wall mural elevation. Graphic applied directly onto wall or onto acoustic material if required. Wall will be constructed as an acoustic barrier to prevent audio spill to adjacent exhibits.

Exhibit Specifications

4.1 Wall-laminated graphic extends the entire back wall, part of this will be on acoustic material.

4.2 Playback and control equipment will be in a cooled secure and easily accessible closet. Controls can be located in the reception desk as well.

4.4 Seating will be upholstered, modular, and moveable by all staff.

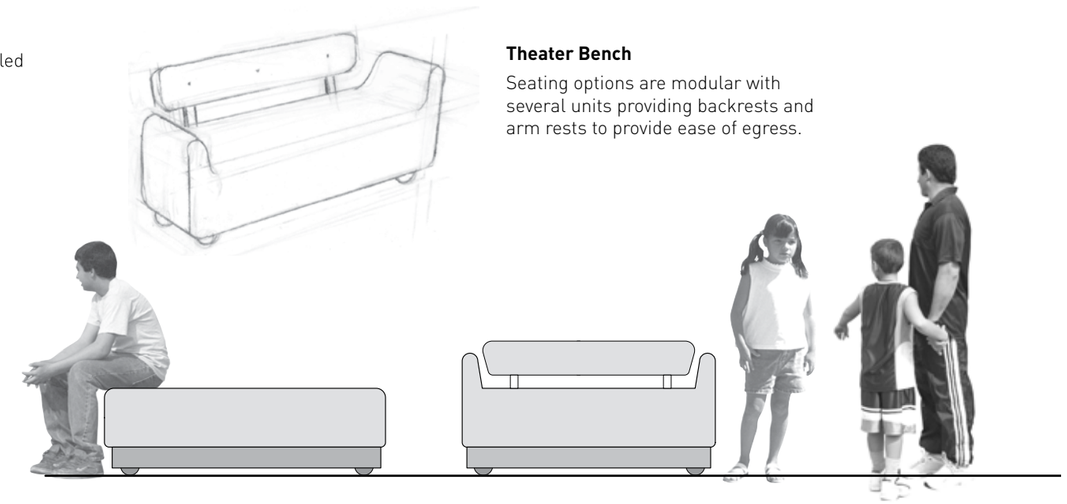
Accessibility

Spatial: Adequate circulation space is provided in the plan.

Seating: The modular seating will either all have lumbar and armrests or the required proportion will have them.

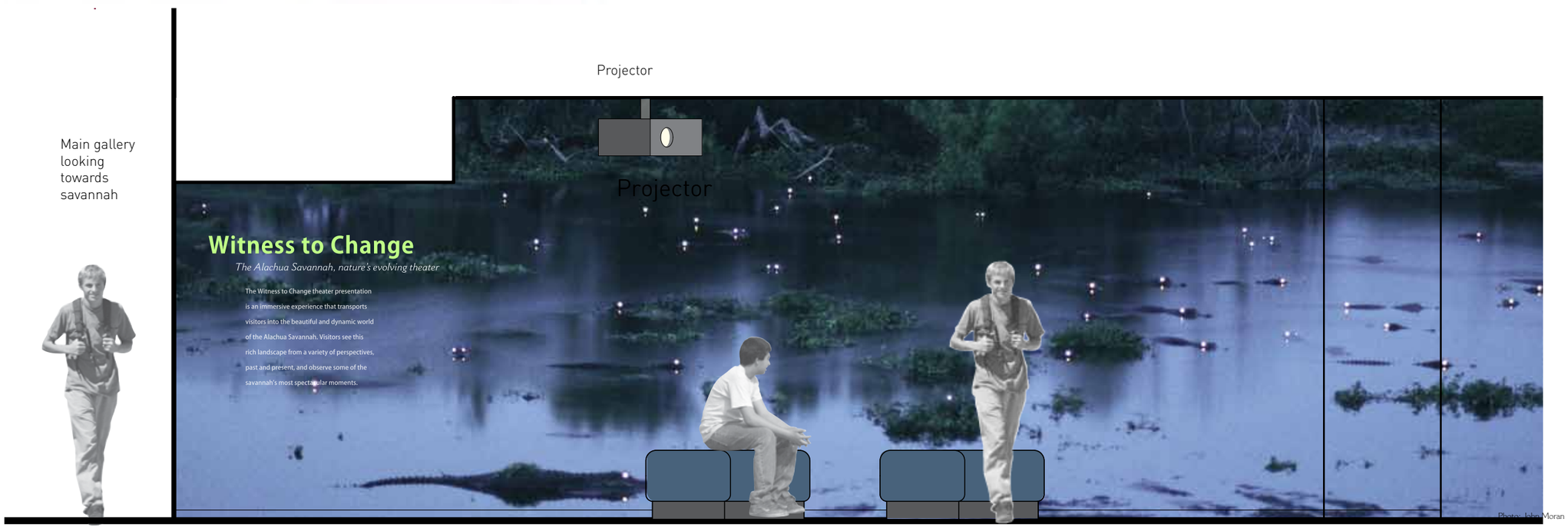
Audio: Captions will be provided either as visitor selected or permanent.

Visual: An audio program will be considered to describe the program if required.



Theater Bench

Seating options are modular with several units providing backrests and arm rests to provide ease of egress.



Area 4.0

Witness to Change

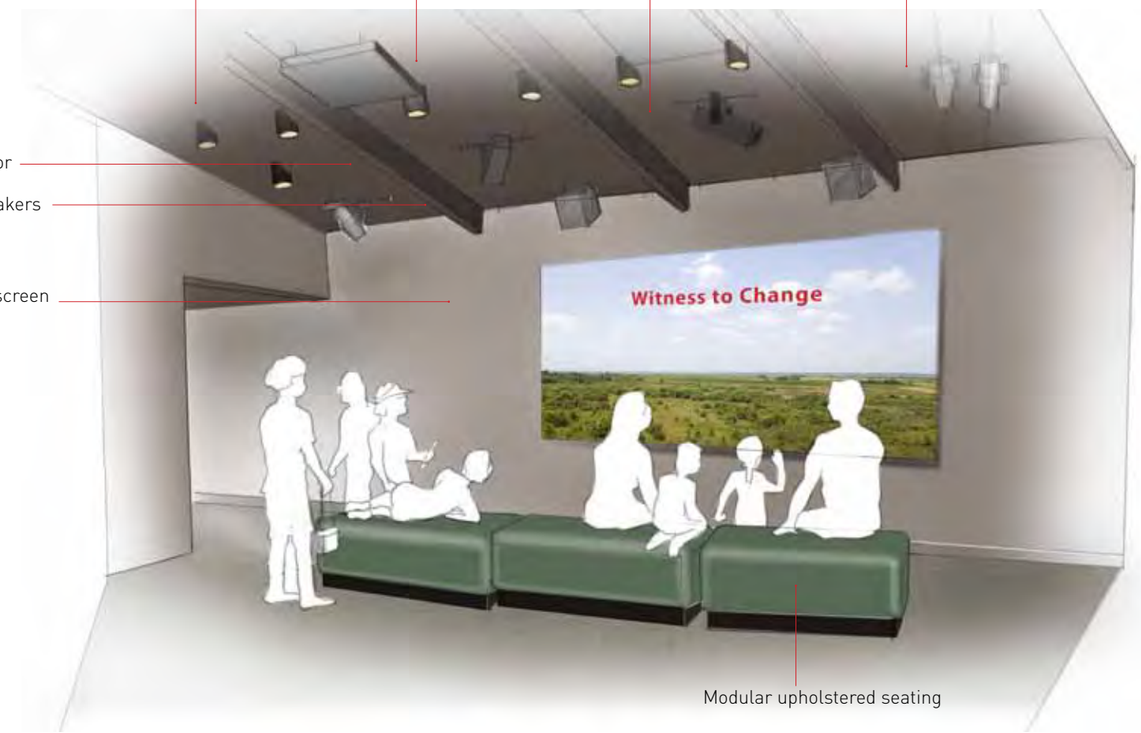
As visitors approach the exhibition hall, they are immediately drawn to the orientation theater by a mural marquee that announces the program: "Witness to Change." Once inside the theater, the program starts automatically.

This theater presentation is an immersive experience that transports visitors into the beautiful and dynamic world of Paynes Prairie. Visitors see this rich landscape from a variety of perspectives—past and present— and observe some of the prairie's most spectacular moments. From the extreme conditions brought about by sudden weather and fire events, to the more gradual but equally transformative seasonal shifts, visitors observe that change is the one true constant on the prairie.

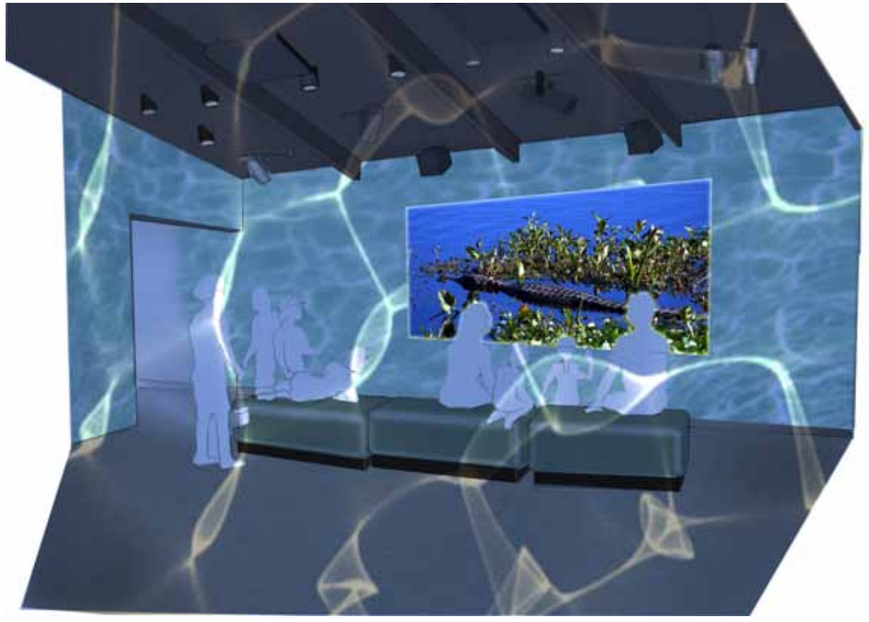
Powerful visuals, time-lapse transitions, and show-controlled theater effects take visitors on a journey through space and time. A day in the life of this unique landscape stretches out to show not only hourly changes but also seasonal transformations. The story expands further still as our narrator and various voices from the past interact to describe important moments from the area's rich history.

Along the way, visitors see and learn how plants and animals respond to changes on the prairie, how they have adapted to survive its sometimes extreme conditions, and how these conditions maintain species diversity. They see too how humans have been affected by and how they have used and influenced the prairie's natural patterns and cycles. These influences continue today as land managers work to restore the natural conditions that existed when some of the prairie's first inhabitants lived here.

Assisted listening device

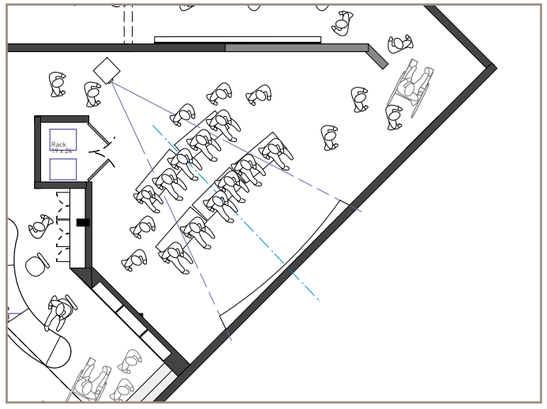


Theater show during water effects segment

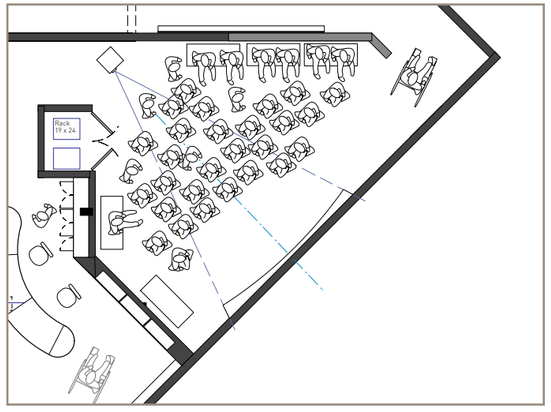


Seating configurations

Seating for typical audience size, 10 - 16 people



Seating for school group with seating pushed to perimeter, 40 people



Photos: Dominick Martino

Area 4.0

Theater Treatment

Key Themes

- The role that water plays in shaping the landscape, sustaining life, and regenerating growth.
- The regenerative role that fire plays in ecological succession.
- The influence humans have had on water, fire, and other environmental factors.
- The similarities and differences between the prairie's past and current conditions.

Sequence and Approach

Theater Entrance

Vivid images and ambient audio of the prairie and marsh in late afternoon set the stage for the Witness to Change theater presentation. Photographs show a variety of different types of animals that are typically active during this time of day, including such creatures as wading birds, dragonflies, alligators, snakes, tortoises, fox, and deer. The images and audio tracks paint a picture of the prairie at one of its most beautiful times of day, and suggest that afternoon is a time of increasing, rather than decreasing, activity for the creatures that live here.

The Story Begins

The theater presentation opens with footage of a variety of animals in various habitats around Paynes Prairie. A wading bird searches for its last few meals of the day, alligators move into shallow water, a deer steps cautiously out of dense cover, migratory birds gather in great flocks overhead, and a gopher tortoise emerges from its burrow. In addition to descriptive narration, a voice from the past—perhaps William Bartram or an early settler of the area—describes the abundance of wildlife on the prairie at that time.

> Sample quote from William Bartram, 1774: *The extensive Alachua Savanna is a level, green plain… fifty miles in circumference, and scarcely a tree or bush of any kind to be seen upon it…. Herds of sprightly deer, squadrons of the beautiful, fleet Seminole horse, flocks of turkeys, civilized communities of the sonorous, watchful crane, mixed together, appearing happy and contented in their enjoyment of peace….*

Audio/visual theater effects

- Ambient sounds of creatures pictured on screen, as well as those that remain out of sight.

Thunderstorm

Just as the creatures of Paynes Prairie begin to settle into their late afternoon routines, the peaceful hum of activity is interrupted by a fast-approaching thunderstorm. Initially, the audience sees only billowing clouds and distant lightning strikes on screen, as well as subtle flashes from show-controlled lighting that brighten the otherwise darkening afternoon sky. Soon, the rumble of distant thunder surrounds the theater. Time-lapse footage and an intensification of the show-controlled lighting and audio effects quickly bring the full force of the storm into the theater space. Flashes of light surround the audience now, as does the roar of driving rain and sudden cracks of thunder. Then, as quickly as the storm descended upon the audience, it moves on. The flashes of light become less intense as more time passes between each flash and the thunder that follows. The rain too begins to subside just as the sun dips below the horizon and night falls on the prairie.

Audio/visual theater effects

- Ambient sounds of insects, birds, and other animals calling before and after the thunderstorm.
- The rumble of approaching thunder that quickly intensifies until it fills the theater before finally moving off into the distance.
- Flashes of light that brighten the darkening afternoon sky, and that become more intense as the storm approaches and less intense as the storm retreats.
- Ambient sounds of dripping, trickling, and rushing water as the storm subsides.

Nighttime

As night falls, the din of the thunderstorm is replaced by the sounds of moving water and active creatures. Although our surroundings are now enveloped in darkness, it's clear that the prairie and marsh are as alive as ever. Visitors hear insects and frogs singing, owls calling, and unknown creatures splashing in the shallows. They also see the shadowy figures and shining eyes of animals moving through the darkness. Narration describes the wide range of plants and animals that call this diverse ecosystem home and explains that they are all adapted in their own way to this sometimes extreme and ever-changing environment. Narration goes on to explain that much of the species diversity found at Paynes Prairie is, in fact, a result of the extreme conditions organisms endure here.

Audio/visual theater effects:

- As the storm retreats, the deep orange sky is replaced by complete darkness.
- Ambient sounds of creatures that are active at night on the prairie.
- Continuation of the sounds of moving water.

Dawn

The first dawn light arrives to reveal a flooded landscape. The thunderstorm has passed but water can now be seen running off into larger and larger temporary surface streams. Following this flow of water, we eventually arrive at Alachua Sink at dawn. Here the audience is treated to the sights and sounds of one of the most beautiful locations at Paynes Prairie at one of its busiest times of day. Narration describes the significance of this body of water to the many plants and animals that live here—as well as to the humans who have lived on the prairie throughout history. Voices from the past describe their perspectives on Alachua Sink and what role it played in their lives and livelihoods.

Sample quote from William Bartram, 1774: *The season being uncommonly wet, almost daily showers of rain and frequently attended with tremendous thunder, rendered traveling disagreeable, toilsome, and hazardous, through an uninhabited wilderness, abounding with rivers and brooks.*

Audio/visual theater effects

- The night sky is slowly replaced by a deep orange glow, then a gradual brightening of the morning sky.
- Ambient sounds of creatures that are active at dawn on the prairie.
- Continuation of the sounds of moving water.

Ebb and Flow

Contemporary and historical footage and images show that Alachua Sink has not always been as it appears today. Narration explains that the water level in the basin has fluctuated considerably due to variations in rainfall, rising and falling groundwater levels, as well as the rate of flow through the sink. Notable periods of flooding have lasted from a few weeks to as many as 20 years. Voices from the past describe life on the prairie during wet and dry periods, including one of the wettest—between 1871 and 1891—when Alachua Sink expanded to become a 16,000-acre lake that supported its own small transport shipping industry. Show controlled effects help to bring these stories to life with patterns of light and audio tracks that suggest the flow and undulation of water around the theatre space. Narration goes on to describe the effects that human activities—namely the creation of canals and dikes—have had on the flow of water in the basin. A voice from a hydrologist explains what measures have been taken recently at Paynes Prairie to try to recreate the natural ebb and flow of water in and around Alachua Sink.

Audio/visual theater effects

- Ambient sounds of the flow of water, as well as boating and other water activities to bring to life some of the historical imagery.
- Lighting effects that suggest the undulation and flow of water.

Extreme Drought

A time-lapse transition quickly transforms the prairie from wet season to dry season as the sun rises high overhead. Show-controlled effects intensify the on-screen visuals with audio tracks that include a chorus of cicadas and other insects, and lighting that suggests the brightness of a midsummer day. As we begin to explore this transformed landscape, the importance of water—and its absence—becomes clear. An environment that earlier seemed lush and full of life, suddenly appears far less hospitable. And yet, as the narrator explains, many of the plants and animals that live here are well adapted to these extreme conditions. Physical and/or behavioral adaptations enable them to survive, even thrive, through long periods of drought. What's more, the diversity within populations of plants and animals is what enables species to survive the wide range of environmental conditions that occur on Paynes Prairie. Human settlers and the animals they introduced to this area have not necessarily managed so well. As voices from the past and narration explain, dry periods on the prairie have, at times, taken a heavy toll on human residents and their livestock.

Audio/visual theater effects

- Bright lighting to reflect the intensity of the midday sun on the prairie.
- Ambient sounds of insects and other creatures that are typically active during hot summer days.

Fire

A storm cloud can be seen in the distance in an otherwise cloudless midsummer afternoon sky. As the sun dips toward the horizon, lightning can be seen coming from the cloud and faint rumbles of thunder can be heard in the distance. In the foreground, a dead tree is smoldering, having been struck by lightning from the departing storm. Before long, the smoldering tree gives rise to a low-intensity ground fire burning at the prairie's edge and into a pine forest. Show-controlled lighting effects cast an orange glow over the theater and ambient audio provides the soundtrack. As night falls, the bright glow of the leading edge of the fire can be seen burning slowly along the ground, consuming underbrush but not extending into the tree branches. While narration and other voices explain the natural, necessary, and regenerative role that fire plays in this ecosystem, footage and still images illustrate these points. They also show how humans have used fire to transform the environment and how land managers today use prescribed burns to try to mimic natural fire patterns in this unique ecosystem. Finally, the fire, which started at the beginning of the scene, having burned well into the night, fades, then smolders, then goes out.

Audio/visual theater effects

- Distant flashes of lightning light up the dimming late-afternoon sky.
- A warm glow from the fire continues well into the night and subsides just before the first signs of dawn.
- Ambient sounds of the crackling hum of a low-intensity fire fill the theater.

New Dawn

A new day begins with fog and drizzle. The light rain and mist fall on recently burned prairie, giving rise to new life. Pitcher plants and other fire-succession plants can be seen growing out of the charred earth. We can also see pine seedlings that have sprouted, their seeds having been released by the heat of fire. The light rain continues even as the morning sun begins to break through the fog. We see the flow of surface water, from tiny rivulets, to larger streams, and eventually into Alachua Sink or Prairie Creek. The morning light reveals a wide variety of plants and animals that have begun to emerge in response to wetter conditions: birds foraging for insects and constructing nests or feeding young, deer browsing on new leaves and grasses, insects gathering pollen from newly opened flowers.

Audio/visual theater effects

- The dawn sky brightens again but more subtly than on the previous morning due to the overcast conditions.
- Ambient sounds of light rain and the trickle of water slowly grow into the sounds of a steady but calm flow of water.

Conclusion

A brief conclusion re-emphasizes the importance of water and fire to this environment, and how both natural and human-influenced factors have affected the natural patterns and cycles of these two forces. Narration explains that it is the variations and combinations of these factors over time that give rise to the prairie's astounding diversity of plants and animals, as well as this ecosystem's ever-changing nature. It truly is never the same place twice.

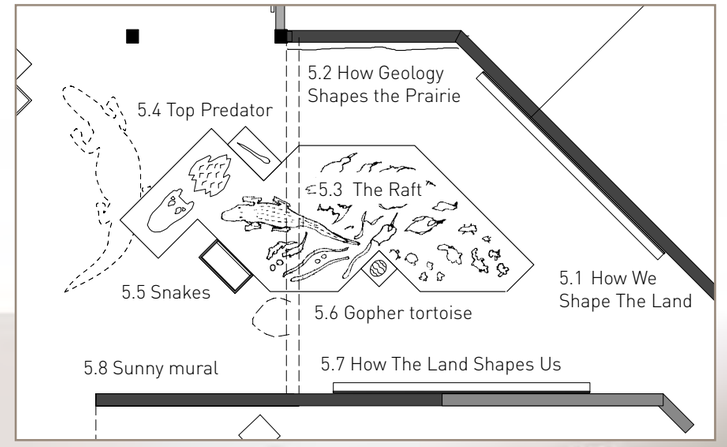
Audio/visual theater effects

- Ambient sounds of a variety of creatures making use of the reinvigorated prairie.
- Subtle ambient sounds of moving water continue.

Theater Exit

Images in the exit gallery and the continuation of sounds of rain and runoff reinforce the importance of water to life in this ecosystem.

Area 5.0 Living With Change



5.8 How the Land Shapes Us

Artifacts and graphics convey the 300 generations of human interaction with the prairie, and the impact of the environment on humans.

Shallow wall case 16' x 4' x 6" with base; artifacts mounted to graphic back wall; conservation requirements to be determined.

New adjustable recessed lighting

Track segments over raft for ease of adjustability

5.1 How We Shape the Land

Artifacts and graphics show how we have affected the land, from past to present.

Interactive stations around perimeter of raft

GPS

Prescribed fire drip torch

5.3 The Raft

5.2 How Geology Shapes the Prairie

Full wall mural

Visitor exiting theater

Area 5.0

Living With Change

As visitors exit the theater, they enter "Living With Change." This area features wildlife, plants, and people of the prairie and tells the stories of their unique ways of making a living in an always changing environment.

Central to the space is a "raft" of animals and plants – a symbol of the Preserve; an island in urban Florida. Field notes run along the edge of the raft detailing the strategies that these organisms possess that allow them to live in such a demanding and active environment. Many raft residents are equipped with simple interactive elements that reveal their surprising strategies for survival. For example, visitors can:

- Touch the teeth of an alligator and note the strength of its jaw and body armor.
- Compare the heft of the shells of a gopher tortoise and a redbelly turtle and guess which one is best adapted to living with gators.
- Feel the bills of wading birds and learn which food they would choose from the diverse prairie buffet.

Exhibits on the walls surrounding this raft illustrate three stories of change:

5.2 How Geology Shapes the Prairie

A graphic "layer cake" shows the mysterious labyrinth that lies beneath the surface of the prairie. First an ancient reef that created limestone, then the flowing ancient sea (the aquifer), and finally the basin that formed from a series of coalescing sinkholes. Touchable features include limestone, chert, and other geological samples.

5.1 How We Shape the Land

The Spanish 'Hacienda de la Chua', clearing for agriculture; the building of railroads; the draining, ditching and cattle ranching; and finally protection, the rangers who steward the property with fire, flood, and other management. Representative artifacts such as steel tools recovered from the prairie and a ranger's drip torch will be included.

5.8 How the Land Shapes Us

A chronicle of the human story of life on the prairie: the Paleoindians and their stone technologies; the Seminoles and their chickee huts; the Cracker cowmen and their whips and spurs; and finally today's community and visitors. Representative artifacts such as ancient hunting tools, clothing and other personal possessions will be included.

Exhibit Specifications

5.1, 5.8: Shallow wall case 16' x 4' x 6" with base; artifacts mounted to graphic back wall; conservation requirements to be determined.

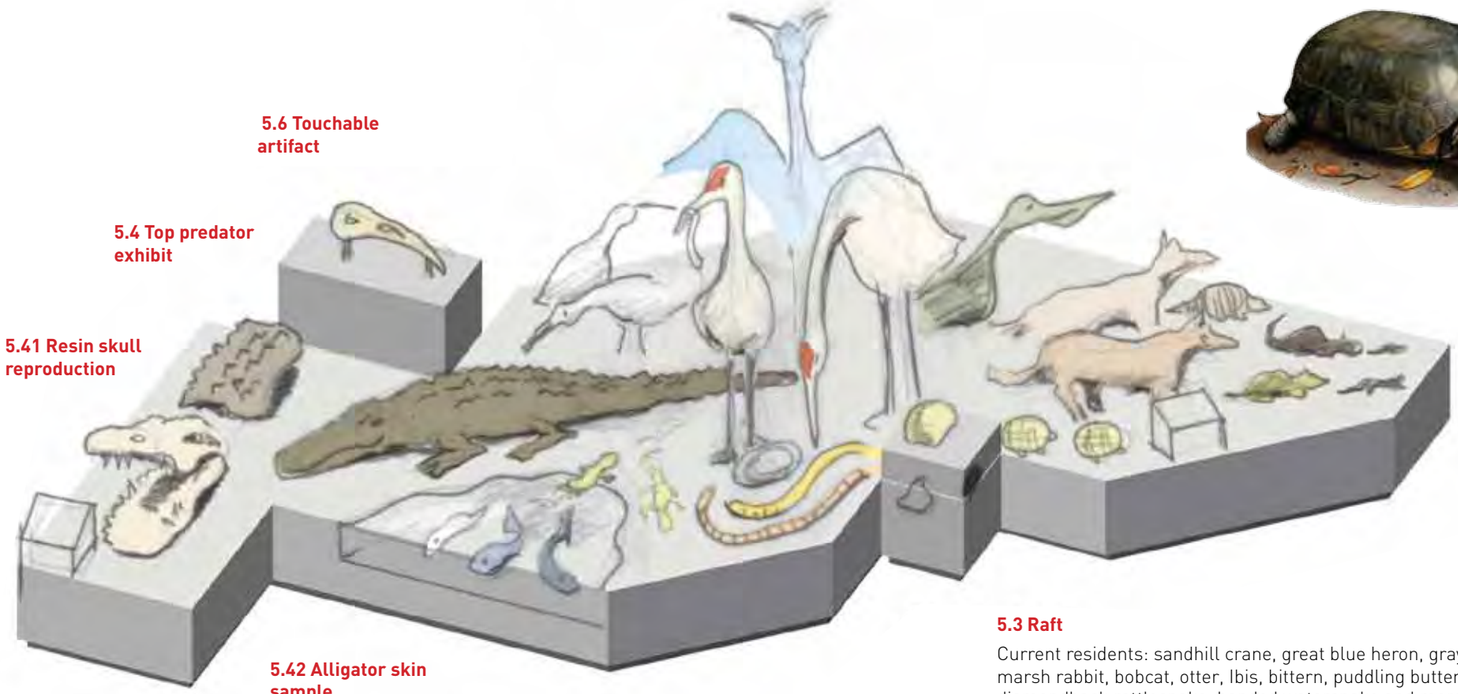
5.2: Full wall mural with at least one touchable chert sample embedded; several simple reveal type interactives; other dimensional elements may be included.

5.3 to 5.6: Low platform, sectionable for ease of installation and maintenance; barrier to be considered where appropriate; approx. 15 animals fabricated in a realistic manner; three perimeter touch "stations" revealing surprising strategies for animal and plant survival in an always changing landscape.

Accessibility

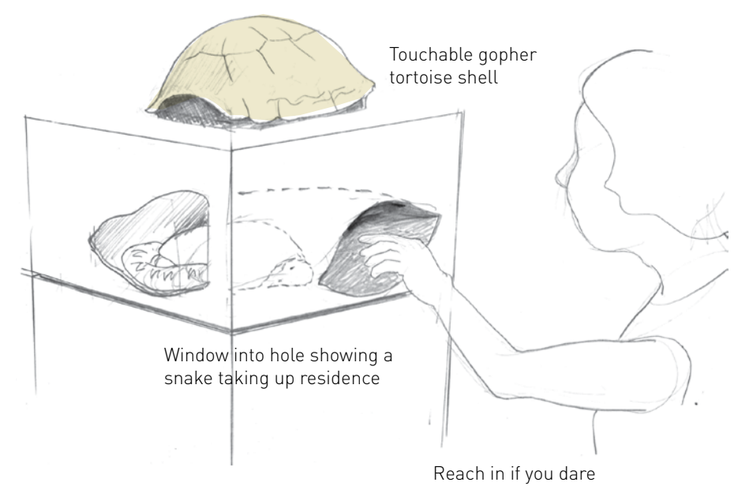
Spatial: large open area at theater exit; path on either side of raft is 4' - 3"; wall cases protrude 6" but have bases; platform is 15" high - animals will be touchable and visible to very young ages; touchable elements at 30" with some lower.

Textural: Adequate lighting and graphics contrast for all text and key images; possible sound recording of textural info.



5.3 Raft

Current residents: sandhill crane, great blue heron, gray fox, marsh rabbit, bobcat, otter, Ibis, bittern, puddling butterflies, diamondback rattlesnake, banded watersnake and more.



5.7 Gopher Tortoise

This is a typical touchable educational exhibit at the perimeter stations around the raft. This demonstrates the way other animals use the gopher tortoise's burrow.

Area 5.0 Living With Change

5.2 How Geology Shapes the Prairie

Combination of background diagram illustration with embedded touchables and question/answer sliders or flaps.

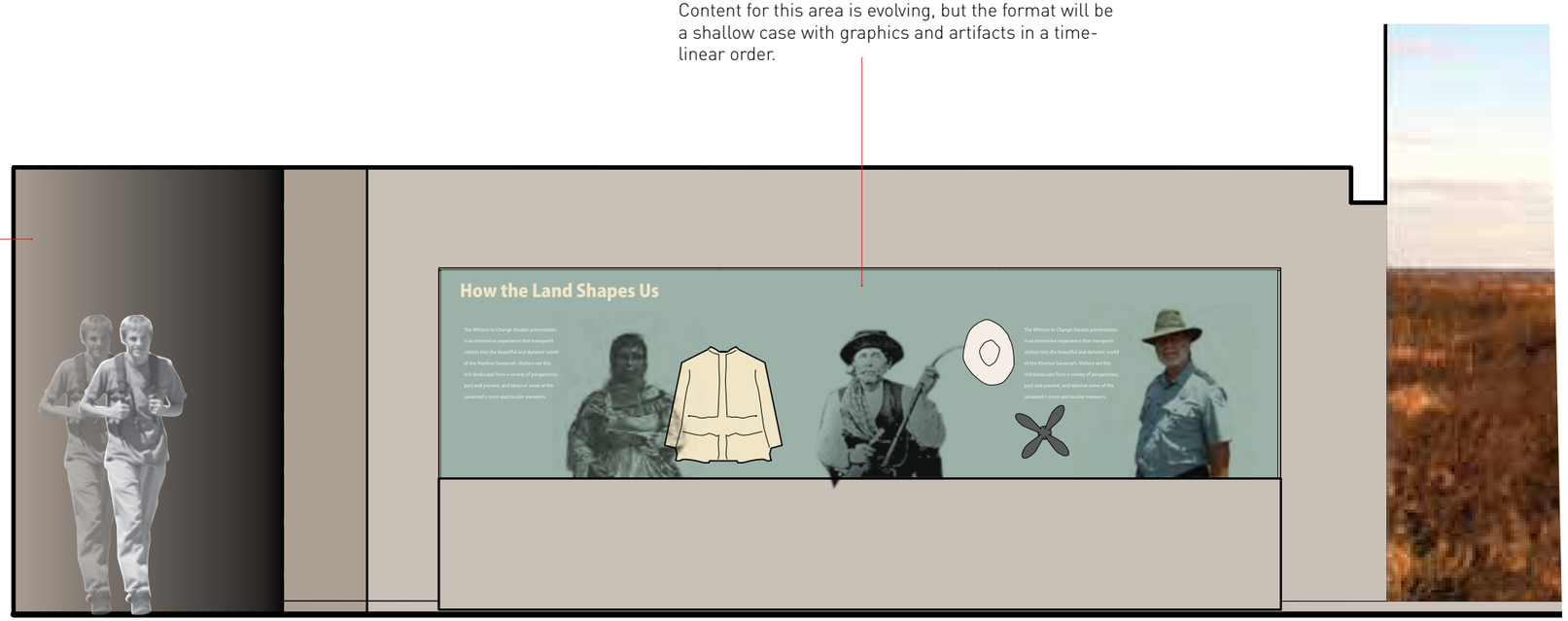
5.1 How We Shape the Land

Content for this area is evolving, but the format will be a shallow case with graphics and artifacts in a time-linear order.

5.8 How the Land Shapes Us

Content for this area is evolving, but the format will be a shallow case with graphics and artifacts in a time-linear order.

Theater exit



6.7 Tall Architectural Murals

Images depicting the spacious, wide-open expanse of the prairie will be painted or applied directly to wall. View is looking toward the front entrance from exhibit gallery.

6.2 Migration Sculpture

Simple casts of migrating cranes and other birds high overhead further celebrate the spaciousness of the prairie.

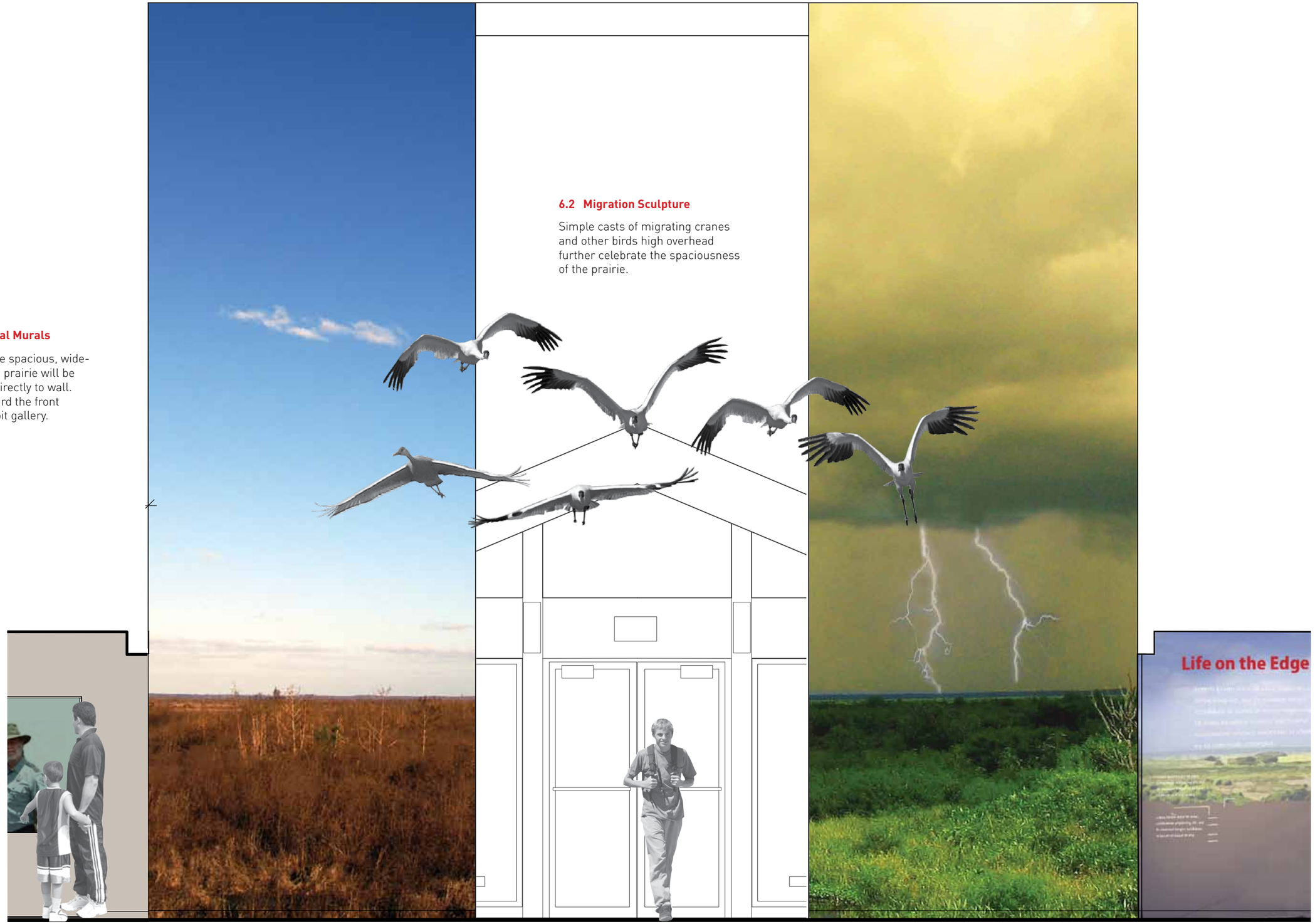
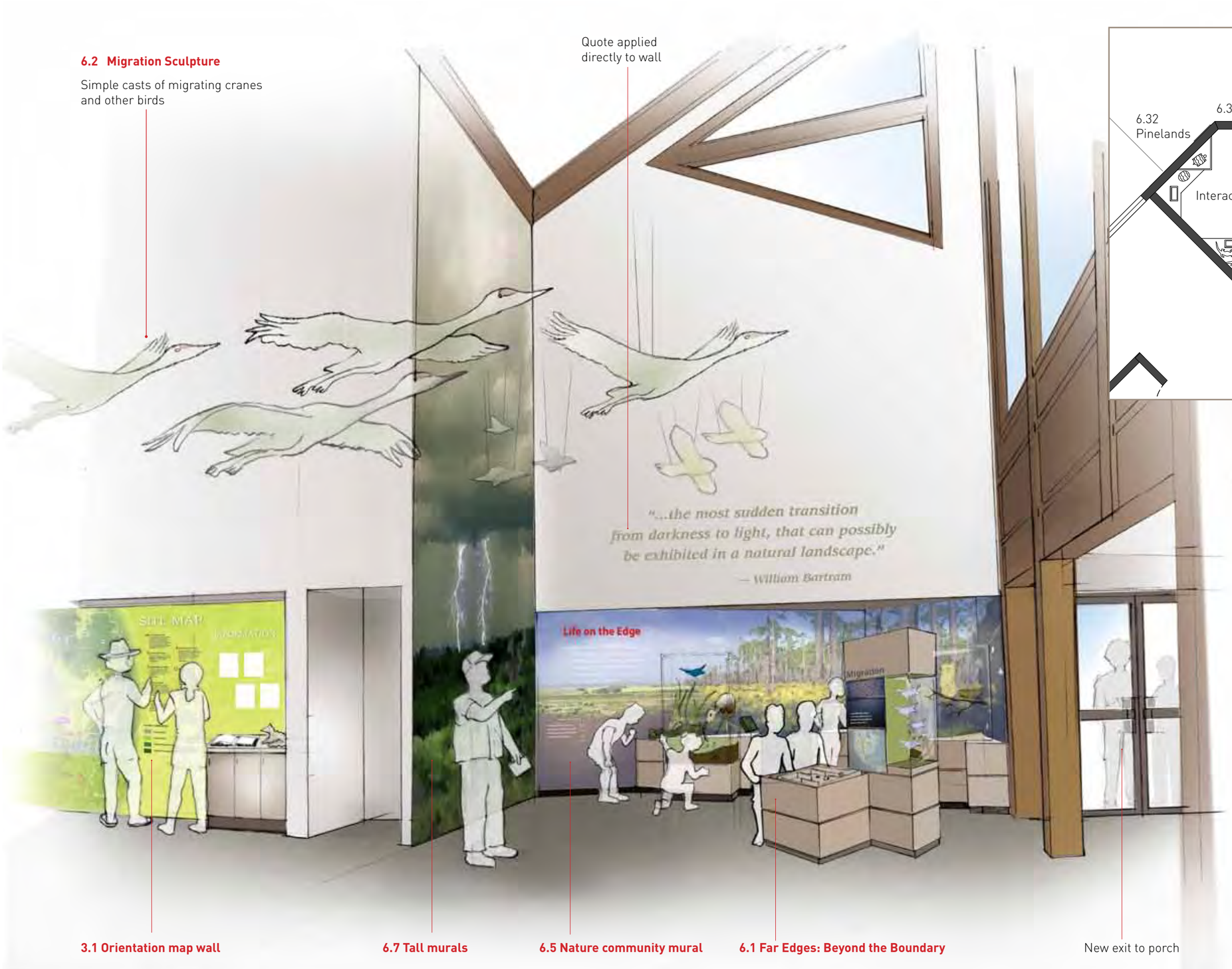
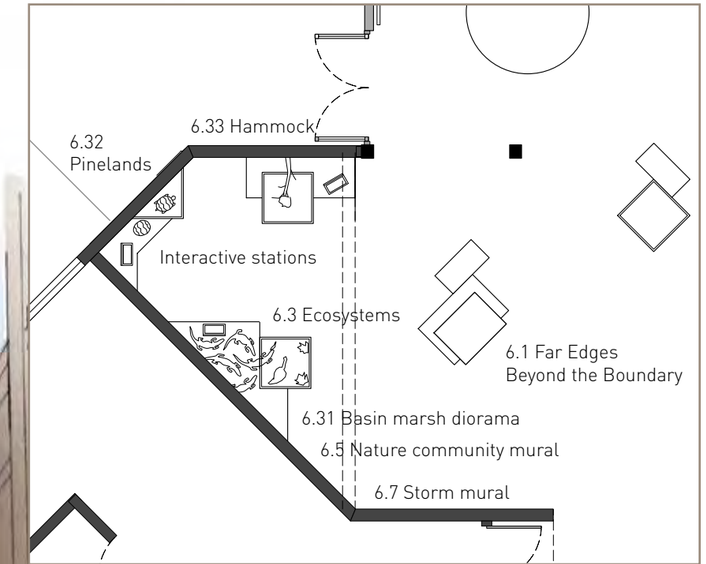


Photo: Jamie Sanford

Photo: Hank Conner

Area 6.0 Life on the Edge





Area 6.0

Life on the Edge

This area highlights the highly interactive edges within the Preserve where soils, moisture levels, and fire lead to distinct ecosystems. Featured will be basin marsh (wettest), live oak hammock (mesic), and pinelands (driest) from the mosaic of ecosystems that comprise Paynes Prairie.

Three detailed dioramas will illustrate the life specific to each habitat, posed in "stop action" animation. For example, in the pinelands diorama, we find a gopher tortoise munching sprouts that emerged after a fire, spiders coexisting with pitcher plants, and white, sandy soils textured with tracks of deer, turkey, and rattlesnakes. A large, simplified background mural helps us imagine from where each of these dioramas has been sampled, and how its edges transition into the next habitat type.

Far Edges: Beyond the Boundary is a free-standing exhibit cluster that reveals the connections that Paynes Prairie has to areas outside of the Preserve and even outside of the state of Florida. Much like a watershed, concepts such as the "sandhill crane-shed", "woodstork-shed", "monarch-shed", and exotic invaders will be explored and illustrated here. This area thematically connects to the migration sculpture overhead and the hydrology/watershed area 7.8.

Exhibit Specifications

6.1 Far Edges free-standing exhibit tower and case; stained wood structure; non-glare glass case with artifacts, mounts and labels; graphic panels laminated to faces.

6.3 Three case ecosystem dioramas; each shows soil cross-sections as well as animal and plants; one iPad touch-screen at each location (3 total) with digital image scroll software.

6.5 Habitat-type, wrap-around painted mural or direct wall graphic that highlights edge transitions, fire, and flood.

Accessibility

• Spatial: 60" diameter circle provided between all cases; diorama surface at 30" with lower areas starting at 17"; touch screen centers at 36".

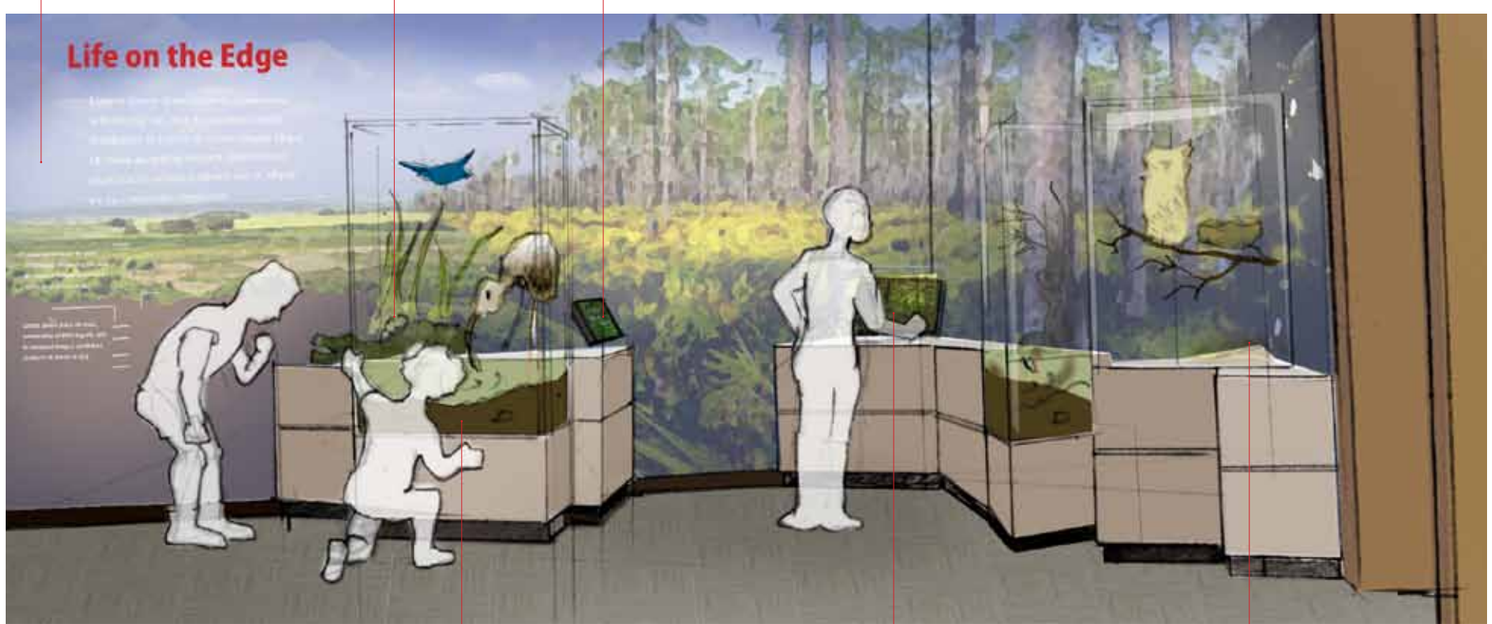
• Graphic Information: labels and wall text will be clearly illuminated and text will meet standards for contrast, if required audio description will be provided.

• Interactive Touch Screens: these will be very simple visual programs, text labels can be provided on screen, audio descriptions to sight impaired users can be provided.

6.5 Nature communities mural

6.31 Basin marsh diorama

6.41 Simple digital image interactive



Dioramas include below ground environments and soils that make it unique

6.4 Touchscreens - possible use of i-Pad technology

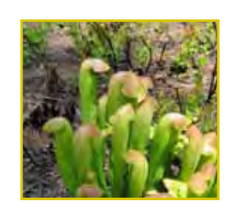
6.33 Hammock with owl

6.42 Pinelands & Fire interactive

A simple digital image interactive where a visitor slides through uninterrupted band of one nature community blending into another. Hot buttons allow visitor to enlarge details

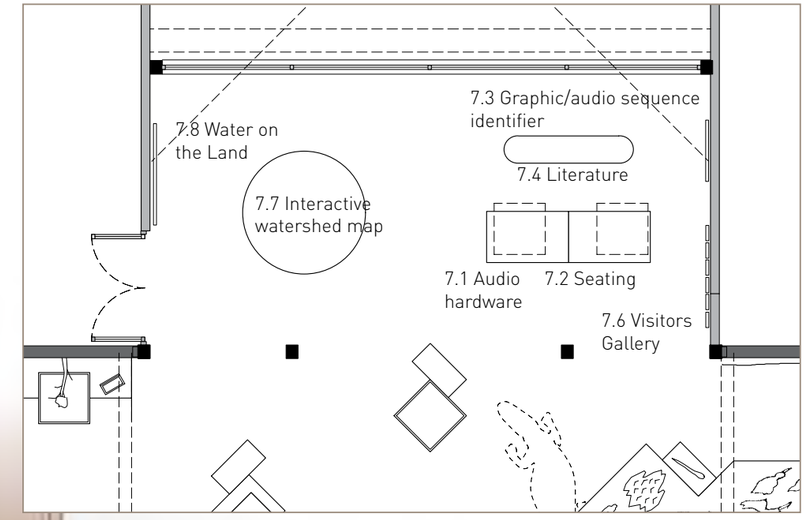
Typical ecosystem case with touchable artifact

Sketch concept for exhibit illustrating prescribed burns



Area 7.0

Alachuan Rhythms

A contemplative experience, Alachuan Rhythms takes visitors on an auditory and visual journey. The area includes a low, comfortable bench facing the expansive prairie view. Overhead, a suspended speaker delivers a soft soundtrack. Visitors can close their eyes and imagine the transition of the prairie as it plays. Tracks include a) "day in the life" with the sounds of animals over the course of the day as weather changes and day becomes night; b) the shifting seasonal soundscape of birds, frogs, and insects; and c) human life on the prairie – from native peoples to settlers to rangers. A low table provides picture books, descriptions of the audio piece, and identification materials that assist visitors in recognizing the sounds they hear. On the wall a changeable visitors gallery will feature recent rhythms captured by artists, photographers, or children's drawings.

Near the doorway that leads outside, a horizontal, topographic and interactive map depicts the prairie watershed with its rhythms of rainfall, water flowing into and across the wetlands, and the basin flooding and drying up. Wall graphics will expand on the rhythms of water at the prairie and its importance to plants, wildlife, the community and beyond.