# The Ridges Sanctuary Interpretive Master Plan

# RIDGES SANCTUARY

February, 2013

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February 22, 2013

# **Prepared By**

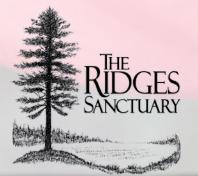
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# **Submitted To**

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Rustic boardwalks and trails define the identity of the original Range Light 40 sanctuary.

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The Ridges Sanctuary protects over 25 species of native orchids, like this Yellow Lady's Slipper.



From large mammals to small insects, many wildlife species call The Ridges home.

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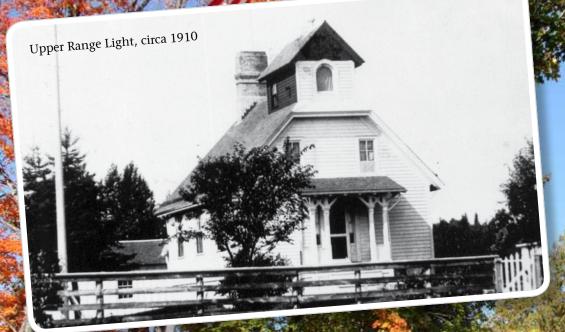
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The unique ridge and swale habitats support an impressive diversity of rare plants and animals in the Sanctuary.

# **Chapter 1: Introduction**



Chapter 1: Introduction

# A Wildflower Sanctuary on the Range Light 40

In 1935, the U.S. Congress passed a bill that would convey the 40 acres surrounding the Baileys Harbor Range Lights to Door County. The County Parks Commission was prepared to manage the property "for the good of the county." At that time, the County Board thought that a camping and recreational trailer park would best serve the community, and planning began for developing the area that was known as "The Baileys Harbor Bog." Under the guidance of Dr. Albert Fuller, local residents like Olivia Traven and Mrs. James McArdle formed a group to petition for the creation of a "flower sanctuary" rather than a campground.

Dr. Albert Fuller, Curator of Botany at the Milwaukee Public Museum, had visited the area many times since the 1920s, marveling at the diversity of plant life in the ridges and swales. As the author of the book *The Orchids of Wisconsin* in 1933, Fuller was in a unique position to appreciate the significance of this natural area. After helping to create Wisconsin's first private land trust at The Ridges, Fuller, along with Aldo Leopold and John Curtis, helped to create the State Board for the Preservation of Scientific Areas.

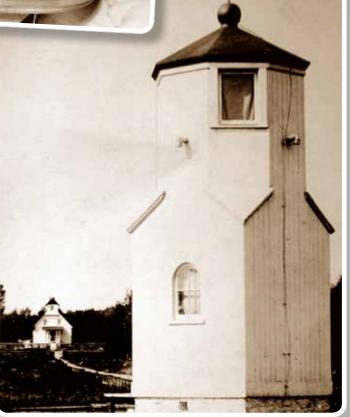
In a February 1937 letter to the Door County Advocate, Fuller stated,

It would be a sacrilege that the people of Door County would always regret if the ridges area at Baileys Harbor were permitted to be made into a *camp site, because campers and* rare plants are incompatible... Every civic-minded local resident of Door County should urge the County Park *Commission to set the 40 acres* aside as a permanent wild life *sanctuary* (emphasis added) and leave the trees, shrubs and all other vegetation in their natural condition."

The Ridges Sanctuary was born and grew because people in the Baileys Harbor community have loved and supported it.



Young Chester Cook *(left)* served as a driver and botanical assistant to a visually impaired Dr. Albert Fuller *(right)*, shown here in their botany trailer lab.



The Baileys Harbor Range Lights serve as symbols of safety and sanctuary for seafarers and contemporary visitors.

Fuller promoted the sanctuary concept in a very conscientious and organized campaign. His approach incorporated a variety of venues through the summer and fall of 1937 with slide talks, guided walks through the ridges, a dinner meeting with the Park Commission, and even an essay contest. He knew the need for local support. His vision was to develop the site into "a botanical garden traversed by a labyrinth of trails and rustic bridges...which will attract in years to come hundreds of thousands of people... if properly cared for and if the picking of flowers is strictly prohibited." Public access and education were always a significant aspect of the plan.

The "Range Light 40" was deeded to the Door County Parks Commission by the federal government on May 21, 1937.

Door County citizens joined the effort. On October 4, 1937, ten supporters signed articles of incorporation for the *"Ridges Sanctuary for Plant and Animal Life, Incorporated."* The Parks Commission supported this concept and granted custodianship to the organization. The purposes of the corporation were:

1. To acquire by gift, purchase or otherwise, part or all of the real estate in the area in the town of Baileys Harbor, Wisconsin known as "The Ridges" or "The Bog" and to protect the native plant and animal life on the same and to preserve the same in its natural or aboriginal state; to erect fences, place signs, and make other improvements necessary to protect the property of or deemed desirable to advance the purposes of the corporation.

- 2. To acquire and hold other pieces of real estate in Wisconsin and elsewhere, and to protect and preserve the native plant and animal life found thereon.
- 3. To carry on educational and scientific activities which will promote the cause of conservation and preservation of wild plant and animal life and natural scenery, and to use and transfer its moneys and properties for these purposes.

One of the signatories, Jens Jensen, a nationally renowned landscape architect and founder of The Clearing, embraced Albert Fuller's idea that this should be a sanctuary rather than a park or museum: "A sanctuary would give a feeling of sacred soil." He and Fuller determined that 1,000 acres would be needed to preserve the site. A 1,000 acre preserve became a Ridges goal. The following signed the articles of incorporation for the "Ridges Sanctuary for Plant and Animal Life Incorporated" on October 4th, 1937:

Jens Jensen Frank Oldenburg John Matter Emma Toft Mrs. James J. McArdle William E. Sieker Mrs. W. C. Sieker Mertha Fulkerson Olivia Traven A.B. (Arthur Burchard) Gochenour



Jens Jensen believed that designating The Ridges as a sanctuary would give it a "feeling of sacred soil."

# **The Sanctuary Grows**

The founders immediately began work to acquire land through donation or purchase. Partnerships with conservation groups aided greatly in this effort. In 1987, The Ridges 50th year, the goal of a 1,000 acre sanctuary was achieved. It has since grown beyond that goal to 1,600 acres. The original "Range Light 40" remains to this day as a lease with the Door County Parks Commission.

From the beginning, education was viewed as critical to the mission of The Ridges. Public support was essential if the plants and animals were to be valued and protected. To this end, school programs, lecture series and public tours of the Sanctuary were initiated. Volunteers constructed and maintained trails and boardwalks that opened The Ridges for public enjoyment. A printed trail guide that corresponded to numbered trail markers was created in 1962. To this day, Ridges staff and volunteers offer diverse programs and tours for children, families, and adults.

The Ridges was an all-volunteer organization until the early 1960s. Founders Emma Toft, Olivia Traven and others served in leadership roles and in the day-to-day operations. Olivia Traven would often answer a knock on her door to lead trail walks through The Ridges. She was the Sanctuary's first volunteer naturalist. A significant decision was reached by the Board of Directors in 1964 to hire a summer naturalist.

Thus began a long relationship with Roy Lukes who eventually assumed the full-time position of Manager/ Naturalist of The Ridges. Under his leadership, additional staff was hired and two historic log cabins were reassembled on site. Membership grew to more than 3,000 by 1990. Research studies of The Ridges were initiated with the knowledge applied to better management of the Sanctuary. Since 1990, Directors Paul Regnier, Steve Leonard, and The Ridges staff and members have expanded on the foundation initiated by Roy Lukes.

# **The Vision Grows**

The formation of The Ridges Sanctuary in 1937 was a groundbreaking event that established a way for citizens to protect wild lands. It served as the model for the development of a statewide system of Scientific Areas that was championed by Albert Fuller, Aldo Leopold, John Curtis, and Norman Fassett. Created in 1951, the Wisconsin State Natural Areas Program was the first state-sponsored program of its type in the United States.



Roy Lukes and Emma Toft at the Upper Range Light. Roy, the first Ridges employee, became a passionate member of the core group that led The Ridges through a critical period of growth.

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1: Introduction

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# The Need for this Plan

In 2006, a strategic planning process was initiated that would set the direction of The Ridges Sanctuary for the years leading to its 75th anniversary in 2012. The plan titled "Pathways to Success, 2008-2012 Strategic Plan" was adopted by the Board of Directors in December 2007. It established goals, strategies, and outcomes for all aspects of stewardship, education, and management of The Ridges.

The education section specified the need for an Interpretive Master Plan as one of its "five-year outcomes": *An interpretive master plan, balancing land protection with visitor use of trails, education sites and appropriate self-guided media (displays, trail signs, brochures, and a website).* 

The Board identified three **strategies** as key components of this Interpretive Master Plan:

- 1. Establish The Ridges as a resource for members, residents, visitors and community leaders on environmental information and training related to The Ridges, Door County, the Niagara Escarpment and the Great Lakes Basin.
- 2. Provide adequate facilities and trails for individuals or small groups to enjoy the scenic beauty of The Ridges and Logan Creek.

3. Use appropriate self-guided media (brochures, displays, trail signs, website and other media) to educate visitors about The Ridges and its embodiment of Door County's natural heritage.

Following the approval of the strategic plan, the Board of Directors determined that a new facility was needed "to support our programs, tell our unique story and expand our stewardship mission." A board resolution in March, 2010 established a building committee to guide this process. Boldt Construction of Appleton was contracted to work with the committee to evaluate potential building sites and eventually to develop plans for a LEED certified facility. An essential first step in this process is the completion of this Interpretive Master Plan, which provides a comprehensive framework for development.

On July 12, 2010, The Ridges Sanctuary, Inc. entered into an agreement with Schmeeckle Reserve Interpreters of the University of Wisconsin-Stevens Point to assist in the development of the Interpretive Master Plan for The Ridges Sanctuary. The consulting agreement identified four tasks:

1. Provide direction for the development of interpretive facilities, media and programs.

- 2. Document the entire planning process for future stakeholders: visioning, audience, resources, themes/messages, site/facility design, programs, and media concepts.
- 3. Develop a document to serve as a fundraising tool for potential donors with each program/media concept illustrated and supported with rationale.
- 4. Serve as a conceptual architectural/ exhibit guide for the design/ fabrication phase.



# **The Planning Process**

Interpretation is defined as a communication process that guides visitors in their search for meanings in objects, places, and landscapes. We adhere to the philosophy that interpretive planning is a process of consensus development—of achieving a shared perspective by all stakeholders of why interpretation is needed, who it will serve, and what significant stories it will tell. Effective planning answers the following questions, which can be illustrated by the Planning Triangle:

#### Why?

Confirm and/or further define the vision and goals of The Ridges Sanctuary for developing an interpretive master plan.

Chapter 2: Vision for Program and Facility Development

#### What?

What?

Resources

Examine the significant tangible resources of the site and describe their intangible meanings. Then, distill these tangibles and intangibles into unifying themes and messages that will serve as a framework for development and programing.

Chapter 4: Resources, Themes and Messages

### Who?

Determine who the visitors are (or will be) and the experiences they are (or will potentially be) seeking. This inherently includes the identification of activities and visitor groups that should not be using the Sanctuary.

Chapter 3: The Audience – Present and Future

Where? When? How?

Who?

Audience

Based on the why, who, and what, a plan will be developed for interpretive facilities, media, and programs that best facilitate visitor/resource connections within the parameters of the mission and vision of The Ridges Sanctuary.

ISSION

INTE

Where? When? How?

Interpretive

Master

Plan

Chapter 5: Interpretive Facility and Site Development

Chapter 6: Interpretive Media

# Chapter 2: Vision for Program and Facility Development

NATURE CENTE

A historic cabin currently serves as The Ridges Nature Center and contributes to a "sense of place" for visitors. September 2010

Chapter 2: Vísíon for Program and Facility Development

# **Strategic Plan Vision Statements**

The "Pathways to Success, 2008-2012 Strategic Plan," as adopted by the Board of Directors in December 2007, established the vision and values of The Ridges Sanctuary. These statements guide the development of programs and facilities at The Ridges Sanctuary:

#### The Ridges Vision

The Ridges Sanctuary, Inc. will be the Center for Environmental Stewardship, an organization that believes in:

#### Land Protection:

Protecting its land through acquisition and stewardship, and providing opportunities for people to enjoy the land forever;

#### **Education & Outreach:**

Encouraging stewardship throughout Door County, by becoming an education and information resource partner for members, residents, visitors, municipalities, businesses and institutions;

#### **Research:**

Serving as a regional, national and international destination for research on The Ridges' and Door County's landscapes, ecosystems and individual species.

#### **The Ridges Values**

The Ridges Sanctuary, Inc. will follow these guiding beliefs and principles as we move forward with our mission and vision.

- Our land is a sanctuary protecting the diversity of flora and fauna and the unique geological formations for untold generations.
- We take pride in our cultural history – sharing the stories of our successes so others may be inspired to act as stewards.
- It's a place for everyone a quiet refuge for individuals and families, to foster a sense of appreciation and wonder towards nature.



The Ridges were preserved in perpetuity in 1937 as a Nature Sanctuary.

- We are committed to preserving the personal connection to The Ridges' organization – identification with the land and closeness and friendliness between staff, members, volunteers, donors, Door County residents and all other Ridges' constituents.
- We are committed to maintaining the public trust - acting in a professional and fiscally responsible manner.

Chapter 2: Vision for Program and Facility Development

# July 2010 Visioning Meeting

Prior to this visioning session, Boldt Construction had been contracted to conduct site analysis on four potential building sites to be considered for a new interpretive facility. They presented their findings at an April 22, 2010 Ridges Building Committee Meeting. After discussion, the site deemed most appropriate was the Sandpiper Restaurant location. The selection was based on many considerations, but a significant factor involved the opportunity that it presented to create a more accessible public image to visitors and to interface with the Baileys Harbor community. Although The Ridges had not, as yet, purchased the property, much of the visioning session discussion was tempered by the anticipation that the facility would be constructed at this site.

The purpose of this visioning session was to gather a broad base of input from stakeholders of The Ridges about the direction of planning for the new interpretive/education facility. Schmeeckle Reserve Interpreters conducted a nominal group process posing a series of driving questions to 20 board members, staff, and stakeholders of the sanctuary. The full results of this session are included in Appendix 1.



Questions asked at the visioning meeting included:

- 1. What makes The Ridges **special**? How is it different from any other place?
- 2. Who are the **target audiences and potential audiences** of The Ridges Sanctuary?
- 3. What **activities** can a new facility help The Ridges to achieve? What activities are **not appropriate** to the new facility?
- 4. What are the important and unique stories that should be told at The Ridges?

The "target audiences" responses are included in Chapter 3. The "significant stories" responses are included in Chapter 4. Twenty key stakeholders shared their collective wisdom regarding a new Ridges facility in July 2010.

# **Follow-Up Interviews**

Schmeeckle Reserve Interpreters followed up this visioning process by conducting individual interviews to clarify and expand on the vision for new facilities at The Ridges Sanctuary. These one-on-one interviews allowed individuals to share more personal opinions and suggestions than in a public forum. It also permitted interviewers to pursue details and rationale regarding their opinions and suggestions.

# **Vision Statements**

The following is a summary of the vision for program and facility development. The bullet points were derived from the visioning process and from follow-up interviews.

### **Vision Statement 1**

The new facilities will increase visibility for The Ridges Sanctuary and provide improved access for the community and for Door County visitors.

- The purchase of the Sandpiper Restaurant and redevelopment of the site into a year-round welcome center and trailhead will greatly increase the visibility and enhance the perception of The Ridges Sanctuary to the community and Door County visitors.
- The new facility will centralize key education services in one hub. The Sandpiper site will improve wayfinding to The Ridges and reduce access from Ridges Road and Highway Q.
- This facility will help increase membership and donors who will see The Ridges as a prominent community institution that contributes to their sense of place and quality of life in Door County.



The former Sandpiper Restaurant site offers a dramatic public entry to The Ridges and an interface with the Baileys Harbor community.



This site interfaces with downtown Baileys Harbor but also buffers the historic nature sanctuary while serving as a public gateway.

- The location on Highway 57 was recently designated as part of the 66 mile "Door County Coastal Byway," a Wisconsin Scenic Byway. This makes it a prime location for travelers.
- The center should encourage outdoor visits by utilizing the area adjacent to the Sandpiper to create a gateway trail loop. This will limit impacts of increased visitation to the area of the Sanctuary between the Sandpiper and range light boardwalk. The area is already channelized and degraded by former livestock grazing, but lends

itself to development as a quality family-oriented Ridges experience. This loop would connect to the existing trail system for those who wish an in-depth experience.

- The new facility should strive to be a "beacon for environmental stewardship." The Ridges website should be used to communicate to the state, region and beyond.
- This facility should <u>not</u> be so commercial and inviting that it attracts people for reasons other than to experience and explore The Ridges.

#### **Vision Statement 2**

The new facilities should provide interpretive media and programs with a focus on natural history (geology, plants, animals), human history (founding The Ridges, maritime), and sustainability practices that engender a "sense of place."



Media and programs must focus on site-specific concepts and significant stories featuring the Sanctuary.

- Interpretive media (inside and outside) should provide for media/ visitor interaction. The most important purpose is to tell the story of The Ridges—to capture what The Ridges means and the unique spirit of the sanctuary. Media should capitalize on the serenity of the sanctuary. The grassroots birth of this nature preserve is an inspiration.
- The Ridges story should be an example that shows a regional geological/ecological view of the Niagara escarpment, its plant and animal communities, and a conservation message for their protection and preservation. Media should show the whole picture-"Portal to the Peninsula", especially the Door County Coastal Byway.
- The range lights should be interpreted at those structures. Many people are seeking the maritime legacy and could become supporters of The Ridges Sanctuary.
- The center should provide missionrelated space, activities, and content for all ages, but it should not be a children's playroom with unrelated play.

### **Vision Statement 3**

The new facilities should provide adequate space to welcome and inform visitors, space for a nature store, and office, storage and work space for staff and volunteers.

- The new interpretive center should blend fixed-use areas with versatile space in order to maximize functionality for festivals, meetings, education groups, and dropin visitors. A space to view A/V productions should be included, but not a large auditorium with a stage; this is already available at the nearby Town Hall.
- Encourage the use of local restaurants and stores instead of providing food operations in the facility.
- The regional/scenic byway story should be told, but this should not be a public information center for recreation and tourist amenities.
- Researchers' needs should be met in a more appropriate facility instead of a public visitor center.
- Coordinate the use of existing structures such as the log cabins and Upper Range Light building in order to serve several audiences simultaneously.
- It should offer convenient restrooms.



#### **Vision Statement 4**

The new facilities should model sustainability and architecturally fit into the community and Door County.

- The new building should not be large and pretentious.
- Avoid formal landscaping. Incorporate outdoor space into the building design.
- The architecture should model Door County's character using materials such as limestone and log timbers. Perhaps it should reflect Door County's maritime heritage and/or northern European farm buildings and cabins.

- The architecture might be rustic to conform to the character of other Ridges buildings and flavor, but it should not contrast sharply with the Baileys Harbor commercial district.
- The architecture should use best practices for green architecture and achieve the highest practical LEED (Leadership in Energy and Environmental Design) rating.
- The architecture should be inspirational to home and business owners and should motivate them to try practical green technologies themselves.

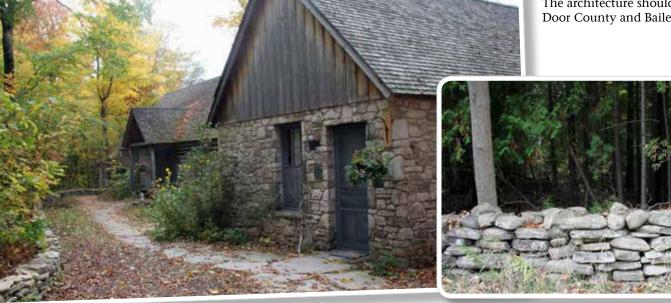
The design team should carefully consider or avoid "high tech" solutions that may have a very long pay-back period and instead concentrate on "passive" green design concepts that offer more cost effective benefits.



The architecture should harmonize with the Door County and Baileys Harbor buildings.

The building should be constructed of indigenous materials

like limestone.



The building should reflect the vernacular cabins and houses of the Peninsula.

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# **Chapter 3: The Audience**

2

Visitors participate in a wildflower hike led by Roy Lukes.

Chapter 3: The Audience

# Introduction

The Ridges Sanctuary was set aside as a protected reserve at a time when the nature study movement was gaining respect and flourishing in regions of the United States like the Midwest. Nature Study was a popular educational movement that attempted to combine scientific investigation with spiritual, personal experiences that came from interacting with the natural world. It is summed up best by the famous Harvard naturalist and educator, Louis Agassiz, when he coined the phrase, "study nature, not books."

The movement came at a time when society was concerned with the future of the next generation and to a great degree with nature conservation itself. It had impact on the developing philosophies of people like Aldo Leopold, Rachel Carson, and locally, on people like Professor Fred Schmeeckle, who promoted a conservation education curriculum at the Stevens Point Teachers College. Only a year before the founding of the Sanctuary, Wilhelmine LaBudde and others spearheaded a movement that resulted in Wisconsin passing a mandatory statewide conservation education curriculum. It is significant to remember that the nation was in the midst of the Dust Bowl and the Great Depression. Land was available at low rates and soil erosion and depletion of resources was a social and economic concern.

The Ridges was born into this social atmosphere. Scientific men like Dr. Albert Fuller were well aware and supportive of the Nature Study philosophy.

Women played a major role in the creation of The Ridges. Five of the ten Ridges Sanctuary founders were women. Although only granted the right to vote in 1920,

women's collective presence was felt throughout the country through organizations like The Garden Club of America, an important contributor to the Sanctuary. Olivia Traven and Anna McArdle were officers in the Baileys Harbor Women's Club when they garnered support for the founding of the Sanctuary. One of The Ridges founders, Jens Jensen, stated, "This group realizes the importance of this bit of untouched beauty...and are earnest in seeing that some of this is passed on, untouched to others."

Jensen held strong feelings for this becoming a sanctuary and not an ordinary park where "the hoi-polloi that has no respect" would abuse and trample the fragile environment. Jens shared the movement's belief that immersion in nature could elevate people spiritually and mentally. He felt that a sanctuary would give a feeling of "sacred soil ", that it would encourage



Jens Jensen speaking to a group at The Ridges in 1938.

people, "...walking amidst the wild forces to become bigger and stronger." The Ridges founders shared these common values—a respect for nature and the belief that people can learn and be spiritually uplifted by experiencing wild communities. They believed that they had a responsibility to future generations and to the land.

These common values have defined the parameters for visitor use and for marketing to potential audiences at The Ridges. The following quotes from focus groups and interviews are typical of many members' thoughts and confirm that many Ridges supporters still adhere to these beliefs:

- "A nature sanctuary is about being outside...keep it rustic."
- "It is about the unique natural features of the site: The ridges and swales and the specialized plants that grow here."
- "A building should only be a gateway to an outdoor experience."
- "The Ridges founders serve as our inspiration today."
- "The Ridges organization has stayed true to its mission."

Each season offers its own charm and experiences in The Ridges.

When The Ridges Sanctuary was officially incorporated, public education programs were offered to "... promote the cause of conservation and preservation of plant and animal life..." (1937 Articles of Incorporation). School programs, lecture series and public tours of the sanctuary were offered. Trails were developed, one with a trail guide, to enhance the experience of both members and tourists.



Named and promoted as a nature sanctuary, The Ridges has always welcomed visitors. However, over the years a misconception has developed among some people that the sanctuary is primarily a "private reserve" for members only. The entrances to the sanctuary and the Nature Center are somewhat hidden and not obvious to the casual tourist driving through Baileys Harbor on Highway 57. In addition, the graceful but understated sign at the official entry to The Ridges only states "Ridges Sanctuary" with no

public invitation to explore the site or to inquire further about use. The name "sanctuary" has a formal and sometimes protective connotation to many vacationers who probably require additional visual invitations in order to feel welcome.

Visitors today take shorter vacations than in the early decades of The Ridges existence when they might have taken more time to explore the area. Today they seek attractions that offer family entertainment or a quick stop. There are many more offerings in Door County to catch their attention and that appear to require less effort to sample. These factors have all contributed to declines in membership and tourist visitation.



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The careful development of a highly visible visitor center serving as a gateway to quality sanctuary experiences and as a connection to the community will help reverse this trend. This in turn will help The Ridges "to support our programs, tell our unique story and expand our stewardship mission" (2010 purpose statement for development of new facilities). In the July, 2010 visioning session, twenty key stakeholders of The Ridges Sanctuary responded to the question: "Who are the target audiences and potential audiences of The Ridges Sanctuary?" Forty-five distinct audiences were identified. This diverse and eclectic list can best be categorized into target groups according to how they relate to and use the sanctuary.

Follow-up interviews with many of the stakeholders, staff, and long-time members gave the planners insight into historic user groups and proposed target audiences. Meeting the needs of each target group must be addressed when planning and designing facilities, media and programs.

# **Target Groups**

### Target Group 1:

#### **Casual Tourists and Vacationers**

Door County has been named by *Money Magazine* as one of the top ten vacation destinations in North America. According to the Door County Visitor Bureau, each year about two million visitors come to the peninsula for its unique attractions and ambience, and their travel expenditures in the county are almost \$500 million. Primary visitation is between the May cherry blossom season and October fall color and apple harvest season. Peak visitation is in July and August.

From May to October when the nature center is open, more than 4,000 people visit the nature center and store and walk the trails (*Ridges Lites Newsletter*, November 2010). Many additional



While Baileys Harbor streets bustle with tourists in summer, the town is much quieter in the off-season.



The current entrance sign is formal and lacks a warm invitation for public entry.



The main trail entry has become enclosed and hidden to first time visitors.

people who do not enter the nature center walk the trails. Visitor surveys conducted in 2002, 2004 and 2010 indicate that about half are first-time visitors and a majority of trail users are not members of The Ridges.

Only a small percentage of Baileys Harbor tourists ever visit The Ridges. Cana Island Lighthouse (also open from May to October) received 43,000 paid visitors each year in 2009 and 2010 (personal telephone communication from Bob Desh, Executive Director, Door County Maritime Museum and Lighthouse in 2011). Nearly every lighthouse visitor drove by the Highway Q entrance to the Sanctuary. Potentially, if it is deemed desirable, the number of tourist visits to The Ridges could probably be increased ten times by promoting a satisfying experience in a new visitor center, on an adjacent interpretive trail, and in the range lights.

Attracting more visitors is very feasible as many tourists are looking for recreational activities that allow them to interact socially with their traveling companions. The mere presence of a gateway facility and inviting boardwalk



Door County tourists on a segway tour stop by the Lower Range Light for a photo opportunity. September, 2010

and trail system will draw large numbers of people.

In addition to the Sanctuary niche that The Ridges has historically occupied, it can become even more relevant as a component of a larger network of interpretive activities such as the Door County Coastal Scenic Byway or as a sanctioned stop for lighthouse enthusiasts. Both of these functions could increase visitation and income but do not have to impact the most cherished and pristine wild areas of The Ridges Sanctuary.

A concern expressed by stakeholders and staff in the visioning session and especially in private interviews is that increased numbers of visitors will impact the plants and animals and degrade the serenity of the Sanctuary that so many people value. From its earliest days, supporters have protected the sanctuary from over-use and have struggled with balancing optimal visitation with the potential for damaging fragile ecosystems. Unlimited numbers of visitors have never been encouraged or viewed as desirable since their very presence can degrade the serene nature experience that some visitors seek.

The challenge will be to attract people who will respect the Sanctuary and to provide experiences that immerse them in the environment but that will not damage the resources and the serenity of everyone's experience.

### **Protecting the Sanctuary**

A carefully designed visitor center can serve to orient and prepare visitors to be respectful of the site. A universally accessible trail loop through the degraded but restorable wetland adjacent to the Sandpiper can function as a visual introduction to The Ridges. This will absorb the bulk of visitors who might otherwise overwhelm the fragile interior trails further north. Lighthouse enthusiasts can continue from the loop to the range lights, and plant/nature enthusiasts and those seeking solitude and serenity can continue to the existing trail system. That most people would be satisfied with the loop trail experience is supported by data from the three visitor surveys: most visitors are seeking a brief encounter on the trails, to "experience the area", "take a nature hike," and "to be with family and friends."

The survey data and staff interviews support the following regarding the development of media and amenities in the new and existing facilities:

- Most current visitors are largely unaware of the significance of The Ridges Sanctuary. This is not adequately communicated through existing media and should be a priority in the new interpretation.
- Many visitors who did not go in the nature center missed the trail brochure and were only aware that it existed when they saw numbered posts on the trail.
- Visitors would value more information about the natural history of The Ridges, especially the ages and ecology of the various

ridges and swales. A few key interpretive panels could most effectively address this.

> Visitors want to know more about the range lights. One way to provide it is to open the Upper Range Light up to the tower. Historic photos and information could be provided on the walk up to the

tower. An interpretive panel with historic photos and illustrations showing how they worked should be included at the exterior of the upper light.

- Visitors want to know more about the significant plants and animals. When orchids and other interesting plants are in bloom and when to best see birds should be communicated.
- Visitors enjoy the observation decks at the swales. Some suggested they should be improved. Swale observation decks should be included as part of the proposed loop interpretive trail.
- Visitors love the rustic qualities of the bridges and boardwalks. The proposed trail loop should follow this rustic model but meet accessibility standards for people with mobility limitations.
- New facilities should separate visitor orientation from the store and cashier. Orientation would be enhanced with a table-top topographic map of The Ridges.





Many visitors are seeking a social, as well as a natural, experience.

# Target Group 2: Members of The Ridges

The Ridges currently has 1,830 members across all 50 states and Washington, D.C. Although the number of memberships has been static, the number of individual members represented by those memberships has risen due to a corresponding increase in the number of family memberships. an important demographic for the Sanctuary. Members who actively participate are understandably a small portion of the total that passively pay dues and support the cause when they are needed. The activeness of members often fluctuates with their work schedules, retirement, health, or commitment to other causes or organizations that were not represented in Door County in the past.

Member surveys from 1990 (Tim Byers MS thesis) and 2004 Ridges Survey indicate that members viewed land preservation as the most important purpose of The Ridges. They believe preservation should be supported by research and education. Most members originally joined The Ridges because they love its natural aspects: wildflowers, birds, geology, and continue to support The Ridges because the Sanctuary is unique and because the land and flora are so special. They value the naturalist led hikes and lectures and, on average, visit The Ridges about twice a year. They tend to be adults, well educated, and active members of other conservation organizations.



"I get my hands dirty!" was a comment by one devoted volunteer.

When asked what motivates them to be active members of The Ridges, involved

Involved volunteers frequently referred to a <u>sense of belonging;</u> of opportunities to meet and share time with others who shared similar interests and values. volunteers frequently referred to a *sense of belonging*; of opportunities to meet and share time with others who shared similar interests and values.

The "Wednesday Crew" is a group of volunteers who meet weekly to tackle various projects around The Ridges. Many of these volunteers reported that they enjoyed the camaraderie and felt that they were needed in very basic and human ways. Some indicated that this work made them feel like they were giving back to the community in a personal manner. Many value the unpretentious, rustic atmosphere of the place and the need for people to give simply of their time and skills to keep it running. "I get my hands dirty," said one crew member with a smile.

Several longtime volunteers recounted memories of collegial bonfires at the cabin site and of spontaneous gatherings of members. The serenity of the environment and the privacy of the site were cited as benefits to "working" here. The noncommercial and homey feeling of the facilities was valued by many. Some expressed concern that a new visitor center could become too sophisticated and commercial and thereby endanger the character of the institution.



Nonprofit organizations have a strong presence in Door County. Like The Ridges, they rely on donations and volunteer support. Some longtime residents and representatives of partner organizations felt that the sheer number of nonprofits strain both the donor and volunteer base in the county. Some expressed concern that land acquisition is no longer perceived as a priority at The Ridges and that other land preservation initiatives receive a lot of publicity.

The Ridges staff is highly proactive in serving the membership and offers a wide range of programs for members. Members are kept informed about the activities of the Sanctuary through a quality newsletter and website, along with periodic flyers Staff interviews indicated that new facilities could encourage new membership and better serve members in the following ways:

- New facilities will allow for expanded family programs. A heated multi-purpose room will provide space for other uses, as well as for year-round programming.
- The log cabins could be used in ways that are more directed at and dedicated to members. Many old-timers have fond memories of weekly gatherings in the homey cabins and around the fire pit located there.



The cabins will be rededicated to member gatherings and activities.

# Target Group 3: Residents of Baileys Harbor and Door County (Non-Members)

Tourism is the primary economic engine for the residents of Door County with a year-around population of 28,000. In its strategic priorities, the Door County Board established "protection of natural resources, especially water" and "responsible development that protects the natural and aesthetic qualities" as essential to maintaining tourism as the economic base (Door County Mission, Vision, Values and Strategic Priorities, adopted by board resolution, January 26, 2010).

Many residents of Door County make their livelihood from tourism. Most are in service industries that provide visitors with amenities needed to better enjoy the Door County environment. These businesses are dependent on the resource base of the area to attract and hold tourists. The Ridges provides a physical resource that tourists can experience directly. Many motels and some restaurants send visitors to the trails at The Ridges already. If facilities are more prominent, and interpretation opportunities are increased, local businesses will promote these passive nature experiences to their customers.

Participants in the July 13, 2010 visioning session recognized the partnership role that The Ridges Sanctuary has with Door County. Some

of the purposes listed for the new facilities are to serve as a "beacon for environmental stewardship, community, and economics," and a "living laboratory for sustainable resource use and preservation." Media in the center. while focusing on what can be experienced at The Ridges, should also communicate the "interplay of geology, hydrology, ecology, and land use." The Ridges could introduce county residents to ideas about how to protect groundwater in a

karst landscape and how to preserve the natural qualities that make the peninsula an attractive place to visit and live in. This is supported by a quote from Dr. James Zimmerman, University of Wisconsin-Madison:

"A major task facing The Ridges is to strengthen its voice: To make its point to enough people so that its message will count. Culture does not pass to new generations without conscious and persistent efforts...mere custodianship of the last few such spots is futility."



The Ridges has always been an integral part of the Baileys Harbor community. July 4th parade, 2012

The Sanctuary also has a close link to the community of Baileys Harbor. The 75 year link between a preserved area and a human community serves as a case study for others. The new facility at the Sandpiper site can greatly strengthen this connection. As the anchor on the north end of the business district, the center will attract tourists who will patronize downtown businesses. The center, in turn, will help residents appreciate and internalize the values of environmental stewardship. The Ridges Sanctuary partners with other Door County conservation groups in the Door County Festival of Nature which offers three days of field trips around the county.

A new center with a multi-purpose room could expand opportunities for serving the county and community by:

- Offering cooperative land stewardship programs with other agencies and land owners with the aim to preserve the "sense of place" that makes Door County a great place to live and visit.
- Offering more family programs that will attract non-members and motivate them to become members.
- Serving school groups and youth organizations are a potential audience if the multi-purpose room is of class size. However, these groups have a plethora of opportunities from the state parks and other sites in the county that become quite available in the school year. For example, Sturgeon Bay schools use The Crossroads. Gibraltar schools use Peninsula State Park. Many parks have naturalists that provide programs for schools and youth groups.

Providing interpretation and information about the new state-designated Door County Coastal Scenic Byway. The Ridges experience is a significant element of the Door County Coastal Byway experience. The scenic byway program has committed money in support of interpretive media for the new center. An indoor "kiosk" will identify the byway and assist travelers in accessing attractions along the route.



The Ridges will be an integral stopping point and information center along the state-designated Door County Coastal Byway. Kiosks, like the conceptual design above, will be installed in communities along the byway, including Baileys Harbor.

# **Chapter 4: Resources, Themes, and Messages**

Showy or Queen's Lady's Slipper orchid

Chapter 4: Resources, Themes, and Messages

The landscape, natural resources, and cultural history are woven into a rich tapestry of interrelated components that constitute a "sense of place" unlike any other.

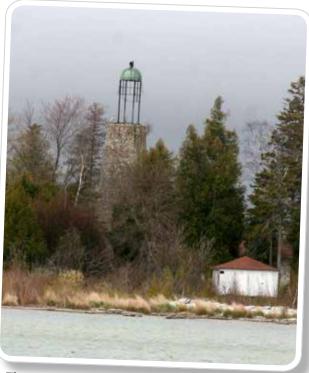
# **Interpretive Resources of The Ridges Sanctuary**

# 1. Cultural History and Founders of the Sanctuary

Early Occupations: Indian artifacts found in The Ridges Sanctuary, and archeological studies of nearby Indian sites indicate that native people lived here thousands of years before the first European settlers. Whitefish Dunes State Park, eight miles south, has evidence of eight occupations from about 100 B.C. up until historic times. Shallow pits near Kinnickinnic Trail connecting The Ridges parking lot and nature center contain chert flakes from stone tool making. This probably dates to 1100 or more years ago when that ridge was at or near the lakeshore. Stone tools and pottery shards collected at Toft Point show that after lake levels

began to recede around 1,000 B.C., there was occupation of the point by Early, Middle and Late Woodland as well as Oneota cultural traditions.

Early Europeans: In 1847 Captain Justice Bailey, skipper of a passenger ship owned by Alanson Sweet, sought refuge from an October storm. He entered a protected bay on the western shore of Lake Michigan. Bailey reported this excellent harbor and the available timber and stone to his shipping master. In 1849, Sweet secured 125 acres there and named it Baileys Harbor after the captain. Work parties established logging and mining camps in the area, and 2,500



The oldest remaining structure in Baileys Harbor is the "bird cage" lighthouse, now privately owned.

cords of lumber were shipped from the harbor. In 1850 Sweet built a pier and stone quarry, and in 1852 he built a lighthouse at the south end of the west shore of Baileys Harbor Point to mark the harbor entrance.

However, the Inspector of the 11th Lighthouse District deemed this light inadequate to guide ships safely between the shoals on both sides of the harbor entrance. Congress appropriated \$6,000 for the construction of a pair of lights and in 1869 Lighthouse Board construction crews put two range lights into service. Ship captains simply lined up their vessels with the two lights to secure safe passage into the harbor. Beginning with keeper Fabian Trudell, these range lights were



Henry Gattie was light keeper from 1896 to 1923.

operated by the U.S. Lighthouse Service continuously until 1923, when the last keeper was replaced by an acetylene lamp, followed by an automatic electric light in 1930. In 1934 the U.S. government deeded the "Range Light 40" surrounding the lights to Door County with the stipulation that the land be kept as a park. The lights were decommissioned in 1969. Many historic photos of the community and lighthouses are available. The Sanctuary now has responsibility for these range lights.

The Founders: With its incorporation in 1937, The Ridges Sanctuary became the first land trust in the state of Wisconsin. Chapter 1 documents the efforts and vision of people who founded The Ridges Sanctuary beginning with the Range Light 40. In their vision, The Ridges is above all else a sanctuary for the protection of the orchids and other rare plants and the ridges and swales that harbor them. The story of a private group and their tireless efforts to acquire and protect The Ridges is an inspiration to all. Their work and philosophy is documented by quotes from the founders and historic photographs.

The Ridges founders include **Albert Fuller**, Curator of Botany at the Milwaukee Museum who served as a catalyst for protecting the sanctuary, and **George Sieker** who studied the flora of the area in 1932-1933 and subsequently drafted the articles of incorporation. The ten people who signed the articles of incorporation on October 4th, 1937 were:

- ► Jens Jensen
- ► Frank Oldenburg
- ► John Matter
- ► Emma Toft
- ► Mrs. James McArdle
- ► William Sieker
- ► Mrs. W. C. Sieker
- ► Mertha Fulkerson
- ► Olivia Traven
- ► A.B. (Arthur Burchard) Gochenour



Albert Fuller was a catalyst for protecting The Ridges.

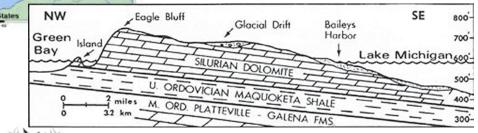
#### 2. Geologic Processes and Features

The Niagara Escarpment and Cuesta: The Door Peninsula is formed by a Silurian dolomite cuesta that slopes down from bluffs (the escarpment) along Green Bay until it disappears into Lake Michigan. The cuesta forms an arc along the western and northern borders of Lake Michigan and northeastern Lake Huron and continues through Niagara Falls from which it gets its name. The alkaline dolomite rocks, closely related to limestone, create alkali fens (a wetland type) along the Lake Michigan shore. There are some fens in The Ridges, but most of the swales are acidic because of their quartz sand substrate. The rocky shore and quarried dolomite in Toft Point is the best nearby example of the Silurian dolomite.

Extent of the Niagara

Dolomite is susceptible to dissolution from weak acids created when rainwater percolates through decaying vegetation. This creates caves and voids in the bedrock through which rainwater readily passes, often carrying contaminants from agriculture, residential areas, business and industry. This is commonly called **karst topography**. Protecting the groundwater in karst country is a priority for the Door County government.

Ridges and Swales: The alternating swells and swales that make up the 30 crescent-shaped ridges along Baileys Harbor Bay have been extensively studied since the early 1900s in order to better understand the late glacial history of the Great Lakes. These ridges and swales were formed over the past 1,200 years. Beach ridges form where there is a steady sediment supply in the final stages of a lake-level rise. When the lake-level rise slows, a berm forms at the crest of the swash zone (area of wave action on the beach). Grasses colonize on the berm and trap wind-blown sediments. The



The Niagara Cuesta slopes from bluffs along Green Bay until it disappears into Lake Michigan. *Paull & Paull, 1988* 





dune cap grows in height and width and, with a sufficient supply of sediment, resists erosion during the next lake-level rise. Through time, a series of beach ridges are created and preserved, recording high stands in lake levels. Plants grow to stabilize the ridges and the intervening swales between them collect water to form wetlands. The diversity of soil types and acidity and the lakeshore microclimate creates diverse conditions that provide habitat for the most diverse plant community in Wisconsin. The east to west oriented ridges exist in troughs that have up to 60 feet of sand and clay overlaying the dolomite bedrock.

(Adapted from "Reconstructing paleo lake levels from relict shorelines along the Upper Great Lakes" by Steve Baedke et al., 2004)

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Cuesta.

#### 3. Plant and Animal Communities

An isolated pocket of boreal forest encompasses The Ridges Sanctuary. It is the only known boreal forest in the eastern half of Wisconsin and is maintained by the cold humid air brought by off-shore southerly winds. This microclimate is about ten degrees Fahrenheit cooler than inland, mimicking the boreal climate that existed here thousands of years ago at the edge of the glaciers.

The cool, moist breezes and diverse soils provide conditions for several rare plants including 25 members of the orchid family. Members of the heath family grow abundantly as do the conifers. The wide range of pH from alkaline to acidic provides soils to suit a high diversity of plant species. In 1953 The Ridges Sanctuary was designated a State Natural Area by the Wisconsin Scientific Areas Preservation Council. It is also designated as a National Natural Landmark, an Audubon Important Birding Area, and a Wisconsin Wetland Gem.

In 1976, a list of blooming times of the 100 most spectacular flowering plants in the sanctuary was published by Roy Lukes. In 1981, a study and collection of all the plants of the sanctuary by University of Wisconsin-Green Bay graduate student Joel Trick identified 475 vascular plants. This study also defined 15 distinct plant communities. These communities provide habitat for a variety of vertebrate and invertebrate animals including six nesting species of warblers. The wetlands are habitat for the Hine's emerald dragonfly, a federally listed endangered species.

**State Natural Area** description from **DNR website:** "The **Ridges Sanctuary** State Natural Area encompasses a variety of unusual habitats, and supports one of the greatest concentrations of rare plants in the Midwest. It features ridge and swale topography on a series of former Lake Michigan beach ridges. The ridges and swales

vary from being open and wet with very rich calciphilic marsh and bog herbs dominating, to boreal conifer forest. Black and white spruce, balsam fir, and white pine are the most common canopy species. This boreal forest in northeastern Door

Pitcher Plant





**Bog Rosemary** 



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Themes, and Messages <u>Resources,</u>

County is far disjunct from the other boreal forest stands in Wisconsin, which occur mostly in the northwestern part of the state along Lake Superior. The climate is heavily influenced and moderated by Lake Michigan, with cooler springs and summers, warmer falls and winters. These conditions have resulted in reduced evaporation rates, lower growing season temperatures, and more precipitation, which allow northern species to thrive here. This site supports an outstanding assemblage of rare and endangered plants and animals, including the world's largest known population of the federally endangered Hine's emerald dragonfly."



The federally endangered Hine's Emerald Dragonfly (photo by Carol Freeman).

# Site-Specific Tangible Resources and Their Intangible Meanings

### 1. Original Flower Sanctuary, "The Range Light 40"

- This is a classic ridge and swale forest and wetland with exemplary displays of spring and summer flora. Rustic trails laid out by volunteers and trod by the founders and other renowned naturalists.
- It is the living sanctuary that symbolizes what people can do to preserve natural places of exquisite beauty and complexity.
- It is the Baileys Harbor community's own "Garden of Eden," the pristine gem that was almost lost but came to be valued.

# 2. Upper Range Light

- This is a tangible human connection to the history of Baileys Harbor and the "Range Light 40" story.
- All the hands that have grasped the hand rail: the keepers, the ministers, the original founders, Roy Lukes...All the ears that listened to the waves or wind in the evergreen boughs.
- The connection between the community and the "Range Light 40."



Boardwalk through the original sanctuary.



Upper Range Light.

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- Attracts lighthouse buffs and others who are more interested in human history rather than natural history.
- You can snoop and peek into others' lives. The logs provide insight such as the entry by Henry Gattie on February 18, 1901, "My wedding at 4 PM."
- You can peer through the same window through which the light shone over the harbor to guide ships beginning in 1870.
- Range lights have been the symbol of safe passage into a sheltering harbor. Lives depended on the lights and those who kept them, the "keepers." The oil shed reminds us of the danger of explosive fuels. The straight boardwalk between the range lights speak of the unwavering duty to keep the lights burning.
- This old building has been a home for families with vegetable gardens, clothes lines, outhouses and summer flowers. This house is a witness to joy (keeper Harris' (1875 to 1881) wife, Rosalie, gave birth to the first baby born at the range lights, a daughter they named Mabel), and tragedy (e.g.: An outbreak of typhoid fever in the winter of 1874-75 claimed keeper Shaler's wife, Lucy. So great was his grief that he resigned his post in April of 1875).

- The kitchen has heard the laughter and the sobbing of families, volunteers and friends and even the spirited debates of those who looked after the sanctuary.
- This is a potential "clubhouse" for volunteers (in the back rooms) with a kitchen for serving events or simply having a cup of coffee.
- It is a place for "front step" weddings with all the meanings such as fidelity and home and security that we associate with lighthouses.

# 3. Log Cabins, Fire Ring, and Open Field

- ▶ Provides a rustic/intimate shelter.
- The smell of smoke and wood linger in the logs. The cabins offer an earthy clubhouse with connections to the history of Door County.
- This is a safe escape for group gatherings away from traffic and people. Parking and restrooms are already available.
- Evokes memories of members gathering around past campfires. Council rings symbolize warm group gatherings and shared moments in nature. Jens Jensen always worked them into his park landscapes. This is a place where



A view from the Upper Range Light.



The Marshall Cabin.

you can "crank" ice cream, roast corn, and toast s'mores.

- It is a quiet out of the way space for workshops, classes and volunteer gatherings, with an "event friendly" grassy lot west of the cabins.
- This is the "back door" to The Ridges where "family" can enter at any time. Members and community can get away from crowds of visitors.



Children participate in activities around the campfire ring *(above top)* and in the open field by the cabins *(above bottom)*.

#### 4. "Hidden Brook Trail" Interpretive Trail Loop (from the new visitor center)

- This is where you meet the ridges and swales and get a glimpse of the "orchid ridges" as Edwin Way Teale called them. This trail will give visitors (especially families and children) a sensory and emotional introduction to The Ridges. It will be a "Ridges experience."
- It will be a sensory experience that focuses on the mystery, variety and beauty of the site: Sunny swales with long views, dark, cool cedar woods (the "Canadian Carpet" as Virginia Eifert called it). It will be filled with sounds and silences (wind in the conifers, flowing water, birds, quiet woods).
- ▶ It will be a trail that disappears invitingly into the damp woods. A boardwalk will undulate into the trees and drop down to float on a watery swale. It forks and splits around trees and rejoins on the other side. Spurs take you to quiet reflective areas with benches. It is an adventure of discovery.

- It will be inspirational with quotes from founders and children.
- The interpretation will have tactile and sound devices and sculptures to engage visitors of all ages. The trail itself must be a "work of art" to capture the imagination of everyone. It will be accessible for everyone, no matter their age or abilities.
- The boardwalk trail will demonstrate "mindful" planning and respect for the site that preserves the delicate ecological communities of the Sanctuary.

The flowing water in Hidden Brook surprises visitors.





The undeveloped wild woods, ridges, and swales make up the heart of The Ridges Sanctuary.



5. Second Growth Woods West of Highway 57

- Diverse but hardy vegetation that invites hiking, discovery, physical activity, and roaming.
- Open sunny sandy fields with invading shrubs and trees.
- A place for families to explore and create adventures.
- 6. Undeveloped Wild Woods and Swales of The Ridges (most of the 1,600 acres)
  - Cool cedar swamps and towering white pine sentinels that hold down the ancient coastal beaches of Lake Michigan.

- It is an area protected by muck and mosquitoes, most hospitable in winter when ski and snowshoe permit painless passage.
- "A town is not protected so much by the bravery of the men within it as by the swamps that surround it." Henry David Thoreau
- This land is the promise that some things in Door County can be saved for generations.

### 7. Logan Creek Property

- Logan Creek is a State Natural Area and designated Outstanding Water Resource held in trust by The Ridges Sanctuary.
- "This 180-acre natural area begs a visit in spring, when early

wildflowers explode with color and migrating songbirds flit about sending sweet love songs into the spring air."—Paul Regnier

- Trails traverse the property through dry upland beech-maple forests and lush lowland conifers including groves of majestic eastern hemlocks.
- The story of how this property was preserved from development is testament to the passion of the landowner and Ridges members to save wild places for posterity.



The Ridges Sanctuary: Interpretive Ma

## **Themes and Messages**

Themes are the important umbrella concepts that organize the messages to be communicated at The Ridges Sanctuary. They create a framework for planning and help place resources and events into meaningful contexts for the audience. Based on these themes and their associated messages, decisions are made about programs and media that are most appropriate to communicate them.

A theme statement, the main idea of an interpretive opportunity, should contain **universal concepts**. A universal concept is an intangible meaning that has significance to almost everyone, but may not mean the same thing to any two people. They are the ideas, values, challenges, relationships, needs, and emotions that speak to the human condition. Compelling interpretive themes link a tangible resource and its intangible meanings to the interests of visitors. For example, a lighthouse symbolizes safety and sanctuary to most people. Many lighthouses are remote and lonely places where light keepers and their families had to depend on each other. Loneliness and family are both universal concepts that people can identify with.

- A primary theme expresses the main idea that ties together the stories of The Ridges Sanctuary. To provide a cohesive visitor experience, all interpretation should relate to this holistic theme.
- Sub-themes split the primary theme into several more specific and workable ideas. These broad

storylines guide visitors to discover deeper meanings and relationships with the resources of the site.

Messages break down the broad sub-themes into specific, discrete stories that can be told with interpretive media and programming.

## **Primary Theme**

The Ridges Sanctuary was created through the vision and dedicated efforts of volunteers to preserve diverse and rare plants and animals living within its classic beach ridges and swales.



Prehistoric cultures flourished on this site even as the continental glaciers receded north into Canada.



#### Messages:

- 1.1 Artifacts found within the sand dunes along the eastern coast of the Door Peninsula document the occupation of Woodland Indians as they evolved new technologies and life ways from about 1,000 B.C. until European contact.
- 1.2 Woodland cultural traditions mixed hunting and gathering with farming, especially corn. Over the centuries of this occupation these peoples developed pottery and the bow and arrow.
- 1.3 Whitefish Dunes State Park, eight miles south, has evidence of eight occupations from about 100 B.C. up until historic times. Shallow pits near Kinnickinnic Trail connecting The Ridges parking lot and nature center contain chert flakes from

stone tool making. This probably dates to 1,100 or more years ago when that ridge was at or near the lake shore. Stone tools and pottery shards collected at Toft Point show that after lake levels began to recede around 1,000 B.C., there was occupation of the point by Early, Middle, and Late Woodland as well as Oneota cultural traditions.

#### Sub-Theme 2

In 1847 this bay became Baileys Harbor, a safe port for shipping timber and stone.

#### **Messages:**

- 2.1 In 1847 Captain Justice Bailey, skipper of a passenger ship owned by Alanson Sweet, sought refuge from a storm in a protected bay on the western shore of Lake Michigan. Bailey reported this excellent harbor and the available timber and stone to his shipping master.
- 2.2 In 1849, Sweet secured 125 acres there and named it Baileys Harbor

Baileys Harbor marina.



after the captain. In 1849, 2,500 cords of timber were shipped from the harbor. In 1850 Sweet built a pier and stone quarry, and in 1852 he built a lighthouse at the south end of the west shore of Baileys Harbor Point.

2.3 The first lighthouse in Baileys Harbor was deemed inadequate to guide ships safely between the shoals on both sides of the harbor entrance, and in 1869 the U.S. Lighthouse Board built two range lights. Ship captains simply lined up their vessels with the two lights to secure safe passage into the harbor.



Cana Island lighthouse.

- 2.4 These range lights were operated by the U.S. Lighthouse Service continuously until 1923 when the last keeper was replaced by acetylene, then an automatic electric light in 1930.
- 2.5 The Baileys Harbor Upper Range Light was a home for many keepers and their families. (Note: A complete list of keepers is available).
- 2.6 From 1930 to 1956 Immanuel Lutheran Church leased the Upper Range Light as a parsonage. The ministers acted as part-time keepers, maintaining the lens and light. The building stood vacant until 1965 when first naturalist-director Roy Lukes moved in. The light was extinguished for good in 1969 and replaced by a beacon near the harbor. Since 1992, the building has been used for offices and seasonal naturalist residence.
- 2.7 Lighthouses are rich with symbolism. They evoke concepts such as danger and risk on the sea, and duty and vigilance by the keeper. Keeper and light offer guidance and safety. The glowing lamp reminds us of home and security.
- 2.8 Lighthouses are attractants for all visitors and especially for those who seek connections to our maritime past.

#### Sub-Theme 3

Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development.



Yellow lady's slipper.

#### **Messages:**

- 3.1 In 1935, the U.S. Congress passed a bill that would convey 40 acres surrounding the Baileys Harbor Range Lights to Door County with the stipulation that the land be kept as a park.
- 3.2 The county considered creating a recreational trailer park on the site. This was brought to the attention of Dr. Albert Fuller, Curator of Botany at the Milwaukee Public Museum, by the chairman of the Door County Parks Commission who suggested that now was the time for public input on the proposal.

- 3.3 Dr. Fuller, who had often visited The Ridges and marveled at the plant diversity, launched a campaign to create a refuge for the plants and animals of The Ridges.
- 3.4 Jens Jensen wrote that "The true value of a sanctuary is spiritual..."
- 3.5 On May 21, 1937, the "Range Light 40" was deeded to the Door County Parks Commission by the federal government.
- 3.6 In October, 1937, ten people, including Jens Jensen and Emma Toft, signed articles of incorporation for the "Ridges Sanctuary for Plant and Animal Life Incorporated."
- 3.7 The words and actions of the many dedicated founders of the Sanctuary serve as an inspiration to people today.
- 3.8 Fuller and Jensen set a target of 1,000 acres as necessary to protect the ridges and their wildflowers and wildlife.
- 3.9 Over the years, dedicated volunteers promoted the organization and its acquisition of land for the sanctuary. In 1987, The Ridges 50th year, the goal of a 1,000 acre refuge was achieved.
- 3.10 The 169-acre Logan Creek property was acquired in 1992 and 1994 to protect it from development. The site features a northern wet-mesic forest along the north shore of Clark Lake.

- 3.11 The Ridges Sanctuary has since grown to more than 1,600 acres.
- 3.12 This was an all-volunteer organization until the summer of 1964 when the first seasonal naturalist, Roy Lukes was hired. A professional staff, assisted by volunteers, now manages the Sanctuary and provides programs for members and visitors.

The Door Peninsula owes its physical character and beauty to the Niagara Cuesta that underlies it and the escarpment overlooking Green Bay.



The cliffs of the Niagara Escarpment overlooking Green Bay.

#### Messages:

- 4.1 The Door Peninsula is formed by a Silurian dolomite cuesta that slopes down from bluffs (the Niagara escarpment) along Green Bay until it disappears into Lake Michigan.
- 4.2 Cuesta (from Spanish: "slope") is a ridge formed by gently tilted sedimentary rock.
- 4.3 The peninsula owes its beauty to this escarpment and cuesta formed 425 million years ago in coral seas.
- 4.4 The cuesta forms an arc along the western and northern borders of Lake Michigan and northeastern Lake Huron and continues through Niagara Falls from which it gets its name.
- 4.5 The alkaline dolomite rocks, closely related to limestone, create alkali fens (a wetland type) along the Lake Michigan shore. There are some fens in The Ridges, but most of the swales are acidic because of their quartz sand substrate.
- 4.6 The rocky shore and quarried dolomite in Toft Point is the best nearby example of the Silurian dolomite.



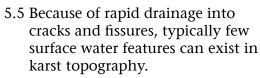
The Door Peninsula is a typical karst landscape with all of the benefits and problems associated with surface and groundwater.



Typical karst landscape at Toft Point.

#### Messages:

- 5.1 As with all limestone, weak acids from rain cause dolomite to dissolve forming caves and fissures commonly known as karst topography.
- 5.2 Spelunkers have many caves to explore in the Door Peninsula.
- 5.3 Karst aquifers are as easily contaminated by human activities as surface water. Care must be taken to prevent groundwater pollution.
- 5.4 Threats to karst aquifers include septic systems, agriculture, commercial parking lot run-off, untreated waste dumping, and industrial sites.



5.6 Karst topography lacks buffering because of thin soils.

### Sub-Theme 6

The ancient beach ridges are unique geologic features created since the last ice age that provide a diverse wonderland of forested ridges and wet swales.



Where ridges and swales are born.

#### Messages:

- 6.1 The alternating swells and swales that make up the 30 crescent shaped ridges along Baileys Harbor Bay were formed over the past 1,200 years.
- 6.2 Beach ridges form where there is a steady sediment supply in the final stages of a lake-level rise. When the

lake-level rise slows, a berm forms at the crest of the swash zone. Grasses colonize on the berm and trap wind-blown sediments. The dune cap grows in height and width over time and, with a sufficient supply of sediment, resists erosion during the next lake-level rise. Through time, a series of beach ridges are created and preserved, recording high stands in lake levels.

- 6.3 Plants grow to stabilize the ridges and the intervening swales between them collect water to form wetlands.
- 6.4 Small streams and groundwater maintain the saturated to inundated conditions of the swales.
- 6.5 About 95 dune and swale complexes have been identified in the Great Lakes. They are found in embayments (e.g., the ridges) and on large sand spits.
- 6.6 The ridges and swales vary greatly in their physical attributes which creates diverse plant and animal communities.
- 6.7 The east to west oriented ridges exist in troughs that have up to 60 feet of sand and clay overlaying the dolomite bedrock.

The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin.



Boreal forests on ridges alternate with boggy swales

#### Messages:

- 7.1 An isolated pocket of boreal forest encompasses The Ridges Sanctuary. It is the only known boreal forest in the eastern half of Wisconsin and is maintained by the cold humid air brought by off-shore southerly winds. Lake effect snowfalls are greater on the Lake Michigan side than on Green Bay.
- 7.2 This microclimate is about ten degrees Fahrenheit cooler than inland, mimicking the boreal climate that existed at the edge of the glaciers

thousands of years ago. The climate is heavily influenced and moderated by Lake Michigan, with cooler springs and summers, warmer falls and winters. Boreal plants have existed here since the time of the glaciers.

- 7.3 The cool, moist breezes, longer growing season, and diverse soils provide conditions for several rare plants including 25 members of the orchid family.
- 7.4 Members of the heath family grow abundantly as do the conifers.
- 7.5 There are 15 distinct plant communities ranging from the beach on Baileys Harbor across the various types of ridges and swales to the beach on Moonlight Bay. This diversity of plant communities provide habitat for the highest plant diversity in Wisconsin.
- 7.6 The Ridges are home to 475 identified vascular plants.
- 7.7 These communities provide habitat for a variety of vertebrate and invertebrate animals including six nesting species of warblers.
- 7.8 Door County's wetlands, including those at The Ridges, are habitat for the largest known population of Hine's emerald dragonfly, a federally listed endangered species. Their larvae live in the wet swales for 3-5 years eating aquatic insects. They then crawl out of the water, shed their skin one final time, emerging as flying adults. These adults live

only 4 to 5 weeks. The essential elements for egg laying and larval development are found in wetlands with shallow, organic soils overlying dolomite and limestone bedrock. The essential elements for adults are shrubby and forested areas bordering the larval wetlands and open corridors that adults use for movement and dispersal.

- 7.9 The open sand provides habitat for ant lions (commonly called doodlebugs because of the random "doodling" designs they make in the sand). The larvae of this Neuroptera species dig a shallow cone-shaped pit and wait at the bottom for an ant or other insect to slip on the loose sand and fall in and be devoured.
- 7.10 Beginning in early spring with Arctic Primrose, Trailing Arbutus, Dwarf Iris, and many kinds of orchids, a parade of flowers delights people with their beauty through the seasons.
- 7.11 Some populations of orchids within the sanctuary have changed over the years as they have been affected by competition and succession.
- 7.12 Forested ridge and swale complexes including The Ridges Sanctuary are especially important as migratory bird stopover points.



# Chapter 5: Interpretive Facility and Site Development

Conceptual rendering of the new interpretive center building at night.

# Chapter 5: Interpretive Facility and Site Development

## Why a New Interpretive Center?

The Ridges Sanctuary suffers from a lack of visibility. Many people who visit Door County are unaware of the Sanctuary's existence. Those who do find their way there are uncertain where they can go, what they should do, and what the significance of this place is. Few people are disappointed in their trail experience; they enjoy the serene natural beauty, but seldom discover any greater significance or appreciate the ecological richness of this important place.

The on-site experience can be inspirational. Ideally each visitor should leave with an elated feeling that they want to support the preservation efforts at The Ridges. The visit should also place The Ridges story into a holistic context of environmental awareness about the sensitivity of the Door County Landscape, both ecologically and culturally.

A new interpretive center will serve as a gateway that introduces the on-site experience. It will create a visible entrance to the Sanctuary, orient visitors to the site and its importance, and place The Ridges story into the greater Door County context. Visitors will, ideally, enter with curiosity and leave feeling inspired.

A new interpretive center will, at a basic level, provide much needed space:

- Staff and volunteers need offices, break room, work space and storage to better do their job.
- Programming and resource space is needed to allow for expanded year-around educational programs that better serve members, the community and Door County residents, and to provide "relevant, meaningful learning experiences for children, adults and families".
- Space is needed to adequately inform visitors about the important stories of The Ridges Sanctuary. Interpretive media will tell these stories of the Sanctuary that are currently missed by most visitors. An expanded nature store will provide memorabilia and educational materials that allow visitors to take their Ridges experience home with them and to more deeply understand and appreciate the site.

Research space is needed (perhaps by rededicating space in the Upper Range Light or log cabins) to expand flora and fauna inventory efforts, and to develop new collaborative research efforts. Research is needed to better inform land protection and management activities and programs both in the Sanctuary and in Door County.



At a basic level, a new interpretive facility will relieve the cramped conditions of offices and work spaces in the existing Upper Range Light headquarters building.

## **Rationale for Selecting the Sandpiper Restaurant Location**

The Sandpiper Restaurant was strategically located at the intersection of Highway 57 and Ridges Road, where The Ridges Sanctuary intersects with downtown Baileys Harbor. The purchase of the Sandpiper and redevelopment of the site into a year-round Ridges interpretive center hub will increase the visibility of the Sanctuary to Door County visitors. The present location of the nature center on County Road Q is missed by most visitors and does not appear to be public. The location on Highway 57, recently designated as part of the 66-mile Door County Coastal Byway, makes this a can't-miss attraction for travelers driving through Baileys Harbor. The old Sandpiper site will improve wayfinding to The Ridges, while reducing visitor access from Ridges Road and County Q, buffering visitor impacts on the heart of the Sanctuary.

This location integrates The Ridges Sanctuary into the Baileys Harbor community. The Sandpiper site anchors the north end of the business district on Highway 57. This new facility will help residents see The Ridges as a prominent community institution that contributes to their sense of place and quality of life in Door County. This will result in increased membership, donations and volunteers for the Sanctuary. The area of the sanctuary adjacent to this site lends itself to development as a gateway trail into The Ridges. The

impacts of increased visitation will mostly be limited to the area of the Sanctuary between the old Sandpiper and the range light boardwalk. The area is already channelized and degraded by former livestock grazing, but is still aesthetically interesting, evolving ecologically, and has potential for development as a quality family-oriented introduction to The Ridges experience.

This trail would connect to the existing trail system for people who wish an in-depth experience with nature or with the range lights. Members will still have access to this historic trail system from the County Q entry.



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This highly accessible site will require some mitigation and creative landscaping.

There are, of course, some challenges and trade-offs associated with this site. It is a relatively small parcel of land which limits on-site parking and the potential expansion of the facility in the future. It is on a busy street corner which can be quite noisy during tourist season. Existing power lines and commercial signage are visually disruptive. There has been soil contamination from kerosene used for fish boil fires.

These trade-offs have been factored into the selection of this site and most of the concerns can be mitigated or used as educational opportunities.

## **Interpretive Center Design Parameters**

#### 1. Honor a Sense of Place/Spirit of Place

The building architecture must fit the ambience of the Door Peninsula and fit comfortably with the architecture of Baileys Harbor. It must also reflect the significance of The Ridges Sanctuary with its isolated boreal forest and ridge and swale landscape. Sand, water and microclimate are the determinants of the plant diversity found in the Sanctuary. The historic range lights are connections to the maritime heritage of The Ridges, Baileys Harbor and the peninsula.

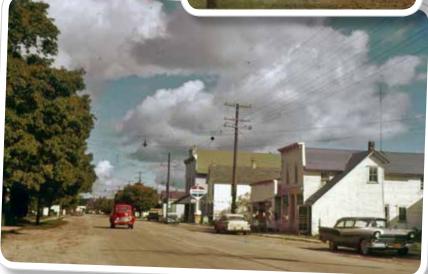
Door County's sense of place includes pastoral dairy farms and orchards overlooking the waters of Green Bay and Lake Michigan. Small villages dot

the almost 250 miles of coastline, each with their boutique shops, art galleries, diners and turn-of-the century inns. Between the villages are parks and nature preserves, some with squeaking sand beaches and headlands with lighthouses. Restaurants everywhere advertise their open air fish boils. The landscape compels visitors to hike, stroll, pedal, ski, and paddle

or take a leisurely drive on country roads to experience this place and its German/Scandinavian cultural milieu and architecture.

In the visioning meeting for the new interpretive center it was suggested that in order to capture this sense of place, the architecture should metaphorically





Downtown Baileys Harbor 1961

Door County's

sense of place

includes small

towns and

orchards.

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include the symbolism of a screen door. The screen door conjures a feeling of simple, rustic Door County dwellings surrounded by the sounds of birds and light summer breezes that stir the window curtains, and the happy sound of children playing on the beach. In this center you are standing at the threshold of a memorable and unique experience with nature. The center, symbolized by the screen door, brings the outdoors in and leads you, as a visitor, to the outdoors. It should be a "permeable membrane". This screen door concept should be viewed as a metaphor and not taken literally as tangible screen door.



A screen door metaphor reflects the concept that the building is only a gateway to an outdoor experience.

#### 2. Use Indigenous Materials and Vernacular Forms

The Niagara cuesta is a primary influence on Door County landscapes. It forms the backbone of the peninsula. The escarpment offers dramatic views to Green Bay and bayside communities. From there the cuesta slopes gently to the east until it disappears into Lake Michigan. Locally quarried dolomitic limestone has been used historically as a building material in Door County barns and civic buildings. In Baileys Harbor, the Town Hall and McArdle Library and the St. Mary's of the Lake Catholic Church are classic stone buildings. The Clearing in Ellison Bay blends rustic log and wood structures with limestone:

Not only is limestone a direct connection to the landscape, it is a visual connection to cherished community institutions linking past, present and future. Limestone as building material is enduring, solid and strong, symbolizing the integrity and stability of the institution that it houses.



The vernacular architecture of the Peninsula includes limestone foundations and pine board siding.



Emma Toft visits The Clearing.



Baileys Harbor Town Marina.

#### 3. Design Space for all Program Functions

The interpretive center should include the following based on decisions made jointly by the building committee, architect, and interpretive consultants:

#### Public space

- Covered Gathering Areas (near entrance and back exit to trail loop): Places for families and groups to wait and gather their members together. The back area, near the trailhead, would also serve as a briefing area for naturalist led groups. This area should be out of the normal visitor flow to facilitate semi private group sessions. Benches should be of a rustic and thematic nature that "speaks" of the quality natural experience that visitors will encounter on the trails.
- Entrance Vestibule (glass doors to allow a view into the building): This would serve as a transition from the parking lot into the building. It is a visual invitation to enter and a physical portal to protect people from the elements and to limit air infiltration. The entry floor should have grates to collect mud and sand off the shoes of visitors.

**Restrooms:** The number one need for visitors. A staff restroom will be separate from public restrooms.

Restrooms will not be available after hours as it was determined that other public restrooms are available nearby. They should be very visible and easily accessed from the door so that the front desk personnel can address duties other than directing people to these facilities.

- Lobby (large and soaring space illuminated with clerestory windows above): This space must be sufficiently large to remain inviting even during peak periods of visitation when tourists may flood the lobby and front desk. The high ceiling will help to create a perception of open space even as the floor space becomes crowded. This room must have materials on walls, ceiling, or floor to absorb the echoing sound of crowds.
- Interpretive Space: The visitor center serves as a portal to the outdoor experience and therefore has limited interior media. The guiding philosophy of this area is to focus people's attention on a few important concepts that will make their outdoor experience more meaningful. These media serve as an introduction to The Ridges and put the outdoors in context. It will contain a mini-theater for a self-selecting, and informal video introduction to The Ridges. It will

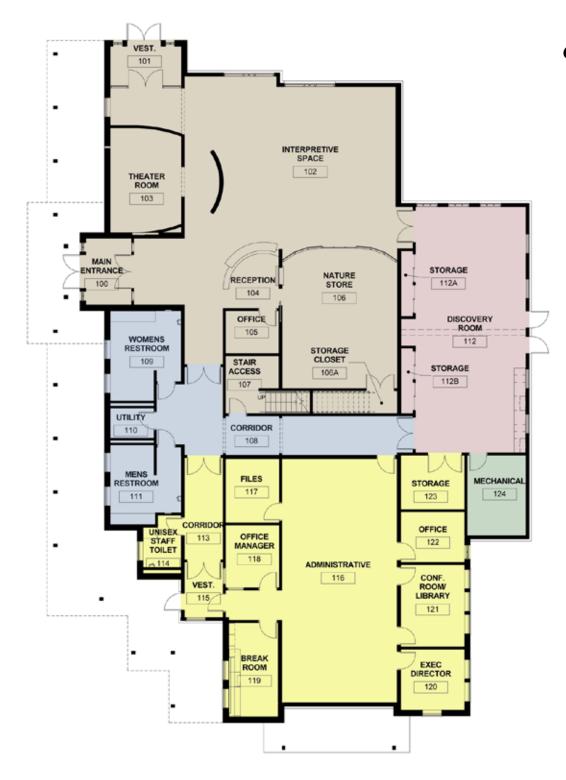
have a large wall of windows that direct visitor's attention out to the trailhead. A reconstructed ridge and swale will sweep from the trailhead into the room where a lifelike diorama dramatically introduces visitors to the ridges ecology. Another exhibit addresses the "Founders of the Sanctuary."



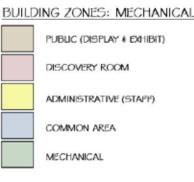
A dramatic focal point diorama introduces the exhibition theme at the Elk Country Visitor Center in Missoula, Montana.



Visitors read stories projected onto rock at Head Smashed In Buffalo Jump in Alberta, Canada



## Conceptual Interpretive Center Floor Plan



#### BUILDING NOTES

- · APPROXIMATE AREA: 7,400 SF
- PURSUING LEED CERTIFICATION
- INTERPRETIVE SPACE CAN OPEN INTO MULTI-PURPOSE ROOMS, ALLOWING FLEXIBILITY FOR LARGER EXHIBITS AND DISPLAYS, AS NEEDED
- BUILDING DIVIDED INTO THREE SEPARATE MECHANICAL ZONES, PROVIDING FLEXIBILITY BASED ON LEVEL OF VISITOR USE AND SEASON
- COMPUTER SIMULATIONS WILL BE USED TO ANALYZE AND EVALUATE POTENTIAL BUILDING SYSTEMS
- BUILDING ORJENTATION TO MAXIMIZE NATURAL DAYLIGHT AND VENTILATION
- STORAGE MEZZANINE LOCATED ABOVE NATURE STORE AREA.

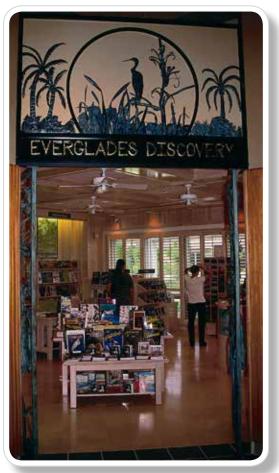
The **Ridges Sanctuary: Interpretive Mas** 

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At Everglades National Park, the gateway visitor center must accommodate huge seasonal fluctuations of international visitors (shown here on a slow summer, off-season day)

- Reception: This desk is clearly visible, yet set back from the entrance so as not to intimidate visitors or create a traffic "bottleneck" or barrier to entry when visitation is high. It can also serves as the check-out for the sales area to allow only one person to work the center when visitation is slow. There must be adequate space to place maps and other information on the wall behind this desk.
- Sales Area: Should be viewed as an extension of education; books on The Ridges, karst, sustainable design, flowers, birds, conservation—include children's books on these topics. The design should reinforce the rustic and



A sales area should be seen as a thematic extension of the center's educational program.

natural theme found throughout the building. Storage space dedicated to the store merchandise is essential. Perhaps a mezzanine area above the store would be desirable for storage.

- Wood Burning Stove: A place to linger, gather and converse during the winter and the shoulder seasons. It serves as an historical touchstone to the woods and Door County. Since it will not be an important gathering area during the summer peak tourist season, it should not dominate the main lobby area but should perhaps be placed in the multipurpose/ discovery room where it will not disrupt the lobby traffic flow.
- Wildlife Viewing Area: Seating should be provided in front of windows that look out on a wildlife feeding station to the north of the building.



Wildlife feeding stations allow close encounters with birds and small mammals. Richardson Nature Center, Bloomington, Minnesota.

#### Multi-Purpose and Discovery Room: This room should be able

koom: This room should be able to comfortably seat groups as large as 40 and have a sound-proof divider for smaller meetings and break-outs. It should have a small kitchenette for coffee and catered lunches. The room adjacent to the interpretive space will be furnished with tables and cabinets as an interactive discovery room where visitors can explore objects and media that relate to the mission of The Ridges Sanctuary.

#### **Staff Offices and Volunteer Area**

- Secure Central Office (with office machines): This room is an area to close out the cash register where staff can count money, send letters, etc. when they are not busy with visitors. It has storage cabinets and work counters around the space.
- Break Room/Kitchenette: To be available for staff and volunteers who are working in the building with visitor services.
  - Staff Office: Enclosed offices will provide privacy for staff members. A large open area will be flexible office space that can be reconfigured with dividers as needed. It should be able to house at least six staff members or volunteers.
  - Storage/Utilities: Inadequate storage is the biggest complaint of interpretive centers. It should be provided in the sales area,

offices and multi-purpose room. A separate windowless room should be included for large items such as tables and chairs and program materials.

Exterior Door/Loading Area: Opens directly into the building (storage room or multipurpose area) to avoid turning corners with tables and chairs and other large items. Exterior doors should be provided in each of the "divided" multipurpose rooms to eliminate disruptions in either when they are both in use.



Surveys of nature centers consistently show that storage space is almost always lacking.



A naturalist's discovery room encourages self-directed exploration of artifacts and natural objects. Crowley's Ridge Nature Center, Arkansas

#### 4. Follow Sustainable Design Strategies

#### Sustainable Design/LEED<sup>®</sup> Strategies

The stakeholders and staff for The Ridges expressed the need for the new facilities to "model sustainability, use best practices for green architecture and achieve the highest practical LEED rating".

Sustainable design is future oriented. It is accountable to generations that follow us. Designers choose nontoxic, locally available, recycled, and recyclable materials. Sustainable facilities are energy efficient and self-sufficient. They conserve water and some even treat wastewater onsite. Sustainable developers reclaim disturbed sites and renovate existing buildings. Sustainable design in interpretive centers models technologies and processes that visitors can use in their own buildings. It borrows from ancient practices that use natural solutions for heating, cooling, and lighting, and integrates them with proven, state-of-the-art technologies and building processes.

#### What is LEED<sup>®</sup>?

Leadership in Energy and Environmental Design is a thirdparty (U.S. Green Building Council) certification program and the nationally accepted benchmark for the design, construction and



The Mead

Wisconsin.

Wildlife

#### LEED<sup>®</sup> Certified Facilities

There are three LEED certified interpretive centers in Wisconsin that could serve as models for green design of this facility:

► The Mead Education and Visitor **Center** at the George W. Mead State Wildlife Area near Stevens Point has platinum LEED certification (the highest level). It features five different renewable energy systems to heat, cool and generate electricity. It also features a highperformance building envelope, low toxin recycled and recyclable materials, energy efficient windows, lighting and appliances, and waterefficient plumbing fixtures. Tom Brown of Stevens Point was the



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architect. A flyer is available that details the green design features.

► The Aldo Leopold Legacy Center near Baraboo is also platinum certified, receiving 61 of a possible 69 LEED points, the most ever measured by the U.S. Green Building Council at that time. It is the first carbon neutral building certified by LEED and is a net-zero energy building. In fact, it produces 110 percent of its energy needs on-site. The building is constructed of wood harvested from the Leopold Reserve. The building was designed by Kubala Washatko Architects of Mequon. Arthur J. Boldt Construction was the general contractor and construction manager.



The Schlitz Audubon Nature Center, Milwaukee, Wisconsin.



The Aldo Leopold Legacy Center, Baraboo, Wisconsin.

► Kubala Washatko also designed the Schlitz Audubon Nature Center in Milwaukee, a gold LEED certified building which employs extensive use of natural light, with specially designed and placed window systems that reduce energy needed for lighting; a geothermal heating system that uses 90 groundwater wells and the earth's temperature to provide heating and cooling; a 10-kilowatt photovoltaic solar power system, donated by We Energies, that supplies 10 to 20 percent of the building's electricity; and low-flow plumbing that reduces water usage.

#### Specific sustainable Design Recommendations for The Ridges Interpretive Center

There are trade-offs to consider for high-tech applications. For example, it may not be within budget limitations to invest in photovoltaic or active solar hot water systems or wind generators that have long pay-back periods. These systems also can't be made invisible and may clash with existing downtown architecture.

It may be feasible and worth investigating geothermal heating and cooling, which would use a closed loop heat pump system to circulate water through bore holes. This in turn is pumped through hydronic radiant floor coils. Some staff and stakeholders have expressed a desire to include a "homey" fireplace. A high-efficiency wood biomass heater, where the fire is viewed through glass, is a possible alternative. The heaters are fired only once in the morning and radiate heat throughout the day. However, a highly efficient fireplace that draws combustible air from outside and includes glass doors for viewing would be a good compromise between an open fireplace and the ceramic wood biomass heater.

There are a wide range of low-tech/low cost sustainable design options. The choice and placement of glazing and roof overhangs should maximize winter heat gain and minimize summer heat gain. Interior thermal mass in floors, walls, and the wood stove would store energy and therefore minimize internal temperature fluctuations.

Other standards should be applied for modest up-front costs with long-term energy savings. This would include high efficiency windows, a high efficiency building shell without thermal bridges, and efficient heating and ventilation systems. These standards also contribute LEED certification points.

The Ridges has chosen to reclaim the Sandpiper Restaurant site for the interpretive building. Materials were salvaged as much as possible during the demolition of the restaurant. This will also contribute to LEED points.

#### 5. Other Exterior Site Design Considerations

#### Parking

The parking area should be a permeable surface to allow for optimal water infiltration. It should include rain gardens and vegetative screening. During peak visitation, visitors should be encouraged to use other nearby parking areas like the fire station and town hall. Bicycle storage areas should be provided to encourage alternatives to driving automobiles to the site.

#### Signage

Limestone bases and timber supports create a rustic family of signs that will create a sense of visual unity as people walk through the property. Limestone can be engraved with letters to create durable and venerable entry signs as well. Both limestone and timber are indigenous materials that are both economical and harmonious with the site.



Visitors on an interpretive hike search for critters in a wetland.

# **Chapter 6: Visitor Experience**

Visitors enjoy an interpretive hike through The Ridges to search for orchids. June 2012



## Introduction

The goal of interpretation is to connect visitors to the stories of The Ridges Sanctuary. These stories are expressed in the themes and messages detailed in Chapter 4. These themes form the framework for all interpretation at The Ridges. They are the unifying messages that help shape visitors' understanding and appreciation of the sanctuary as well as parameters that keep the program on a defined course toward its established goals.

> The interpretive center visit will set people's expectations and guide their trail experience.

## A Gateway to The Ridges

The new interpretive center will be a beacon to Baileys Harbor visitors that invites them to explore The Ridges Sanctuary. This new facility should appear to be a welcoming public gateway into a "must see" Door County treasure. Once visitors have entered the sanctuary, they will sense that this is a very special place, which is carefully managed for its ecological significance. The quality of each person's experience should reinforce the sense that this is a high caliber preserve that one is privileged to visit.

The building will prepare people to more fully appreciate their trail visit. At the most basic level, it will be a place where people can get a drink of water, use the restroom, and have their questions answered by a friendly receptionist. The beauty of the architecture and the quality of



The real story of The Ridges is discovered outside. The new facility serves as a gateway to the outdoors.

the interpretive media will reassure visitors that they have selected a worthwhile way to spend their time. The interpretive center visit will set people's expectations and guide their trail experience.

The interpretive media will include human interest as well as biological information. It will consider that all visitors are potential supporters but may not, as yet, be ecologically literate or aware of the unique attributes of this ridge and swale environment.

# Conceptual Interpretive Center Design



## Serving a Larger, More Diverse Audience

When The Ridges made the decision to create a more visible gateway facility that interfaces with the Baileys Harbor community and with tourists to the area, it also accepted the concept of increased numbers of visitors entering the facility and at least using some trails in the sanctuary.

A successful visit should be immersive, inspirational, and satisfying. Every visitor has different needs and invests in the experience with different expectations. Some nature enthusiasts are seeking to view rare plants and birds, some families are after a shared social interaction, and many vacationers are looking to recreate both physically and spiritually.

For many visitors, a trip to The Ridges Sanctuary is serendipitous and without well-defined expectations. Their pleasant "walk in the woods" can be more fulfilling if they can form some intellectual and emotional connections to the sanctuary.

For many visitors, a trip to The Ridges Sanctuary is serendipitous and without well-defined expectations.

## **Personal Interpretation**

**Personal interpretation** is the most effective technique for connecting the interests of visitors to the meaningful and unique stories of The Ridges Sanctuary. Currently, seasonal and full-time staff lead popular trail walks though the sanctuary during the summer months. Special events and programs are offered throughout the year. However, the ability to serve every visitor with a personal program or conducted experience is limited, and many vacationers do not wish to invest the time for such experiences. As a result, many if not most, visitors are left without information about the significance of the sanctuary.



Naturalist led walks have always been popular at The Ridges. Here, Emma Toft leads a group through the sanctuary.



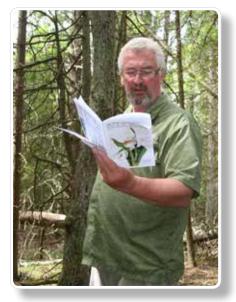
Marne Kaeske, Stewardship Coordinator at The Ridges, leads visitors on an orchid interpretive walk. (June 2012)

## **Interpretive Media**

**Interpretive media** such as exhibits, audio-visual productions, wayside panels, and trail panels are nonpersonal forms of interpretation. These media can enhance visitors' experiences by helping them make connections between the tangible resources of The Ridges and the intangible meanings that these resources represent.

At present, the primary medium available is the trail guide which is keyed to numbered posts. It is eclectic in the topics it covers and is best described as ecological in its thematic approach. Many significant themes and stories are not included in this brochure. It also requires special effort on the part of visitors who are predominantly seeking pleasurable experiences rather than information. A large percentage of trail users never enter the nature center and do not pick up a trail brochure, thereby missing any information regarding the significant stories at The Ridges.

Wayside exhibits at key locations such as the range lights and at the trailheads are needed to highlight key concepts. The kiosks at the trailheads will be ideal structures for panels, which can be created and installed at relatively low cost. In the center and in the Upper Range Light, exhibits and audio-visual media will develop holistic themes and concepts. An introductory, universally accessible trail from the new facility will reinforce concepts presented in the center. These media must go beyond providing information to developing emotional connections to The Ridges and its priceless resources.



The Ridges Sanctuary trail guide has traditionally served as the primary interpretive medium for visitors.



Innovative wayside exhibits, like these at the Crowley's Ridge Nature Center in Arkansas, can offer a more attractive and direct connection to the themes of the Sanctuary. Tactile and audio components provide multisensory experiences.



## **The Founders and Their Vision: Visitor Experience**

A variety of interpretive media will honor the work of the leaders and visionaries responsible for the creation and preservation of the ridge and swale complex at Baileys Harbor. These media will be offered throughout the visitor experience and will document the vision that inspires the work of The Ridges Sanctuary into the future.

The following provides a summary of each interpretive opportunity and its location on site. See the corresponding sections in this chapter for more details about each interpretive experience.

## Interpretive Center Media

#### Bronze Figures of Albert Fuller and Chester Cook

Bronze figures of Albert Fuller and Chester Cook seated on a bench will dramatically introduce the individuals for whom the interpretive center is named. A short inspirational story will be told of their relationship and the significance of Albert Fuller to the founding of the Sanctuary. This will be placed on the wall adjacent to the bronze figures.

#### Audio-Visual Program: "An Enduring Sanctuary"

In this theater program, the story of why and how this place was saved will be told. It will relate the vision of the founders and how that vision guides the development of the Sanctuary to this day.

# **Exhibit: The Founders and Their Vision**

- ► Albert Fuller—Champion of The **Ridges:** A corner of the exhibit hall will reveal a "botanist's table" like one used by Albert Fuller. The table will have tangible objects: Letters from Jens Jensen, Fuller's orchid book, a stereoscope through which people can look at floral specimens, a camera of the era, a walking stick—and other tools of the naturalist. The panel associated with this table will include a photo of Fuller and Cook working at such a table. The story of Fuller's childhood will be told and how he was inspired by his discovery of showy lady's slipper orchids to dedicate his life to botany.
- ► The Founders: The story of how Albert Fuller inspired the founders who were local citizens.

- ► A Model for Wisconsin: How Albert Fuller used The Ridges as a model when championing the creation of the Wisconsin State Natural Areas program in 1951.
- Logan Creek—The Vision Grows: The story of how The Ridges staff applied their vision to the purchase of this property through the cooperative efforts of the Knowles-Nelson Stewardship Program and The Nature Conservancy. It became a State Natural Area in 2007, a connection to Fuller's work.

#### Panels: "Emma Toft" and "Olivia Traven"

These dedicated women were instrumental in the creation and development of The Ridges Sanctuary. Emma's story will be told at the gift shop, Olivia's at the entrance to the Discovery Room. Both will have quotes and stories featured on selected Hidden Brook Trail panels.

#### **Discovery Room Media**

The relationship between research and the conservation vision of the founders will be explored with temporary exhibits, such as the Hine's emerald dragonfly, dwarf lake iris, and John Wilterding's moth collection.

## Staging Shelter Interpretive Panels

## Saving The Ridges Piece by Piece

This panel will document the growth of the organization, a map of the parcels and their former ownership, and Ridges recognitions for those who made these land acquisitions possible.

## **Our Volunteer Legacy**

This panel will describe how The Ridges Sanctuary was an all-volunteer effort until the Roy Lukes was employed in the mid-1960s. The panel will emphasize the dedication and passion of these volunteers who helped The Ridges develop. It will highlight the current volunteers who have inherited this legacy and form the backbone of this organization.

## Hidden Brook Nature Trail

The **trailhead** will set the stage for the experience by connecting the stories of the Founders to the natural world. At many stops along the trail, quotes and stories from the Founders will be included.



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## **Entrance Experience**

## **Entrance Signs**

A well designed entrance quickly sets visitors' expectations about the quality and purpose of a natural experience. Signage must be harmonious with the site, meet community and legal standards, and must be easily seen and understood by people passing by at "highway speeds".

The main sign identifying this building must be of a size and scale commensurate with the landscape surrounding it. The materials and the

typeface should reflect the sanctuary values and purpose. Native limestone and hand-carved cedar ties it to the site while the serif lettering conveys a solemn, graceful message that this is a serene place to slow down and enjoy nature. The Ridges logo accompanies the title of the center.

An advance warning sign at the intersection of Ridges Road and Highway 57 will prepare drivers to slow down and make a decision about turning into the parking area. Ideally this will be a large sign (approximately 4 feet x 8 feet if codes permit). If not, then even a small panel will serve the purpose if it is prominently placed.

The landscaping must be designed to accentuate motorist's views of the signs and the building. Species that grow large enough to screen the entrances of the parking area and even of the view of the building entrance should be avoided. The landscaping should integrate the site and building but not block the public view of it.

Conceptual Rendering of Entrance Sign

## Portico

Pedestrians from town and people walking from their cars in the parking lot should pass through landscaping and rustic architecture that serves to slow them down and introduce them to the nature experience. Most will pass under a lattice work that supports Virginia creeper and grape vines. Subtle organic cues reinforce the natural history theme. Artistic wooden benches carved with representative species of plants and animals line the portico.

Small reconstructed swales and ridges are integrated into the landscaping to soften views of the building and separate it from the parking lot. A loose stacked limestone wall creates a buffer as well for the benches within the portico. The walkway under this portico could include representative limestone fossils and footprints embedded in the concrete.

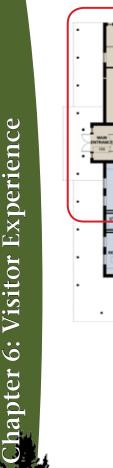
The high roofed porch outside the front doors invites entry and appears "public". The name of the center engraved above the archway entrance gracefully reinforces the importance of this place.

Carved rustic benches, like this "frog scene" in Schmeeckle Reserve, will greet visitors as they enter the building and set expectations for the experience. **Conceptual Rendering of Entrance Portico** 



## **Interpretive Center Experience**

Interpretive Space enlarged on next page

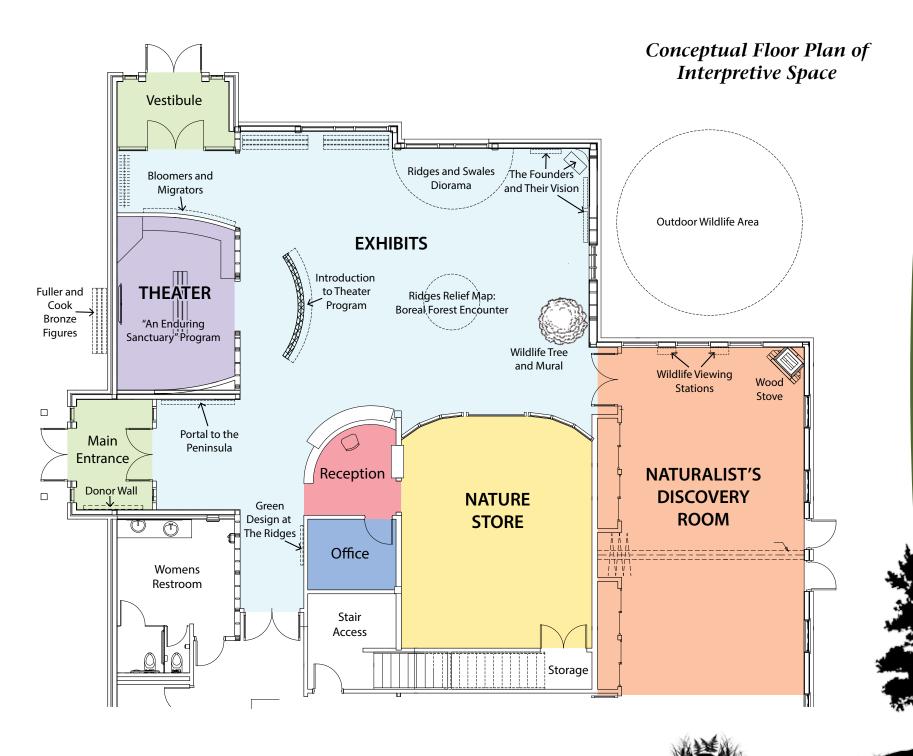


This building and its media are intended to prepare visitors for the entire Ridges adventure. When entering the room, they should sense that this will be a first-class experience and one that is worth investing time to explore.

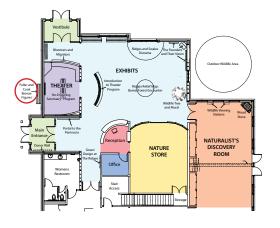
The room is spacious enough to invite entry even during periods of peak tourist visitation. It has a soaring ceiling to facilitate some exhibit components that attract attention even when the room is crowded. Large sandhill cranes will be suspended from the ceiling with wings spread gracefully as they seem to be sailing into the room above the visitors.

Optimal floor space will allow a free flow of traffic and permit casual access to exhibits. The room should not be crowded with interpretive media—**a** few important stories will be emphasized. Each media concept in this section is described with the following elements:

- 1. Purpose: This briefly explains the rationale for selecting a particular medium and justifies why that option is recommended.
- 2. Sub-themes and messages: The important stories for the media are identified with links to the themes and messages in Chapter 4. This assures that all important ideas are being addressed somewhere in the interpretation.
- 3. Objectives: Describe what the visitor will learn (educational), how they will feel (emotional connections), and what they will do (behavioral) when experiencing the media.
- 4. Description: A narrative along with graphic representations provide detail for each media concept. Illustrations provide a visual context for the concept.



A CANADA AND





Life-size bronze statues, like Abraham Lincoln as a young man in Pontiac, Illinois, possess an enduring quality that gracefully honor the people they portray.

## **Exterior Exhibit: Fuller and Cook Bronze Figures**

#### **Purpose:**

These bronze figures present visitors with a dramatic introduction to the importance of the founders to the creation of The Ridges Sanctuary. They tell people that the Fuller/ Cook Visitor Center is a memorial to passion and commitment of dedicated people pursuing a lifelong ideal—not merely a naming opportunity in response to gifted money.

#### Sub-Themes and Messages:

Sub-Theme 3: Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development. Message: 3.3

#### **Objectives:**

- To inspire visitors to feel that one motivated person can make a difference.
- To present an example of the importance of mentors to future generations.
- To make visitors aware of the real meaning of the Sanctuary as a commitment to preservation ideals to save the very best natural ecosystems for the enjoyment and inspiration of everyone.

#### **Description**:

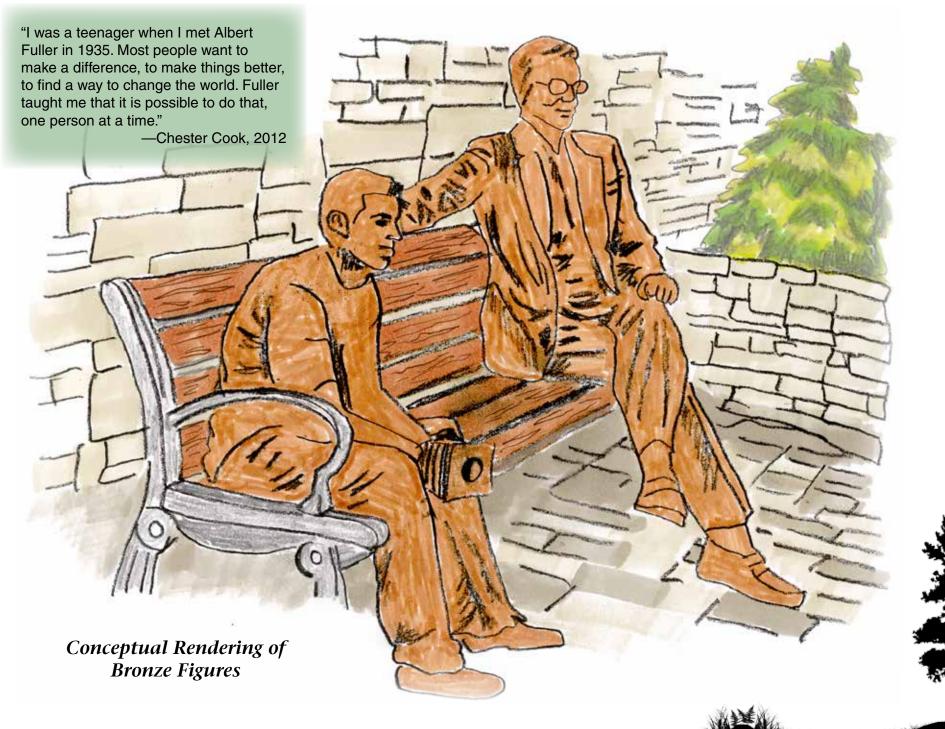
Two life size bronze figures near the entrance to the visitor center are positioned on a bench-like block of stone. They are leaning toward each other as if they are engaged in conversation. One is a thin, young man and the other an older man with thick framed glasses. They represent Chester Cook as a youth and Albert Fuller, his mentor. Bronze or a similar treatment processes a dignified and enduring appearance that is appropriate to this memorial.

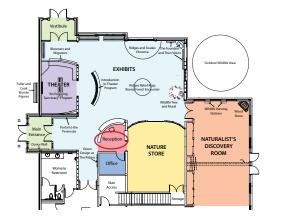
An interpretive panel near these figures tells a brief but inspiring account of these men and their involvement with the creation of The Ridges. It reads:

Albert Fuller, Curator of Botany at the Milwaukee Public Museum, was a tireless leader of the effort to save The Ridges and their magnificent wildflowers. This became a reality in 1937 with the establishment of this Sanctuary.

At the age of 16, during the Great Depression, Chester Cook worked as an assistant to Albert Fuller in a statewide botanical project. During World War II he served as a Navy lieutenant in the South Pacific. After the war he became a successful businessman in the construction field.







## **Reception Desk**

#### **Purpose:**

Upon entry to the interpretive center, visitors have a clear view of the reception desk and receptionist. Here they will receive answers to their questions and orientation to The Ridges Sanctuary and its opportunities for exploration.

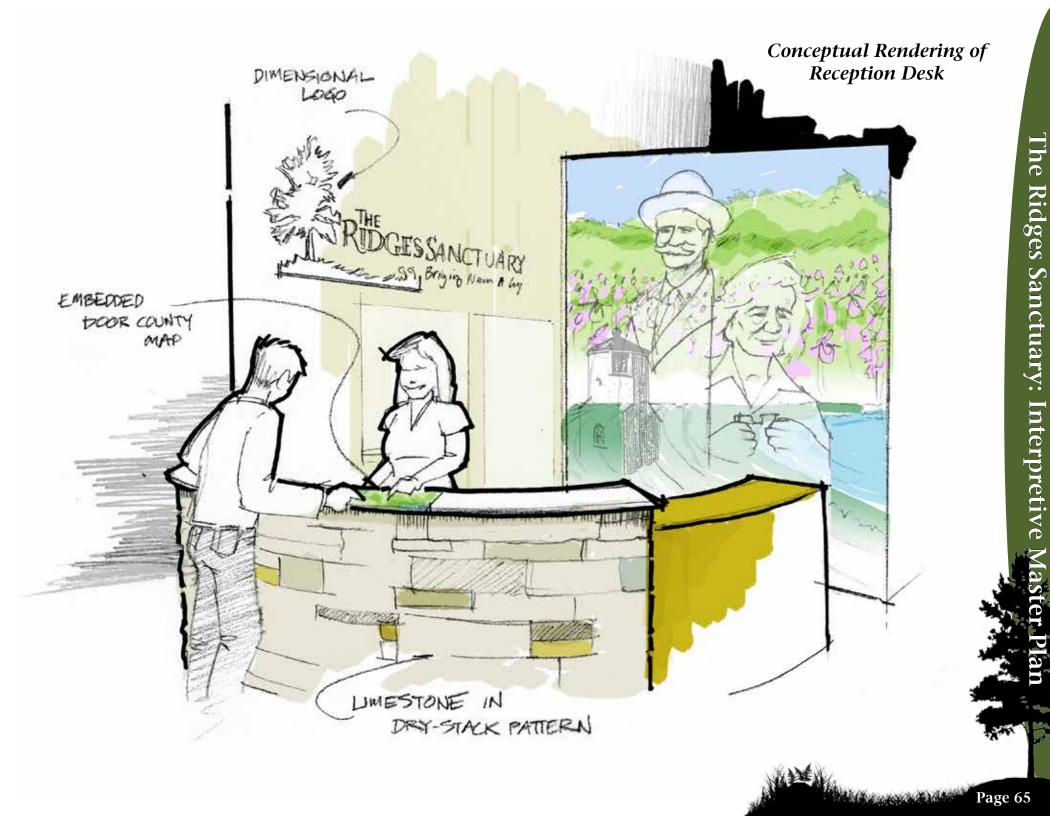


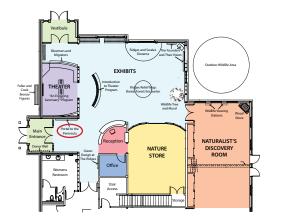
The reception desk at the Necedah National Wildlife Refuge Visitor Center demonstrates a well-lit and inviting space, which gracefully connects with the architecture of the building.

#### **Description:**

The curved reception desk is constructed of limestone and wood that sets the ambience for the entire interpretive space.

- The counter top has a high density laminate Land Sat space photo of the Peninsula with prominent geographical features clearly identified, including the Coastal Scenic Byway, state and county parks, and other natural areas that welcome visitors. This provides a visual aid for the receptionist as they orient visitors to the peninsula and The Ridges Sanctuary.
- On the wall behind the desk, an artful composite mural or changeable pictures illustrate iconic features of the Sanctuary including showy orchids, ridge and swale views, range lights and founders.
- A bulletin board (not shown) with the headline, "Welcome to The Ridges Sanctuary" announces upcoming activities including daily trail walks and docent talks or upcoming special events.
- The Ridges logo and mission statement will be clearly identified above the reception desk.
- A cash register will be installed for collecting trail fees and selling merchandise.







# **Exhibit: Portal to the Peninsula**

#### **Purpose:**

This large wall exhibit inside the entrance to the interpretive center has four purposes:

- 1. To serve as an interpretive hub for the Door County Coastal Byway (DCCB).
- 2. To show a map with the communities on the DCCB and interpret the importance of protecting the cultural and natural landscape of the peninsula.
- 3. To identify key partners in conservation, interpret their work, and identify on the map conservation areas and parks where visitors are welcome.
- 4. To assist visitors in choosing natural and cultural sites that they want to visit.

#### **Description:**

Due to its location on Highway 57, the new Ridges facility will become an important information center for travelers on the DCCB.

This exhibit in the front door alcove features a wall map, a series of photos highlighting features of the Byway, a small brochure rack, and a touchscreen computer to help travelers plan their trip on the DCCB. The exhibit will be graphically and thematically linked to the experience hub kiosks that are being developed for communities along the DCCB. The DCCB logo attached to a blue metal wave serves to frame the exhibit and ties it to the byway's design elements.

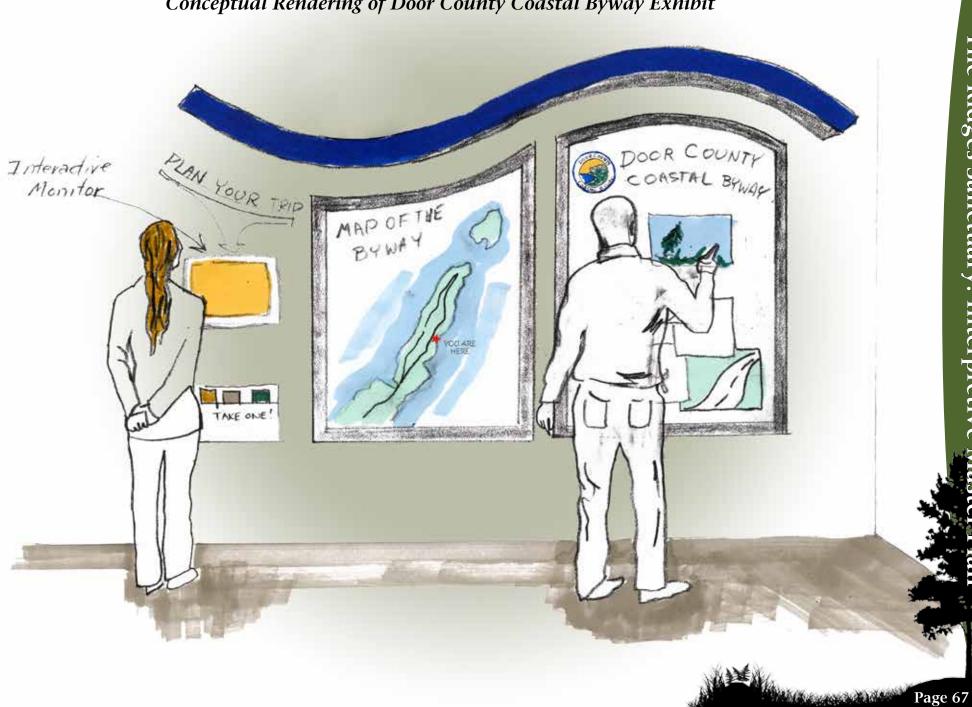
At the top of the exhibit, a headline and main message is set in large print:

# **Portal to the Peninsula** The Door County Coastal Byway

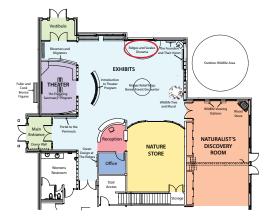
Why is Door County special? Farms and orchards, Great Lakes lighthouses, historic coastal towns, parks and nature preserves—all set on the great Niagara Escarpment.

Below this is a large map of Door County identifying the DCCB and main communities. An adjacent panel visually interprets select natural and cultural sites that travelers can visit along the byway. A touchscreen computer provides layered information for travelers to further plan their experience.

A graphic inset section interprets the "Partners in Conservation" that work to preserve the natural treasures of Door County.



# Conceptual Rendering of Door County Coastal Byway Exhibit



# **Exhibit: Ridges and Swales Diorama**

#### **Purpose:**

To focus visitor's attention on the unique ridge and swale complex that has created habitat for diverse boreal plant and animal communities and to prepare them for seeing "the real thing" on the trails.

#### Sub-Themes and Messages:

Sub-Theme 6: The ancient beach ridges are unique geologic features created since the last ice age that provide a diverse wonderland of forested ridges and wet swales. Messages: 6.1-6.7

Sub-Theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Messages: 7.1-7.12

# **Objectives:**

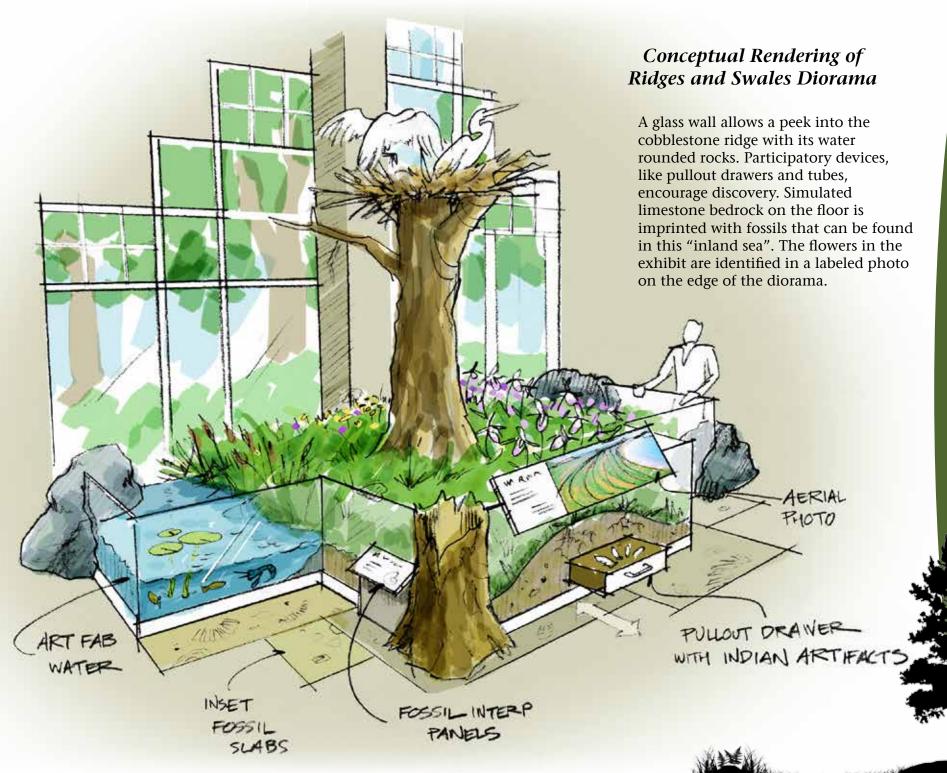
- Visitors will learn that the ridge and swale complex formed over the past 1,200 years as exposed beaches which were later stabilized with vegetation.
- Visitors will interact with tactiles, visuals and stories that describe facts and processes of ridge and swale development and introduce them to the diverse and rare plants and animals of The Ridges.

# **Description:**

This lifelike diorama is the center of attention in the main hall. It is visually attached to a restored ridge and swale that sweeps up to this window from the woods and that culminates as this indoor exhibit. A large, detailed aerial photo near this diorama shows the complex patterns of these ridges and swales and gives clues to their lake shore origins.

This exhibit is alive with dramatic reproductions of the rare plants and animals that live in this boreal forest.

The area adjacent to the diorama is rich with sensory objects like "scent boxes" that lure viewers into smelling odors like trailing arbutus and balsam fir. A swale filled with simulated water invites views of crayfish, their chimneys, and of the frightful looking dragonfly larvae that seek shelter in the crayfish holes during droughts. A small panel describes the endangered Hine's Emerald Dragonfly which includes a real specimen preserved in a block of resin.



The Ridges Sanctuary: Interpretive M

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A CANADA AND

# Audio-Visual Program: "An Enduring Sanctuary"

#### **Purpose:**

To provide a holistic overview of the history and significance of The Ridges Sanctuary

# Themes and Messages:

Primary Theme: The Ridges is a renowned sanctuary, created through the vision and dedicated efforts of volunteers, to preserve diverse and rare plants and animals living within its classic beach ridges and swales.

# **Objectives:**

- Visitors will learn the story of why and how this place was saved; the unique spirit of the Sanctuary and its grassroots beginnings.
- Through seasonal images along the trails, visitors will be surprised at the diversity and beauty of plants and animals in The Ridges.
- Visitors will learn about the processes that created this ridge and swale complex.
- After viewing this video, visitors will be motivated to walk The Ridges trails and experience the things described in the video and support the Sanctuary by becoming a member.

# **Description:**

A mini-theater within the lobby will provide a comprehensive overview of The Ridges. It will have comfortable, moveable seating facing a highdefinition flat-screen TV. The program will include interviews and narration that tell The Ridges Sanctuary story through video taken on the trails throughout the year, and historic still images and film.

Outside the mini-theater, a curved baffle wall has the title AN ENDURING SANCTUARY emblazoned across the top. Below it are "movie posters" that include images and inspiring quotes from the presentation.

The production should be limited to about 10 minutes to ensure that all visitors will take the time to view it. It must be fast paced with limited narration and dramatic images that carry the messages. This will require a tight script and storyboard.

# **Storyline Concepts:**

Opening Scene—View from a sailing ship, pitching dramatically in a Lake Michigan gale, aims for the entrance to Baileys Harbor. It aligns the red and yellow light of the Upper and Lower Range Lights to enter the safe waters of the harbor.



Scene 1—*Why the Range Light 40 was preserved.* Vintage photos of the range lights are shown as the narrator tells human stories of the keepers and the history of the light.(" The light station was a home.") This vignette concludes in 1935 when the Lighthouse Service deeded the "Range Light 40" to Door County for a recreation trailer park.

Scene 2—*Making connections to the founders and their values.* (Use vintage photos and different voices to quote the founders and express their passion for saving the ridges. This should be quick paced). Local residents Olivia Traven and Mrs. James McArdle were alarmed when workers began cutting trees and filling swales for the park. Sounds of earth movers can be heard behind the voices. Their protests reached Milwaukee Museum botanist Albert Fuller who had been studying the rare plants of the ridges and swales in Baileys Harbor. He argued forcefully that these orchid ridges be set aside as a "wildlife sanctuary" and "leave the trees, shrubs and all other vegetation in their natural condition." Other voices such as Jens Jensen and Emma Toft joined in the fight. In 1937 they won their battle and the "Ridges Sanctuary for Plant and Animal Life" was established, the first land trust in Wisconsin.

Scene 3—*Growth of Wisconsin's first land trust.* (Show vintage photos of the development and activities of The Ridges- with panning shots of old photos like a Ken Burns documentary). Over the years this small group of founders worked tirelessly to add more land to the sanctuary. These volunteers constructed trails and led tours in the sanctuary. By the 75th anniversary in 2012 The Ridges Sanctuary had grown from its original 40 to 1,600 acres of ridges and swales. Show a dramatic "pull back" on an aerial photo from the original forty to the full size in 2012.

Scene 4—*The natural history of a special ecosystem.* A silent, soaring flyover from the harbor shows the ridges and swales that are protected in the sanctuary. The scene shifts to the shoreline where new beaches are forming (the sound of wind and waves). A video animation takes the viewer across the ancient ridges and swales, showing how they have developed over their 1,200 year history. The cool breezes from Lake Michigan have provided conditions for this isolated boreal forest and its Canadian carpet of plants.

Scene 5—*The Ridges as a living laboratory.* A video sequence takes the viewer along trails through the seasons with images of rare flowers and wildlife. Researchers describe their ongoing studies of Hine's emerald dragonflies, dwarf lake iris, invasive species, and what a unique site this is for so many special species.

Closing Scene— A call to action. (With video showing visitors exploring The Ridges). Viewers are invited to explore the Hidden Brook Trail, look out from the Upper Range Light, or perhaps even experience the more remote areas of the sanctuary, such as Logan Creek. "Become a member of Wisconsin's first wild lands trust."



**Conceptual Rendering of Mini-Theater** 



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Children enjoy touching a Solid Terrain Model relief map.

# **Exhibit: Ridges Relief Model**

#### **Purposes:**

To offer a tactile experience with the ridges and swales of the sanctuary and to graphically interpret how they were formed. To interpret (through air movement and graphics) how the cool in-shore air creates conditions suitable for boreal forest.

# Themes and Messages:

Sub-theme 6: The ancient beach ridges are unique geologic features created since the last ice age that provide a diverse wonderland of forested ridges and wet swales. Messages: 6.1-6.7

Sub-theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Messages: 7.1-7.12

# **Objectives:**

- Visitors will be physically engaged by the opportunity to touch the ridges and swales and by the air moving over them.
- Visitors will learn how the ridges and swales are formed and why a "Canadian carpet" of boreal forest species is found here.

 Visitors will gain an appreciation for the unique and special place they are visiting.

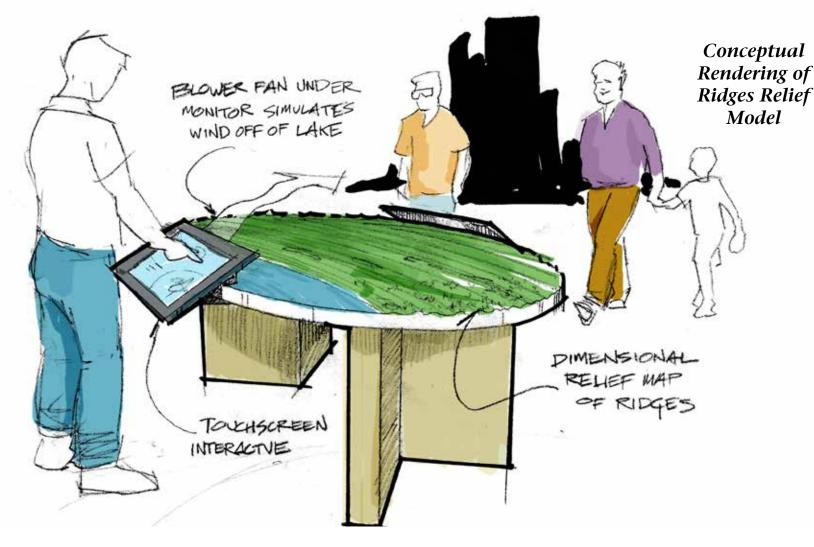
# **Description:**

A relief model offers a tactile experience for visitors. Three dimensional maps have always been popular exhibits in national parks and other natural areas because it makes a geographical story comprehensible to visitors. It will be mounted on a rock and wood base that unifies it with other exhibit components.

This is a digital reproduction of satellite and flat maps printed onto a computer generated relief surface cut from polyurethane foam. Solid Terrain Models<sup>™</sup> could provide this fabrication (www.stm-usa.com).

The model features overlays of The Ridges trails, range lights, and other physical developments. It includes the harbor, Toft Point, and all of the ridges. It has an exaggerated relief to emphasize the alternate ridges and swales. The model should be oriented to the real landscape seen outside.

On the lake shore and harbor side of the relief model, a fan blows air across the ridges and swales of the model. (Note: This air movement could be

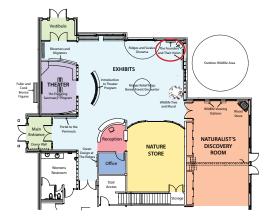


motion activated). This simulates the cool, moist air that bathes the ridge and swale complex.

Around the outside of the model, angled touchscreen interactives interpret the following topics (the number of monitors will reflect the size of the model and the diversity of stories):

- A video illustrates the effects of the cool air that provide the physical conditions which maintain the remnant boreal forest found here.
- Visitors interactively scroll through time over the past 1,200 years and see the development of the ridge and swale landscape. The view is keyed to specific ridges on the relief map.
- Users explore captioned photos of plants that are endemic to boreal forests.
- Visitors watch real-time data that visually shows bird migrations that follow the lake shoreline.
- Users discover the historic flow of glacial rivers that deposited the deep burden of sand and gravel that formed The Ridges.





# **Exhibit: The Founders and Their Vision**

#### **Purpose:**

To honor the work of the leaders and visionaries responsible for the creation and preservation of the ridge and swale complex at Baileys Harbor and to help people realize that each of us can make a difference.

#### Sub-Themes and Messages:

Sub-Theme 3: Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development. Messages: 3.1-3.10

# **Objectives:**

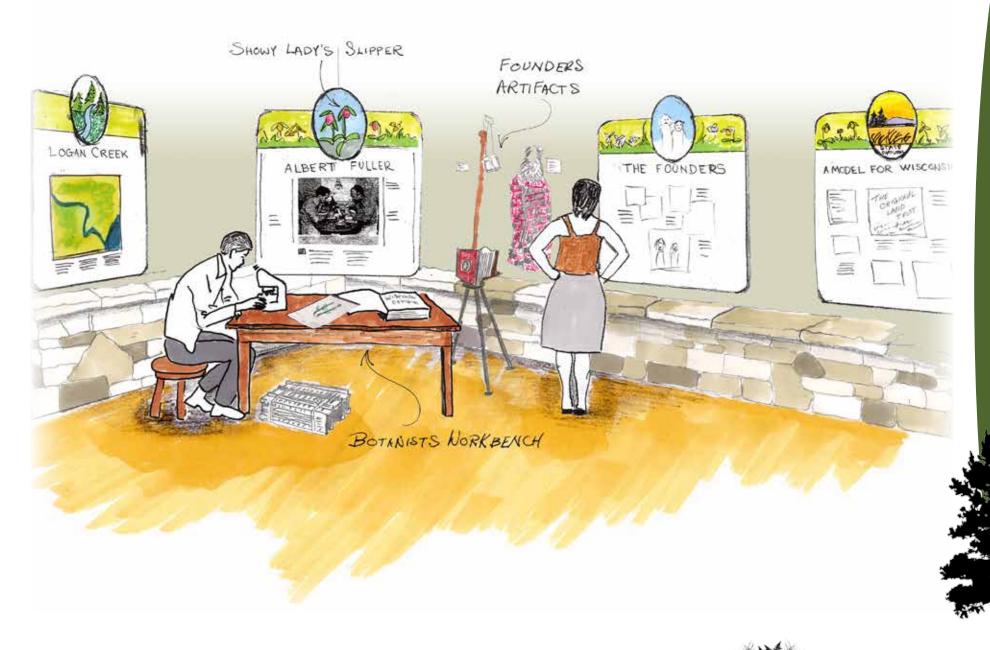
- Visitors will be inspired by the words and works of the founders of The Ridges Sanctuary.
- Visitors will learn how The Ridges Sanctuary developed over the years since 1937.
- Visitors will discover the unique spirit of the sanctuary and its grassroots beginnings.

- Visitors will learn how Albert Fuller used The Ridges Sanctuary as the model to form the Wisconsin State Natural Areas Program
- Viewers will appreciate that the founders all came from different backgrounds but shared a common vision.

# **Description:**

A corner alcove in the interpretive room of the visitor center is devoted to those who created and sustained The Ridges Sanctuary. This space contains approximately 8 feet of wall space on the north side (facing the restored ridges and swales) and 10 feet of wall space on the east side (facing the wildlife viewing area). In the corner of this space is a tabletop and wall exhibit that features Albert Fuller.

# Conceptual Rendering of The Founders and Their Vision Exhibit



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#### Young Chester Cook (*left*) served as a driver and botanical assistant to a visually impaired Dr. Albert Fuller (*right*), shown here in their botany trailer lab.

# 1. Albert Fuller Exhibit

In the corner of this triangular space is a free-standing component interpreting Albert Fuller, namesake of the new facility and catalyst for the creation of the sanctuary.

A large photo of Albert Fuller and Chester Cook working together is mounted on a graphic panel behind a real "botanist's work table."

Objects on the table include the tools of a botanist, such as a loop magnifier, microscope, plant press, herbarium sheets, field guides, etc. Visitors can touch and explore these objects to discover more about Fuller and his research. For example, looking through the microscope reveals dissected parts of an orchid. The plant press will have real specimens that were collected from The Ridges over time. A photo album illustrates Fuller's career as a botanist and conservationist.

The graphic panel introduces the essence of Albert Fuller through his passion for the showy lady's slipper, which has become a symbol of The Ridges Sanctuary. An inscription on the graphic panel might read:

Long live the queen! May many future generations of admirers come to her court and give her their oath of fealty.

—Albert Fuller

The showy or "queen's" lady's slipper was Fuller's favorite. As a boy he and his sister discovered them near their Kinnickinnic River farm. They were "entranced by their regal beauty." Thus began his lifelong passion and career as a botanist and preservationist.



The showy lady's slipper helped to fuel Albert Fuller's passion for plants.

Three additional graphic panels, one to the left and two to the right of the Fuller exhibit, will interpret the following stories:

### 2. The Founders

Interprets how Albert Fuller inspired the founders who were local citizens. The Ridges Founders came from very different backgrounds and careers, but shared a love for neighbors and wild places. Botanist, carpenter, inn keeper, librarian, homemaker, landscaper, and lawyer united in the common cause of saving this natural treasure for future generations.

# 3. A Model for Wisconsin

Reveals how Albert Fuller used his experience at The Ridges as a model for the development and protection of a statewide system of Scientific Areas. Championed by Fuller, Aldo Leopold, John Curtis, and Norman Fassett, the Wisconsin State Natural Areas Program was created in 1951, the first statesponsored program of its type in the United States.

Other Ridges founders, such as Jens Jensen *(left)*, Emma Toft *(center)*, and Olivia Traven *(right)*, will be featured on graphic panels dispersed in the visitor center and along the nature trail.



# 4. Logan Creek—The Vision Grows

Describes the story of how The Ridges Sanctuary staff applied their vision to the purchase of this property through the cooperative efforts of the Knowles-Nelson Stewardship Program and The Nature Conservancy. Logan Creek was designated a State Natural Area in 2007, a fitting connection to the statewide program that Albert Fuller helped to create.

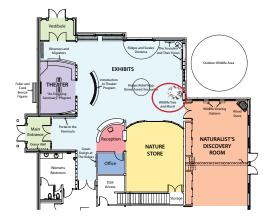
Other interpretation about specific founders will be dispersed elsewhere in the visitor center and along the interpretive trail. For example, a more complete interpretation of Emma Toft will be included near the Nature Store and Olivia Traven near the Discovery Room.

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# **Exhibit: Wildlife Tree and Mural**

#### **Purpose:**

To create an organic element that appeals to bird watchers and nature enthusiasts and to draw visitors to the entry to the Naturalists Discovery Room and wildlife viewing area.

#### Sub-Themes and Messages:

Sub-Theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Message: 7.7

#### **Objectives:**

- Visitors will discover wildlife typical of The Ridges boreal forest.
- Visitors will be drawn into the Discovery Room and Gift Shop by the arching limbs of a white pine.

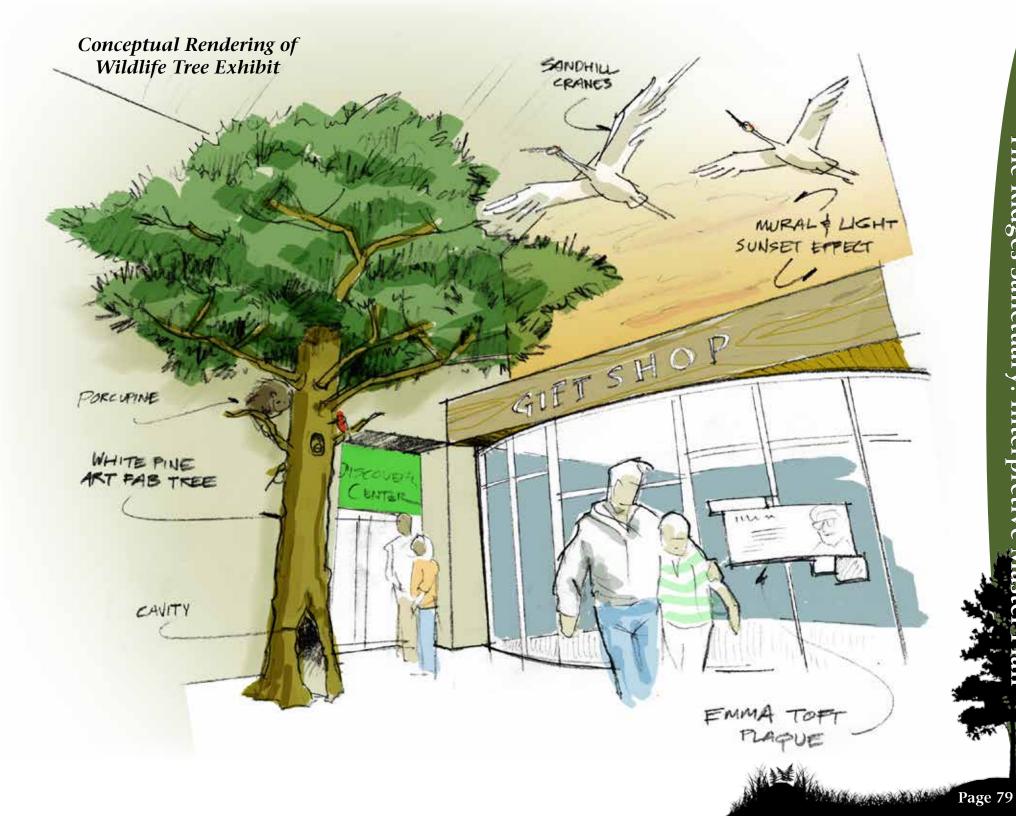
# **Description:**

A life-size white pine frames the entry to the Discovery Room. With its characteristic loose branches, a white pine serves as an excellent scaffold for exhibiting mounted specimens or models of wildlife that might be seen in the sanctuary. A large branch arches over the entrance to the Discovery Room. Specimens would include neotropical birds, a pileated woodpecker, a porcupine and other wildlife.

A mural painting on the large white wall over the Nature Store continues the nature theme. It includes an image of the boreal forest at treetop level with a family (or flock) of sandhill cranes in a light blue sky with puffy white clouds.

This provides another opportunity to interpret the boreal forest that is found here and the fact that it is a significant resting area for neotropical migrants. Nearby is the relief model that provides specific interpretation of the boreal forest and why it is found here. An interpretive panel could be mounted on the wall next to the tree trunk that identifies the specimens illustrated or mounted here. Bird and forest sounds could be triggered when someone walks near the tree.

A cavity opening in the truck on the tree will allow entry for children. Inside, they will come face to face with cavity dwellers.



The Ridges Sanctuary: Interpretive Master

# WERKER <td



Discovery Rooms, like this one at the McGregor Museum in South Africa, feature changing exhibits that encourage hands-on exploration.

# Naturalist's Discovery Room Experience

#### **Purpose:**

To engage visitors in hands-on experiences with objects that relate to the history and ecology of The Ridges Sanctuary. It is a launching pad to outdoor discovery.

#### Sub-Themes and Messages:

This exhibit is always changing and experiential and could relate to any subtheme and message

#### **Objectives:**

- Visitors will engage all of their senses in exploring objects from The Ridges.
- Visitors will make discoveries about these objects from The Ridges.
- Visitors will interact with each other in their search for meanings in these objects.
- Visitors will connect to personal stories of research at The Ridges.

# **Description:**

This is a very organic and accessible exhibit. Around the room are thematic table-top exhibits integrated with wall mounted or center mounted vertical graphic panels. These exhibits are created in-house. Some of the exhibits or portions of them are permanent (e.g. a bird exhibit showing volunteer and research activities); others are temporary and ad hoc (e.g. a touch table). The wall panels attract attention and provide information and direction for interacting and learning from the exhibit. Stools allow families to sit and explore and learn together.

The exhibits contain found objects from the Sanctuary and things that allow visitors of all ages to make discoveries about The Ridges. Viewing devices such as a child manipulated camera with a flexible neck magnifies and projects these objects onto a flat screen monitor. Kids can explore fossils in limestone, shelf mushrooms, an antlion terrarium, a "Canadian Carpet" terrarium, animal pelts, etc. Books and other aids provide direction and information related to their exploration.

When the center is busy, a volunteer naturalist helps to facilitate investigations. The volunteer will also have access to a **"naturalist cart"** for answering visitors' questions about specific topics—for example, helping to identify wildflowers or insects.

#### **Prototype Discovery Room Exhibit:**

"Insects of The Ridges Sanctuary" This temporary exhibit will feature:

► Solitary bees: A window next to the exhibit table provides a view of wild solitary bees attracted to nesting boxes. Information is provided about bees and their importance in pollination. A graphic panel, perhaps with a cut-away model of an orchid and a video of a bee visiting an orchid, will illustrate how orchids are specialized to allow

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SMELLS OF THE FOREST

specific bee or other insect pollinators SOLITARY to enter. BEES Mounted solitary bees can be viewed with a

flexible neck

camera that magnifies objects on a flat screen monitor. Sample nest boxes will inspire visitors to make their own.

▶ John Wilterding's moth collection (1986): Photos and display cases highlight this unique collection, demonstrating stewardship through research and education. The insects can be viewed up-close with a flexible neck camera. Captions on the photos describe John's study and results.

HINES EMERALD

DRAGON FLY

JOHN BECANE AN ENTONOLOURS

- ► Hine's emerald dragonfly: The exhibit will highlight the only dragonfly to be listed as an endangered species. A casemounted Hine's can be viewed with the flexible neck camera. The graphic panel will describe the work of the Sanctuary in partnership with the U.S. Fish and Wildlife Service and other researchers to study and protect the insect and the swales where they live.
- ► Antlions: A terrarium will answer the question, "What are all those cones in the sand along the trails?" A graphic panel will illustrate the life history of this insect. When a docent is present, children may even get to "feed the lion".

FLEXIBLE NECK

CAMERA

MOTHS OF DOOR CO

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# **Discovery Room: Wildlife Viewing Stations**

#### **Purpose:**

To invite visitors to view and learn about wildlife attracted to feeding stations in the The Ridges "backyard."

# Themes and Messages:

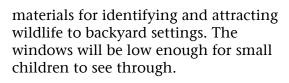
Sub-Theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Message: 7.7

# **Objectives:**

- Visitors will observe and identify birds and other wildlife attracted to the viewing area.
- Visitors will use binoculars and field guides to identify wildlife.
- Visitors will learn how to attract solitary bees, birds, butterflies, bats, and other backyard wildlife.
- Visitors will be encouraged to attract and observe wildlife in their own backyards.

# Description:

The Discovery Room will have tall observation windows that look out onto a natural wildlife viewing area. The space will feature seating, viewing aids, and interpretive



The outdoor wildlife area will include:

- ► Bird feeders (seed, suet, nectar)
- ▶ Bird, bat, and solitary bee houses
- ► A water feature and bird bath
- Plantings that attract butterflies and other insects
- Plantings that produce seeds and berries for birds and small mammals

The indoor viewing area in the Discovery Room will include:

- ► Binoculars
- Field guides to birds, insects, and mammals
- Examples of solitary bee houses, bird houses, bat houses, and bird feeders
- Interpretation on the importance of solitary bees in pollinating orchids and other flowers endemic to The Ridges

#### Vector Vector

# **Conceptual Rendering of Wildlife Viewing Station**



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# The Ridges Sanctuary: Interpretive

# Wall Exhibit: Green Design at The Ridges

#### **Purpose:**

To take advantage of the educational value of the green building features and to earn a LEED point, the U.S. Green Building Council requires active instruction. An exhibit will detail the green design features and benefits of the site and building.

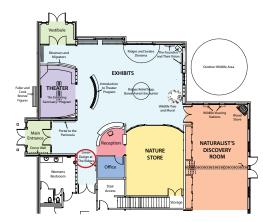
#### **Objectives:**

- Visitors will learn about the green design features incorporated into the building and site development.
- ► Visitors will view live Eco-Screen<sup>TM</sup> data that demonstrate the benefits of green design.
- Visitors will use The Ridges as a model to apply green design principles in their own projects



# **Description:**

This permanent exhibit will be installed on the wall opposite of the womens restroom. It will feature visual descriptions of green design incorporated into the interpretive center and landscaping, tactile sustainable materials that were used inside and outside the building, and a touch-screen interface for viewing current energy use and savings.





The Necedah National Wildlife Refuge Visitor Center has a "Green Design" exhibit that visually interprets sustainable features of the building.

A product like the ALC Eco-Screen provides an intuitive touchscreen interface for displaying live data and sustainable features of the building (courtesy of Automated Logic, www.automatedlogic.com).



# **Nature Store**

#### **Purpose:**

To provide visitors with Door County and nature-themed educational items and souvenirs.

# **Description:**

This large and inviting space will be furnished with organic, rustic display furniture and casements. The style of the furnishings will complement the exhibit design and wall treatment of the exhibit room.

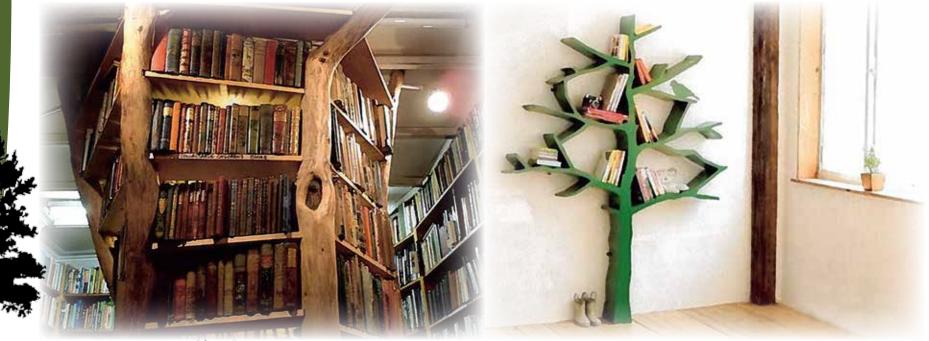
The inventory should reflect the purpose of the gift shop as an extension

of The Ridges' mission. This could include—

- Books and digital media geared to all ages on topics such as The Ridges, Door County, karst, sustainable design, flowers, birds, conservation, etc.
- Books about and written by the founders, like *Siftings* by Jens Jensen, *Toft Point* by Roy Lukes, and *Journeys in Green Places* by Virginia Eifert.
- Locally made arts and crafts including bird, bee and bat feeders and houses.



- Apparel with logo of The Ridges.
- Door County jams, jellies, and other preserved foods could be carried here in modest inventories.



The gift shop will feature organic, rustic design in a style similar to the examples above.

# **Exhibit: Bloomers and Migrators**

#### **Purpose:**

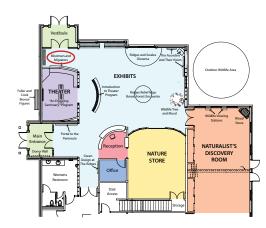
To interpret the current phenological events that visitors might see or experience along the trails.

#### **Description:**

As visitors exit the interpretive center for the trail, they encounter an exhibit mounted on the curved wall of The Ridges Theater (the wall opposite the exit). At the top in bold letters is the heading, "**Bloomers and Migrators**" They learn about phenology events occurring at the Sanctuary and what they can expect to see along the trails. This exhibit is continually updated by staff and volunteers. Some possible components include:

- An area for photos and identification of plants currently in bloom. This includes a wall mounted display so that photos can be viewed and for volunteers to add or delete photos.
- A Velcro board for mounting pictures from a bin. This will be at "kid's level" so they can display things that they saw on the trail.





- A white board on which visitors record current sightings of interest to others.
- A digital photo frame that sequences through photos submitted by visitors (and uploaded by a volunteer). It includes the date, name of the contributor, and description of where it was taken.
- A touchscreen flower database to allow visitors to search flora by color and season.
- A phenology timeline that records and illustrates: dates of flowering, dragonflies emerging, and bird migrations.

An exhibit at the Necedah National Wildlife Refuge Visitor Center features a changing LCD screen with current events and photos.





# **Transition to the Trails**

# **Shelter Building—Staging Area**

During peak use periods, when the center will be crowded, a quiet place is needed to organize groups for trail walks and for small program presentations. A shelter building can economically satisfy these needs in an inviting and intimate way.

It should be located just off of the trail that leads to the main trail head, and be buffered by vegetated mounds. When not being used for programs, it can serve as a picnic shelter for family groups and casual visitors. It will provide a convenient gathering area for people when the main building is closed. Moveable bench seating will provide for flexibility of uses.

The structure should be of a rustic architectural style that complements the larger center. It should be sheltered from the traffic noise of Highway 57 and the prevailing winds that come from the same direction. A limestone fireplace and wall would be the ideal buffer from these distractions. Wooden timber supports, similar to the ones that support the portico on the center building, add a unifying, organic element to the structure.

Conceptual Rendering of Staging Shelter

# **Shelter Building Interpretation: The Ridges Legacy**

# **Conceptual Rendering of Shelter Building Interior**

#### **Purpose:**

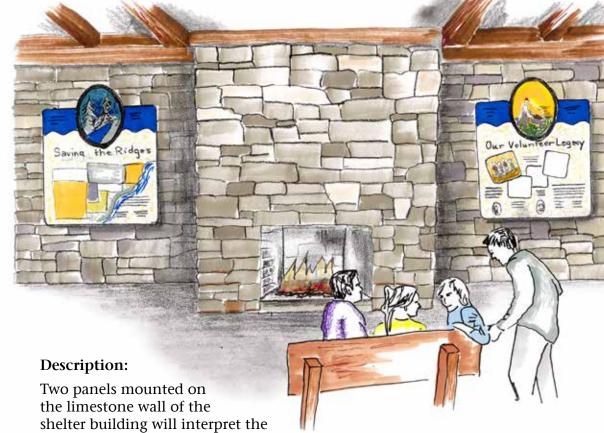
To honor those who contributed to the growth of the Sanctuary and to honor the volunteers who have always formed the backbone of the organization.

#### Sub-Themes and Messages:

Sub-Theme 3: Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development. Messages 3.1-3.10

#### **Objectives:**

- Visitors will view a map of the Sanctuary that shows the parcels that were added through the years and will learn about individuals who helped save each parcel.
- Visitors will be surprised at the size of the Sanctuary and inspired by the dedication and effort that made this possible.
- Visitors will learn that for the first 30 years The Ridges Sanctuary was an all-volunteer organization and that volunteers are still the backbone of the organization.
- Visitors will be encouraged to become a volunteer and contribute their efforts to the continued growth of The Ridges Sanctuary.



following:

- Saving The Ridges Piece by Piece: Documents the growth of the organization, shows a map of the parcels and their former ownership, and gives recognition for those who made these Ridges land acquisitions possible.
- Our Volunteer Legacy: Describes how The Ridges Sanctuary was an

all-volunteer effort until Roy Lukes was employed in the mid-1960s. The panel will emphasize the dedication and passion of these volunteers who helped The Ridges develop. It will highlight the efforts of current volunteers who have inherited this legacy and who now form the backbone of this organization.

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Interpreting the process of mitigating kerosene contamination at this site will help visitors understand the challenges of living in a karst landscape.

# The Ridges "Backyard" Wayside Exhibits

# **Purpose:**

To make visitors aware of the interconnectedness between this remediated and restored site, groundwater, and Lake Michigan. Panels will interpret the value of Baileys Harbor and The Ridges to migratory birds and preventing the impact of runoff on the largest whitefish spawning grounds on Lake Michigan. Finally, the features incorporated in the landscape around the building will encourage visitors to replicate these practices in their own backyards.

# Themes and Messages:

Sub-Theme 5: The Door Peninsula is a typical Karst landscape with all of the benefits and problems associated with surface and groundwater. Messages: 5.1 and 5.2

Sub-Theme 6: The ancient beach ridges are unique geologic features created since the last ice age that provide a diverse wonderland of forested ridges and wet swales. Messages: 6.1 and 6.7

Sub-Theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Messages: 7.7 and 7.12

# **Objectives:**

- Visitors will be pleasantly surprised to learn that the landscape around the building has been restored from one that was once developed and contaminated.
- Visitors will be motivated to create their own wild landscape so that they can enjoy wildlife and contribute to a healthier ecosystem.
- Visitors will understand the strands that connect the preservation of The Ridges to providing a sanctuary for neotropical migrants and protecting whitefish spawning grounds.
- Visitors will become aware of Door County's karst topography and its dynamic impact on groundwater.
- Visitors will realize that we can correct many of the environmental problems that we have inadvertently created over the years.

# **Description:**

Three interpretive panels in standard low profile supports will be placed overlooking the restored ridge and swale area between the interpretive center and the Hidden Brook trailhead. The three panels include:

► Living in Karst Country: Tells the story of Door County's Karst backbone (Niagara Cuesta) of underlying bedrock and its effect on groundwater. It illustrates the remediation process from the fish boil kerosene spillover and explains how human uses impact the quality of our environment. The tone should not imply blame so much as an attitude that we learn from our past problems and responsibly find better ways to do things. Showing how the Sandpiper Restaurant corrected

NESTING

the kerosene spillage would be a positive and practical example that gives credit to the private business owner.

A Sanctuary for Travelers: Describes how preservation of The Ridges protects habitat as a stopover for migratory birds (could highlight osprey nest) and prevents runoff that would impact the whitefish spawning grounds off the coast—the largest spawning ground for whitefish in Lake Michigan.

Provide a Place for Wildlife: Addresses backyard wildlife habitat and demonstrates some practices that visitors can incorporate into their own yards. It will focus on the features of the wildlife viewing area and restored habitat around the interpretive center. Providing food, water, and cover will be emphasized as well as structures such as solitary bee houses, chimney swift towers, bird houses and other ways to make your backyard wildlife friendly.

EEDING



The Hidden Brook Nature Trail will provide opportunities for visitors to observe wildlife of the ridge and swale habitat.

# **Hidden Brook Nature Trail**

This trail is the "Grand Entry" to the sanctuary. It is a visual invitation to all interpretive center visitors to walk in the woods. It introduces visitors to the place, its purpose, and rules. It sets their expectations and gets them excited about discovering new things.

#### **Purpose:**

To provide visitors an inspirational experience in the unique ridge and swale habitat of the Sanctuary, and to interpret why this is the most biologically diverse landscape in Wisconsin.

#### **Themes and Messages:**

Sub-theme 3: Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development. Messages: 3.6

Sub-theme 6: The ancient beach ridges are unique geologic features created since the last ice age that provide a diverse wonderland of forested ridges and wet swales. Messages: 6.1-6.7

Sub-theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Messages: 7.1-7.12

### **Objectives:**

- Visitors will learn the natural history of the ridge and swale complex.
- Visitors of all ages will be engaged in multi-sensory exploration of the ridges and swales.
- Visitors will be inspired by quotes from founders who expressed the significance of The Ridges Sanctuary.

#### Description:

The 8-foot wide wooden boardwalk will permit groups and wheelchairs adequate room to pass each other on the trail. It will wind invitingly into the cool cedar forest and encourage walkers to stay on the well-defined tread way.

All interpretive stations along the trail will support this primary theme:

# Primary Theme of the Trail

The ridges and swales combine with the cool, moist climate of Lake Michigan to create a rich environment where rare boreal plants flourish.

# Conceptual Layout of Hidden Brook Trail

Existing Trail System

Gateway to the Range Light 40

> Large White Pine At Home in Acid Bogs A Diverse Environment

Wildlife of the Swales

Dwarf

Lake Iris

**Boreal Forest**-

A Relict of Cooler Times

Rebirth of a Resilient Ecosystem

A Watery Refuge

Hidden Brook: A Bridge to the Past

A Cool and Diverse Landscape

Hidden Brook Trailhead

Proposed Interpretive Center Restored Ridges and Swales The Ridges Sanctuary: Interpretive

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# **Trailhead: Gateway Into a World of Ridges & Swales**

The trailhead kiosk will be constructed of rustic timbers and stone. A map, rules, and photographs of highlights that can be seen along the trail will be displayed on full color panels within this kiosk. The kiosk is designed to motivate people to hike the trail.

The same serif lettering and Ridges logo that was used on the main entry sign to the center is replicated on this welcome panel. This panel sets the tone for the entire trail experience. The purpose of The Ridges Sanctuary, Inc. is succinctly stated on a small panel with a request for fee payment. On another panel a map shows people the trail length and difficulty. Photographs of significant destinations along the trail motivate people to explore.

A brief, but dominant, paragraph invites people to enjoy this unique experience and introduces the primary theme of the trail interpretation. A possible inscription might read: You are entering a world where the rhythm of wind, water, and time has sculpted a landscape of ridges and swales. Over eons this land has been softened by the growth of an exquisite community of boreal forests, bogs, and fens.

Take this trail and learn how the collective wisdom and passion of the founders saved this sanctuary for future generations.

Walk mindfully through this sanctuary and enjoy the moment!



Conceptual Rendering of Trailhead Kiosk

# The Ridges Sanctuary: Interpretive

# **Stop 1: A Cool and Diverse Landscape**

The first interpretive wayside will introduce people to the concept of the ridges and swales and their importance to the rare plant life here. It helps visitors understand that these ridges are the result of fluctuating lake levels.

Gracefully carved wooden supports and elegant full color interpretive panels are harmonious and respectful of the site. An important concept here is that Lake Michigan's cool moist air, coupled with the diverse micro-environments, are a recipe for healthy populations of boreal flowers and insects. The dolomitic pavement and cobble beaches create a rich calcareous substrate where rare plant communities can thrive.

# Concept Layout of Nature Trail Wayside Exhibit







A carved sign support at Schmeeckle Reserve connects to the lake setting.





# Stop 2: Hidden Brook: A Bridge to the Past

The second stop along the trail is at the brook itself. Here an arching bridge invites a view of the sun dappled stream and is a place where people will want to linger. A carved bench or swinging bench allows visitors to take in the serene environment while reading inspiring messages from the founders such as Jens Jensen's quote about why this is a sanctuary instead of a park. *"The true value of a sanctuary is spiritual..."*  Another panel will interpret Hidden Brook with the words, "Hidden Brook, beautiful when flowing, was excavated years ago in an attempt to drain the swales so pastures, fields, and houses could be built in the wetlands. The swale marshes are essential to the survival of the endangered emerald dragonfly and countless other plants and animals."

#### Conceptual Rendering of Hidden Brook Bridge





# **Stop 4: A Watery Refuge**

A trail branches out to an accessible swale overlook which permits visitors to view the sunny swales.

A panel installed on the overlook railing interprets swale ecology with an inset about the endangered Hine's emerald green dragonfly and a tactile dragonfly mounted on it. This panel includes participatory devices such as flip boards that show the top of a crawfish hole you flip it and see dragonfly nymphs inside. This illustrates the symbiotic relationships between species, in this case commensalism, where one species benefits without harm to the other.

# **Stop 3: Rebirth of a Resilient Ecosystem**

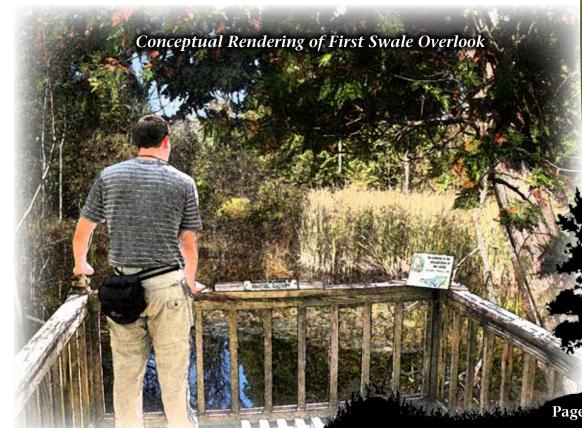
A panel along the way interprets the barbed wire fence which once separated a well-used town pasture from the cedar woods. The panel tells the story of rebirth of the resilient ecosystem and rare plants and also tells of town boys playing in this "wilderness" in summer and of skating on the frozen swale in winter. Even delicate species such as orchids and irises will recover from fires. clear cutting and grazing.

A panel inset will tell the story of Albert Fuller who lead the effort to establish this first private land trust in Wisconsin.



Barbed wire and an old fence post marks the location of the fence line.

Later, Fuller and others used this model to establish in Wisconsin the nation's first Natural Areas Program in 1951.





Example of a boardwalk wildlife blind in Six Mile Cypress Slough Preserve, Florida.

# Stop 5: Boreal Forest—A Relict of Cooler Times

A carved bench invites people to linger on the ridge. Here a panel interprets the boreal forest that grows here the conifers as well as the "Canadian carpet" as Virginia Eifert called it. Again, tactile and participatory devices should be included on the panel. The cool moist air from Lake Michigan provides a micro-climate that allows this isolated northern forest to thrive here. A panel inset will feature some of the neotropical forest birds that nest in this remnant forest.

A view of the ridge and boreal forest.

# **Stop 6: Wildlife of the Swales**

This overlook can be designed as a covered wildlife blind permitting screened approaches to the swale where wading birds like cranes, herons, and egrets feed. A durable viewing scopes provides up-close views of wildlife.

# **Stop 7: Dwarf Lake Iris**

Another significant wayside exhibit features the endangered dwarf lake iris which is extremely abundant here. A full color photo allows people to see the blossoms during all seasons. The cooling influence of Lake Michigan is explained here as an important factor influencing the survival of boreal species in this "southern" site. The boardwalk permits a close view and Abundant foods such as plants, insects, crustaceans, and frogs create a rich web of life for larger species. A guide to common swale species will be included on the blind walls.

picture opportunities of these colonies. The wooden panel supports feature carved iris and orchids. A quote by Virginia Eifert's *Journey in Green Places* (1963) is appropriate as a sub message on this panel.

"It is only in the cold, sandy haunts of the Great Lakes that these little irises are to be found."

# **Stop 8: A Diverse Environment**

A deep swale enclosed by wetland shrubs and cedar provides an intimate view and an excellent location for a swinging bench.



A carved swinging bench can serve as a thematic connection to the stories of The Ridges.

The boardwalk allows for elevation changes with the landscape. A swale "island" where a large white pine soars above the surrounding wetland invites exploration. The boardwalk splits into two sections around this tree with one walkway rising up to give a view of the trunk.

An interpretive panel near the swing will invite visitors to quietly observe the scene around them. A reason that The Ridges is home to so many rare and endangered species is its diversity of habitats. Sunny swales contrast with shaded forests. Dry ridge-tops cloaked



with pines give way to cedar swamps in the lowlands. Acid bogs harbor species far different than lime-bottomed fens. All this diversity of landscape creates a rich mosaic of plants and animals.



A split boardwalk adds interest and puts the resource on center stage.





# Stop 9: Pitcher Plants—At Home in Acid Bogs

Some healthy clumps of carnivorous pitcher plants provide an opportunity to introduce visitors to a concept of plant adaptation. The pitcher plant compensates for the lack of nitrogen and phosphorous in this acidic bog by capturing, drowning, and digesting nutrient-rich insects. A quote from Journey in Green Places:

"The pitcher plant simply holds up its attractive soup kettles and entices fresh meat to walk in and become an ingredient in a potent protein broth."

A tactile model of the plant allows visitors to open up a cut-away pitcher and see the interior adaptations.



Healthy clump of pitcher plants adjacent to the proposed trail.

# Stop 10: Gateway to the **Range Light 40**

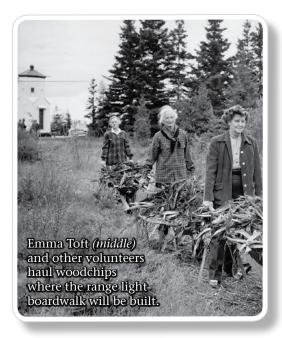
The trailhead at the north end of the Hidden Brook Trail introduces the historic range lights and the "Heart of The Ridges" trail system. It includes a map of the trails and photos that entice walkers to explore the range lights and the historic trails. "Walk in the footsteps of the light keepers and Ridges founders."





The north trailhead of the Hidden Brook Nature Trail will meet the boardwalk that connects the Upper and Lower Range Lights, just across from the intersection with Sandy Trail.

# **Historic Range Light Boardwalk**



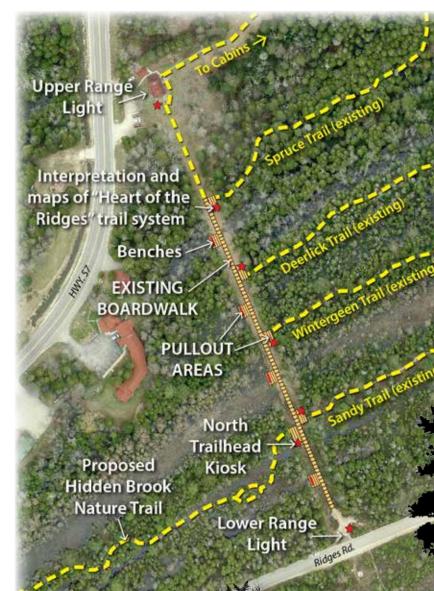
The straight boardwalk that connects the Upper and Lower Range Lights has long been a symbol of The Ridges Sanctuary. With the development of the new interpretive center and Hidden Brook Trail, the historic boardwalk will take on a more prominent role as the gateway to the existing "Heart of The Ridges" trail system.

To be compliant with the Americans with Disabilities Act, the boardwalk will need some modifications. A raised "lip" (constructed out of 2x4s) installed on the edges of the tread will keep wheels from rolling off the wooden deck. While the boardwalk meets the minimum width of 36 inches, it will require wider passing spaces of at least

60 inches wide by 60 inches long, every 200 feet. It is undesirable to widen the entire walkway because rare and endangered plants grow in abundance on each side of the existing boardwalk.

The widened pullouts are most appropriate at trail intersections, where they can also serve as interpretive and wayfinding stops with trailheads, descriptions, and site maps.

One of these stops should be prominent and introduce visitors to the idea that the area they are about to enter is the "historic heart of The Ridges." Here, the founders fought to save the "Range Light 40," which was the seed that started the land trust movement in Wisconsin. There should be a sense that one "is walking on sacred ground" to quote Jens Jensen.





Portions of the Upper Range Light will be open to Ridges visitors.



Ridges visitors will have the unique opportunity to climb the stairs of the Upper Range Light tower, following generations of light keepers.

# **Range Lights Experience**

#### **Purpose:**

To engage visitors in discovering the history of the Baileys Harbor Range Lights, and to expand the diversity of audiences that visit The Ridges.

#### Sub-Themes and Messages:

Sub-Theme 2: In 1847 this bay became Baileys Harbor, a safe port for shipping timber and stone. Messages: 2.1-2.8

#### **Objectives:**

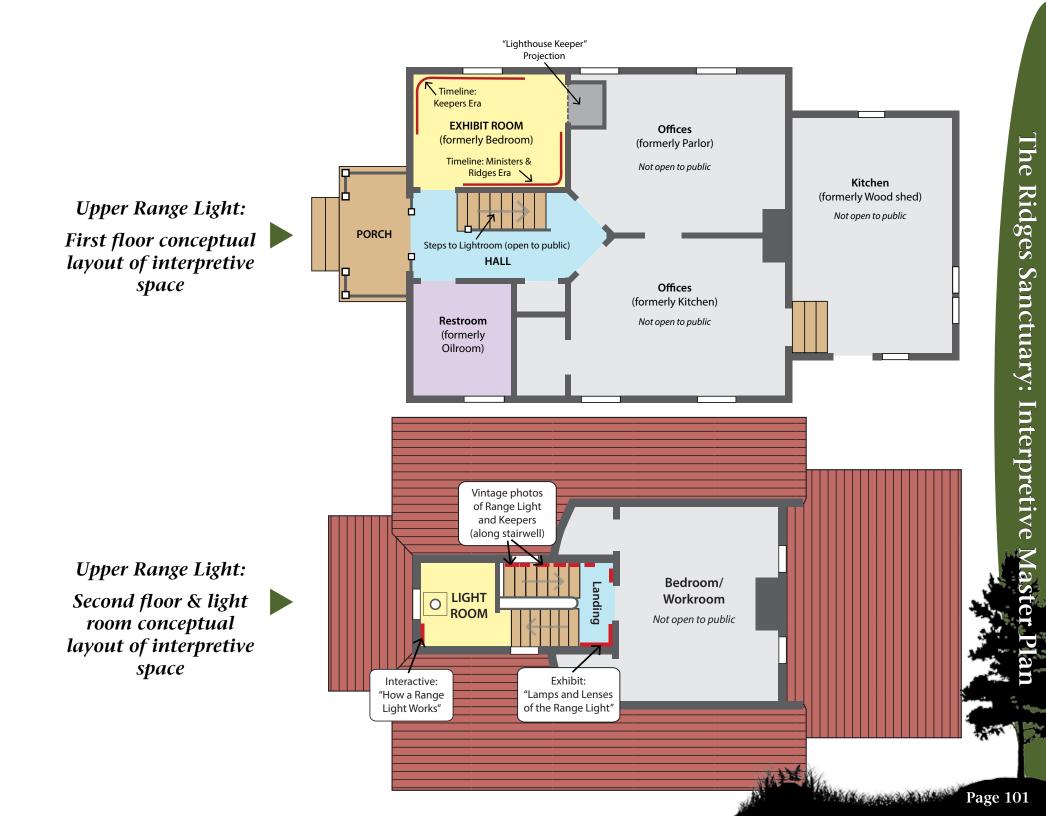
- Visitors will learn about the events that led to the building of the range lights.
- Visitors will learn the history of the range lights from 1868 to the present.
- Visitors will learn how the administration of federal lighthouses evolved.
- Visitors will appreciate that these modest structures had a rich history as it relates to Great Lakes shipping.
- Visitors will be emotionally connected to the lives of the seven keepers and their families who lived in the Upper Range Light between 1869 and 1923.

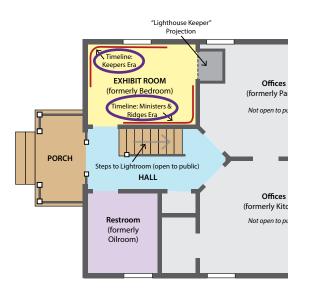
- Visitors will touch the stair rail that all of the keepers used as they tended the light.
- Lighthouse enthusiasts will be thrilled to climb the stairs of the Upper Range Light tower, view additional historic photos, and gain a perspective view from the light across the harbor to Lake Michigan.
- Visitors will learn about Roy Lukes, the first Ridges employee, who made the Upper Range Light his home.

# Description:

The former first floor bedroom and light tower of the Upper Range Light will be open to visitors for the tourist season during times that the visitor center is staffed.

This provides an excellent opportunity to connect with lighthouse tourists in Door County, who may not otherwise visit The Ridges. Partnering with the Door County Maritime Museum would be valuable for effectively developing this public space. The museum may have artifacts, photographs, and information that could be included in the exhibits.







The timeline exhibit will feature objects and artifacts that relate to significant events, such as a U.S. Lighthouse Service flag like this (replica available from LighthouseAntiques.net)

### **Upper Range Light Timeline Exhibit**

This timeline provides a holistic overview of the 150 year history of the Baileys Harbor Range Lights. Intriguing photos and illustrations, rich artifacts, and compelling stories will connect visitors to this history and to this old building.

The following timeline lists the important events in the history of the Baileys Harbor Range Lights. The timeline will be mounted in the former bedroom along the walls. It will be illustrated with photographs where available, and with line drawings where no photographs exist. Artifacts will be mounted to provide tangible connections to the history.

#### **Baileys Harbor Range Light Timeline:**

Red=Lighthouse Service History Black=Range Light History Green=Keeper History

#### **Keepers Era**

- 1848—Ship Captain Justice Bailey seeks shelter in bay from a Lake Michigan storm; tells his shipmaster, Alanson Sweet, about the good harbor and available timber and stone.
- 1849—Sweet acquires land and names it Baileys Harbor.
- 1851—United States Lighthouse Board established.

- 1853—Sweet receives government contract to build a lighthouse at the entrance to the harbor.
- 1866—Following many ship groundings, an inspector from the Eleventh Lighthouse District declares lighthouse inadequate to guide ships past shoals into the harbor.
- 1868—Federal government appropriates \$6,000 to construct two range lights.
- 1870—Range lights begin operation for the opening of the shipping season.
- 1870—Fabian Trudell, age 74, becomes first keeper and moves into the range light with his wife; resigns after two years possibly because of difficulty of maintaining two lights using lard oil in cold weather.
- 1872—Marcus Shaler from Green Bay appointed as keeper; typhoid fever sweeps through Baileys Harbor in 1874, Mrs. Shaler aids victims, contracts illness and dies at age 43, on January 26, 1875; Shaler resigns in grief in April.
- 1875—Joseph Harris appointed as keeper; wife, Rosalie and two children, Edward and Lottie bring life to the lighthouse and engage in many community activities. Another child, Mable is born in the lighthouse later that year.
- 1880—Lights are converted from lard to kerosene making life easier for the keepers.

- 1881—Harris is transferred and replaced by Hans Hanson who brought his new bride to live in the range light. He is transferred in 1882.
- 1882—George Larson replaces Hanson and moves in with his wife and two sons, Charles and Willie. He oversees many improvements to the grounds including a white board fence and stable in the two acres behind the house. The Larsons are very active in the community and highly respected.
- 1884—Keeper's uniforms introduced; the Dahlia delivers Keeper Larson's in June.
- 1888—For health reasons, Larson is transferred to Racine. John Millidge begins his eight year assignment to Baileys Harbor. An asthmatic, Millidge was not actively involved in community life.
- 1895—The Lighthouse Service Tender, Amaranth delivers the materials to build a brick oil house, 15 years after the switch from lard to the volatile kerosene.
- 1896—Lighthouse Service removes Millidge and Henry Gattie becomes seventh and last keeper; he serves here until 1923. A bachelor, he was a popular figure in the village. He began paying special attention to Eva Hendrick as the new century began. On February 18, 1901, Gattie made the following entry in his log, "My wedding at 4 PM H. Gattie." With the development of the Sturgeon Bay canal and overland shipping, Baileys Harbor was no longer a major shipping port. However, because it was a harbor of refuge, Gattie was retained as light keeper until 1923.

- 1910—United States Lighthouse Service Established.
- 1923—Lights are converted to acetylene. This efficient fuel required little maintenance and keeper Gattie was transferred to the Cana Island Lighthouse from where he made periodic maintenance visits to the range lights. The range lights are locked and boarded up on September 4.

#### **Ministers and Ridges Era**

OWDER

ROUGES

- 1930—Lights are converted to automatic electric systems; Upper Range Light is leased to Immanuel Lutheran Church for a parsonage; the minister does minor maintenance of the lights as part of the lease agreement.
- 1935—Government grants the 40 acre property around the range lights to Door County.

7 Life in the Range Light

- 1937—County begins development of a recreational trailer park; Albert Fuller protests the potential destruction of the ridge and swale complex; "Ridges Sanctuary for Plant and Animal Life, Inc." receives management authority from county.
- 1939—U.S. Lighthouse Service dissolved and merged into U.S. Coast Guard.
- 1955—Church ends lease; U.S. Coast Guard rents dwelling to Mrs. Ruby Golke until 1962
- 1965—Ridges Sanctuary uses Upper Range Light to house a naturalist; it has since served as the main office for the Sanctuary.
- 1969—Single beacon light replaces the range lights from which the lenses are removed.
- 2013—Upper Range Light opens as a museum.

Conceptual Rendering of Timeline Exhibit



An exhibit in the triade of an actor onto Museum projects a video of an actor onto glass, which creates the illusion of a living person telling a story. This is a simple, inexpensive technology that would work well in the Upper Range Light.

### "Meet Light Keeper Gattie" Exhibit

A video reflection creates a lifelike illusion of an old uniformed light keeper who moves and tells stories of people and events that happened right here. The personal nature of storytelling is a good technique for dramatically engaging visitors in the lives of those who lived and worked here.

Visitors to the range light will encounter an opening in the wall (to an enclosure in the adjacent room) in the shape of the signal light window. On the wall next to the door is a graphic board with photos of Herman Gattie including one with his wife Eva.

The headline says, "Meet Herman Gattie, Light Keeper at the Baileys Harbor Range Light, 1896-1923."

As they peer through the window, visitors trigger the ghostly image of "Light Keeper Gattie" in uniform tending the light in the lamp room.

#### **Storyline Concepts:**

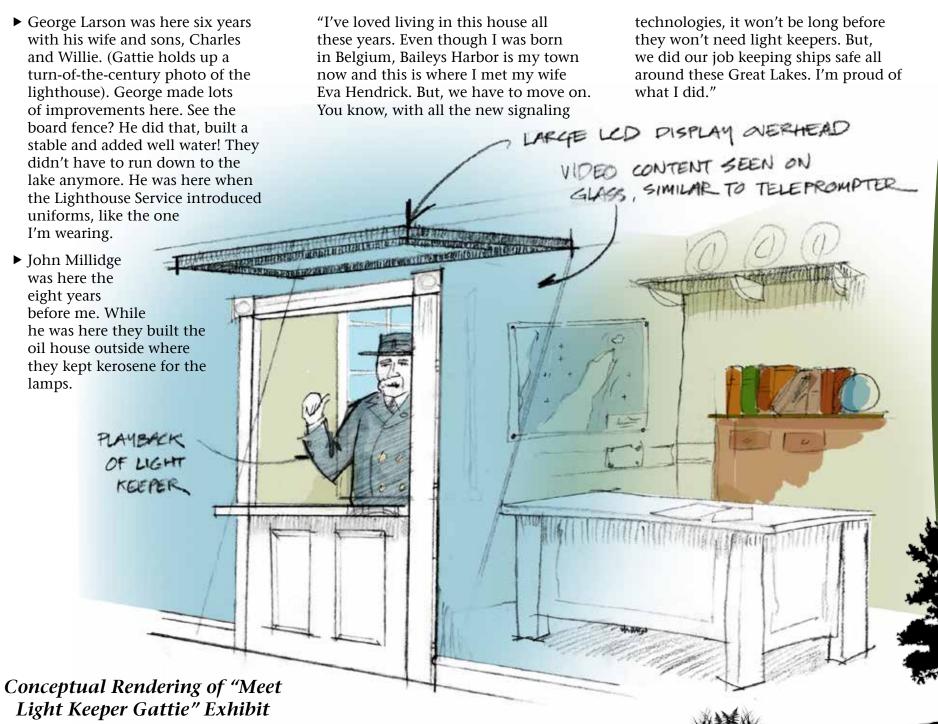
Gattie greets his new guests, "Welcome to our home! I'm Herman Gattie and I've been Keeper for the past 27 years." Gattie looks at the Fresnel lens and lamp and says, "They just changed the lamp to burn acetylene. It doesn't require the care of the old kerosene lamp. So, now I'm being transferred to Cana Island light so I'll only have to stop in here once in a while to clean the lamp—it runs itself!"

"It's a shame that this old place will be boarded up. This has been the keeper's home since 1870—that's 53 years! Let me tell you about the seven keepers and their families that have lived here."

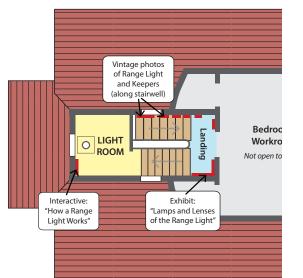
Gattie then tells some of the humaninterest stories about the keepers:

- Fabian Trudell, the first keeper, who was 74 when he started. He and his wife lived here two years. Some say that tending two lights with lard oil that was hard to light in cold weather was too difficult for an old man.
- Marcus Shaler was here during the typhoid epidemic of 1874. Mrs. Shaler tended the victims in town until she became ill and died in the spring of '75. Marcus resigned soon after, probably because his grief was too much to bear.
- Joseph Harris' lively children brought cheer back to the house. His wife, Rosalie gave birth to their daughter, Mable here.
- Following Harris there was Hans Hanson who brought his new bride to live here for a year.

apter 6: Visitor Experience



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This concept rendering of an interactive wall model in the lamp room demonstrates how range lights work.

### **Upper Range Light Tower Media**

Visitors will be able to walk the stairs to the lantern room. At the bottom of the stairs a wall plaque greets them with the words, "Place your hand on the railing that every light keeper gripped as they walked up daily to the lantern room to tend the light."

Ascending the stairs, visitors can view vintage photos of the lighthouse.

#### Interpretive Panel: "Lamps and Lenses of the Range Light"

On the stair landing wall near the entrance to the bedroom, an interpretive panel visually describes the history of the lamp and lens with illustrations of how it was fueled and tended:

- The first lamp burned lard oil. It employed a 5th Order Fresnel lens to exhibit a fixed white light over the harbor; the lower light used a steamer lens to exhibit a fixed red light. Lard oil was difficult to light and maintain, especially in cold weather.
- In 1880, the lamps were converted to kerosene. In 1895, an oil house is added to prevent kerosene explosions or fires in the lighthouse.
- In 1923 the lights are converted to acetylene which required new

lamps but used the existing lens. The system used a pilot light and automatic "sun valve" to turn the light on and off. Light keepers are no longer needed.

- Electricity is introduced to the property in 1930 and electric lights replace the acetylene lamps.
- In 1969, the current directional light south of the Lower Range Light is installed and the lamps and lenses are removed from the lighthouses.

# Interactive Model: "How a Range Light Works"

Next to the window in the lantern room, a small flat wall panel interactive model shows the Upper (with a white light) and Lower Range Light (with a red light) and a ship about to enter the harbor. The visitor can move the ship right or left. When they are lined up with the lights a green light announces that it is "safe to enter the harbor". (Note: Aligning the ship with the range lights completes a circuit that lights a small green bulb. This could be battery or solar powered).

Visitors can look out the window and see how the Lower Range Light aligns with their position and a ship coming into the harbor.

apter 6: Visitor Experience

### **Upper Range Light Outdoor Interpretive Panel**

A wayside exhibit installed near the front porch of the Upper Range Light will provide interpretation for visitors even when the building is closed. The panel will feature historic photographs of the range lights and quotes from the keepers and their families. A rustic wooden base carved with maritime images (like an anchor and pilot's wheel) will provide support for the panel.

# **Keepers of the Lights**

These range lights guided ships into the safety of Baileys Harbor for a century. The Upper Range Light was home to seven lighthouse keepers and their families. In 1930 the lamps were replaced by automated electric lights and keepers were no longer needed. In 1969 the lights were extinguished forever.

#### First Keeper (1869-1872)

Fabien Truedell took his post on December 1, 1869. Though he was in his seventies when he became the keeper, he was the first to walk the long boardwalk between the buildings, carrying oil for the lamps in all weather.

#### A Tragedy (1872-1875)

Marcus Shaler replaced Truedell. An outbreak of typhoid fever in the winter of 1874-75 claimed Shaler's wife, Lucy. He resigned his post in grief in April of 1875.

#### A Joyous Birth (1875-1881)

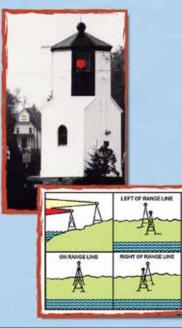
Shaler was replaced by Civil War veteran **Joseph Harris, Jr.** His wife, Rosalie, gave birth to the first baby born at the range lights, a daughter named Mabel.

#### Last Keeper (1896-1923)

Henry Gattie maintained the range lights for 27 years. This handsome bachelor's name and social doings often appeared in the newspaper. Many girlish hearts were broken when he married a local woman, Eva Hendrick. He noted in the station logbook on February 18, 1901, "My wedding at 4 PM."

#### How Range Lights Work

Ships enter safely into Baileys Harbor by lining up the red light of the lower range light with the white light of the upper range light.



### Concept Layout of Upper Range Light Wayside Exhibit

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A crank-powered audio box provides a multi-sensory experience for visitors without the need for external electricity. This would be an ideal solution to interpret the range light oil house.



The placard would include the logo of the U.S. Lighthouse Service.

### **Oil House Audio Exhibit**

When the Upper Range Light is open to the public, the metal door to the oil house will also be open. Just outside the entrance they encounter a crankpowered audio box (like the TourMate Systems Eco-Box). On the top of the device is a placard with the following invitation:

#### **OIL HOUSE**

Turn the crank to hear "Keeper Herman Gattie" tell you about this building. (a dramatization)

#### Audio Message:

As the visitor turns the crank, a narrator (the same Keeper Gattie voice used in the interior audio-visual) tells the story:

Welcome! I am Keeper Herman Gattie. Did you hear that thunder? If we kept our lantern oil in the lighthouse and lightning struck, why it might explode! That is why the Lighthouse Service built oil houses at all of their lighthouses. This one was built in 1895, just one year before I became Keeper. When this range light first opened in 1870, the lamps burned lard oil. Lard oil was safe, but it was hard to use, especially in cold weather. So in 1880, the lamps were all converted to use kerosene. It burned much better, but was very explosive and dangerous to have around.

As you can see, this building has a metal roof and door and is made out of brick, so no forest fire can ignite the oil inside. We store 90 five gallon cans of kerosene to keep the lamps lit for one shipping season.



The historic brick oil house *(right)*, near the Upper Range Light, was used to store kerosene. It provides another opportunity for visitors to learn about the history of this area.

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### Lower Range Light Development

The Lower Range Light is a maritime icon that attracts the attention of anyone driving on Ridges Road. It is a mixed blessing for The Ridges; the structure is an inviting entrance into the sanctuary, but is difficult to monitor. People do not get properly prepared for a sanctuary experience and entering here causes motorists to park on the narrow roadway. Ideally, people should return to the interpretive center, enter through this organizing portal, and walk the trail to the range lights.

The planners believe that an attempt should be made to discourage entry at the Lower Range Light, or, at least, to make people aware that they are entering through the "back door".

A subtle but effective barrier could be created with a period-style, low, picket fence, painted white like so many light station features. A gate, with a spring to keep it closed, would strongly suggest that this is a fee area while still permitting quality photo opportunities. A small, discreet sign just beyond the gate and out of the camera view would state that visitors must register at the center. Although many will still enter here, they are much more likely to pay the entry fee or eventually return to the interpretive center. The current bulletin board and fee box should be removed.

#### **Interpretive Panel**

A wayside exhibit placed adjacent to the Lower Range Light interprets the history and function of the Baileys Harbor lights. The panel will feature:

- A graphic illustrating how a range light works (same as the Upper Range Light panel)
- Brief history of the Baileys Harbor Range Lights, with a selection of historic photographs of the site
- Historic photographs showing how the Lower Range Light has always been an attraction for Door County tourists



The Lower Range Light has long been a photo stop for tourists, like these motorcyclists from the 1930s.





The Discovery Trail encourages kids and families to use their imaginations and have fun in the outdoors.



# **Family Discovery Trail**

#### **Purpose:**

To connect children, and their parents, to the natural world through handson activities and natural objects that invite them to use their senses and imagination in creative activities along a pleasantly diverse trail.

#### Themes and Messages:

Sub-theme 6: The ancient beach ridges are unique geologic features created since the last ice age that provide a diverse wonderland of forested ridges and wet swales. Messages: 6.1-6.7

Sub-theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Messages: 7.1-7.12

#### **Objectives:**

- Families will feel a sense of empowerment about leading their own adventure in nature.
- Children will associate forests and fields as rich environments where they can use their imaginations to create fun and rewarding physical constructions of forts trails blinds, and where they can exercise their bodies and minds at the same time.

 Participants will serendipitously develop firsthand knowledge about the characteristics of natural materials and habitats.

#### **Description:**

This self-guided trail will introduce the natural features of the Sanctuary in an engaging voyage of discovery for families and children. The new trail, in the woods on the west side of Highway 57, will informally teach children about nature through a series of interactive discovery stations that encourage children to play and interact with the environment around them. Families can choose to travel the trail on their own or use The Ridges Discovery Trail Guide.

In order to maintain the character of the natural setting, natural materials will be used to develop stations.

The intent is for users to make a personal connection to the natural world, without time and schedules – to help alleviate the leisure-deficit disorder we all face in today's fast paced society. By providing fun, natural experiences, generations can commit to stewardship and responsible enjoyment of natural resources while remembering the simpler times of our childhood. Conceptual Layout of the Family Discovery Trail



The Ridges Sanctuary: Interpretive Mas P

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Stations along the Discovery Trail will be made of natural materials and blend harmoniously with the landscape.



### **Discovery Station Guidelines**

#### **Discovery Station Guidelines:** Experiences on site

- The Discovery Trail will be harmonious with nature. The signs, bird blinds, and trails will be made of natural materials. The trail must be seen as a first-class experience.
- The signs will guide the parents and children to the location of the different stations and main themes, but the signage will be openended, allowing families to make discoveries on their own.
- The discovery stations will use the natural habitats as the main themes for discovery stations. Some nets, magnifying glasses, and other "tools" can be contained in station discovery boxes.
- Station names will relate to the surrounding area (ex: Circle of Cedars) to informally make natural connections.

The trail offers infinite possibilities for children to creatively use and explore natural materials.

- Stations will change from year to year following the ideas defined in "Design Principles for Nature Play Spaces in Nature Centers and Other Natural Areas" (Green Hearts Institute for Nature in Childhood, 2009, www.greenheartsinc.org).
- Each station will provide an area for seating, so that parents can sit back and let children take the lead and make their own discoveries.
- Benches, blinds, and trail markers should all encourage creative play and imaginative uses of natural materials.



### **Trailhead Kiosks**

Two entrances to the Discovery Trail are available: one on the west side of Highway 57 near the intersection with County Q, and the other at the parking lot adjacent to the fire station. The tone of adventure must be set here. Parents should be informed of



The entrance to the forest offers contrast with the sunny, dry sandy area around the kiosk.

### Station 2: Circle of Cedars

An old logging road cuts off from the main trail revealing an intimate cluster of cedar trees that bend and twist in imaginative ways. This is a natural "jungle gym" for climbing, building forts, or reading a book. the open-ended nature of this trail so they can help children to discover on their own. A well-crafted wooden panel can introduce this adventure. Perhaps a creative structure or naturalistic sculpture at this entrance sets the tone of creative self-expression on this trail.

### **Station 1: Entrance to Forest and Wetland**

A tempting gateway of trees invites families from the open, sandy area of the Highway 57 parking lot and trailhead. The trail enters a thick forested area that wanders along a wetland, marked by a cluster of three birch trees. The forest offers opportunities to roll logs over looking for critters. The wetland provides a chance to get feet and hands muddy.



Bent and twisted cedar trees encourage climbing and fort building.





### Station 3: Maples and Miniature Forest

A "miniature forest" of club mosses encourages kids to get down on their bellies and imagine what they were like as tiny creatures. A caterpillar would be the size of a bear! The maple canopy provides leaves for making crayon rubbings or other natural artwork.





Stepping stones or cut logs provide a fun way to cross wet areas.

A large white pine shades a potential wetland overlook site.

### Station 5: Stream Crossing

The trail crosses a small intermittent stream flowing from the "white pine" wetland. Stepping stones and cut logs provide an adventure for children to cross the water and mucky area.



A "miniature forest" of club moss offers a different perspective of the maple stand.

### Station 4: White Pine and Wetland Overlook

A majestic white pine tree stretches out over a sunny wetland. This is a natural place to build an overlook of the wetland, shaded by the large limbs of the pine. A floating boardwalk, which feels like walking on water, can bring families down close to watch or catch aquatic insects, frogs, and other critters.



An intermittent stream offers an adventurous crossing for families.



The dense stand of cedar encourage hiding and imaginative games.

### **Station 7: Open Field**

This sunny, grassy area is filled with insects. An activity station here can provide nets, bug collecting boxes, magnifying glasses, and sheets for shaking bushes. The large open area encourages free play that may involve running or chasing, throwing balls, tossing frisbees, or flying kites.

This area is a great place to see animal tracks and antlion funnels, and to dig in the sand.



### **Station 6: Cedar Forest**

This dense stand of cedar trees invites lingering, hiding, and playing games. This is an ideal place for activities that may require more time and concentrated focus. The forest provides all sorts of imaginative items and activities for kids: walking sticks, magic wands, swords, "horse" riding on bouncing bent trunks, fort building, or hide-and-go-seek.



An open field offers opportunities to catch bugs and run.

### **Station 8: Sandy Trail**

Antlion funnels and animal tracks demand closer inspection in this sandy, open area. Branches and downed timber can be collecting to build fanciful shelters. Some preliminary structures and/or pictures of some are a way to get creative juices flowing and motivate families to get involved. An area set aside for digging in the sand allows kids all kinds of imaginative possibilities... building castles and roads, digging a lake, or pretending to be ground squirrels.

Outhouse

White

Pine

Stream Crossing

ilhead

Cedar Forest



The cabin site is a rustic, intimate setting for members and the community to embrace camaraderie and shared history of The Ridges.



A heritage garden near the cabins would serve as a tangible link to the historic light keeper families, while providing opportunities for kids to learn about growing food.

### **Historic Log Cabin Area**

#### **Purpose:**

To serve as the intimate "back door clubhouse" to The Ridges where members can gather for casual meetings, social events, and as a staging area for activities in the historic "Heart of The Ridges" trail system.

#### Themes and Messages:

Sub-theme 3: Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development. Messages: 3.1-3.2, 3.4-3.6

#### **Objectives:**

- Members will be reminded of the shared traditions and values of The Sanctuary when they gather in these earthy cabins that have housed so many special moments and that are connected to the history of Door County.
- Members will feel a special sense of intimate ownership because only members will be allowed to use these quiet, out of the way buildings.
- Visitors will consider the added advantages of a Ridges membership when they view the rustic setting.

#### **Description:**

This site has the potential to become the "touchstone" that connects members to their historical values and founders. Instead of becoming a hollow memorial to the past, it can be a dynamic place for campfires, birthday parties, family reunions, and other significant ceremonies that become traditions. Memorial benches and chairs could remind members of those who served before them.

The **council fire** ring is a hallmark feature of Jens Jensen's work. It is a spiritual place where people are united outdoors around a warm fire. An interpretive panel here should show a historic photo of it being used and should include a quote from Jensen on the value of a council ring. *"…because a group is gathered in a continuous circle, there is no hierarchy, but a simple affirmation that all members of the community are important to it."* 

The real value of the field is for its open, multi-use capabilities that are rare in the rest of The Ridges property. Therefore at least half of this area should be maintained as a **mowed field** that can continue to be used for educational programs, workshops, and special events. A **heritage garden** could be maintained here as well. It could contain heirloom vegetables and serve as a link to the self-sustaining nature of the families that lived in the light station.



The **council fire ring** is a symbol of shared experiences in nature—a place where you can "crank" ice cream, toast s'mores, and share stories.



The area around the historic cabins will continue to be used for member programs and workshops.

# "Heart of The Ridges" Trail System

#### **Purpose:**

To provide visitors with opportunities to appreciate and discover the history and pristine ridge and swale habitats of the original "Range Light 40" sanctuary.

#### Themes and Messages:

Sub-theme 3: Visionary and dedicated pioneers founded The Ridges Sanctuary to provide a refuge for the rare and diverse orchids and other plants and animals that were threatened by development. Messages: 3.2-3.4, 3.6

Sub-theme 7: The isolated boreal forest of The Ridges Sanctuary provides habitat for diverse and rare plants and animals, making Baileys Harbor the most biologically diverse Township in Wisconsin. Messages: 7.1-7.12

#### **Objectives:**

- Visitors will learn that this was the original nature land trust in Wisconsin; set aside to save the rare orchids of the ridges and swales
- Visitors will feel a connection to the founders and their reverence for this special sanctuary.
- Visitors will be motivated to become supportive members of this historic trust.

#### **Description:**

The original "Range Light 40" sanctuary harbors pristine ridge and swale habitats and the greatest diversity of flowers. The rustic and peaceful trails, boardwalks, and bridges represent the true spirt of The Ridges Sanctuary, and should be maintained for this experience. The main trailhead kiosks should contain panels that interpret the significance of this special site.

The existing leaflet and marker system has proven to be ineffective for communicating with visitors. Trail brochures are often overlooked or ignored by first-time visitors entering the trails. The initial intent might have been to keep the interpretation unobtrusive, but the comparatively large and unattractive fence post markers appear inappropriate for the delicate natural setting.

Attractive, full-color interpretive panels communicate more directly with hikers who do not need to carry a brochure or match numbers to text. The interpretive signs should be placed low and at an angle that facilitates easy reading, while not imposing on the natural landscape. As recommended for the Hidden Brook Nature Trail, carved wooden supports will help the panels to blend into the landscape while reinforcing the



interpretive themes. They should be limited to locations where significant stories can be told and where people naturally congregate (viewing platforms, trail intersections). Text should be concise and lively, since people are standing and reading in an outdoor setting with external sensory stimuli. Small seasonal identification signs could be temporarily placed near blossoming flowers and at other ephemeral attractions.

Quotes and photographs of founders and naturalists should be on these panels, since this is the historic sanctuary where they led walks, identified plants, and communed with nature. This respect for history and the sanctuary are one of the aspects that give The Ridges its identity.

Plans should be formulated for closing some of these trails to give them time to rest and recover should they become overused. Rustic rail fences or gates with a "Trail Resting and Recovering" sign might be appropriate.

Swale Overlook "Heart of The Ridges" Trail System in Platform Solitude Swale relation to proposed developments Writer Wren swale Members Cedar Tra / Parking P. e Wood Frog Swale Historic Cabins Upper Range Light Cowslip Sivale Staff P Parking. Sandy Swale Maintenance Access Historic Range Light Boardwalk Lower Range Light Proposed Hidden Brook Lake Michigan Nature Trail Próposed Interpretive Center Page 119 A CARGE AND CON

# **Logan Creek Property**

#### **Purpose:**

To provide orientation and information about the Logan Creek site and significant features along the trail.

#### **Messages:** (Source: Wisconsin DNR Natural Areas website)

- 1. Logan Creek features a northern wet-mesic forest dominated by white cedar and black ash.
- 2. Spring wildflowers are outstanding on this site—Canada mayflower, wood fern, yellow blue-bead lily, yellow trout lily, sharp-lobed hepatica, and beech drops put on a show from mid-April to the end of May. Within the hummocky terrain are typical ground layer species including common dewberry, American starflower, threeleaved goldthread, Labrador-tea, wintergreen, and naked miterwort.
- 3. Flowing through the site is Logan Creek, a 5.4 mile-long stream that flows southeast from Lost Lake and empties into Clark Lake. The creek is a designated Outstanding Water Resource and supports the stateendangered small yellow water crowfoot (*Ranunculus gmelinii*).
  - Several species of neotropical migrant birds nest or rest here

including ovenbird, red-eyed vireo, black-throated green warbler, eastern wood-pewee, great crested flycatcher, rose-breasted grosbeak, and hermit thrush.

#### **Objectives:**

- Visitors driving on Highway 57 (Door County Coastal Byway) will be made aware of the Logan Creek State Natural Area and the opportunity to walk its trails.
- Visitors will be oriented to the trail system and informed about the significant features along the trail.
- Visitors will be motivated to walk the trail and return to experience its natural beauty in all seasons.
- Visitors will learn about the natural history of the site and its significance that led to its designation as a State Natural Area.

#### **Description:**

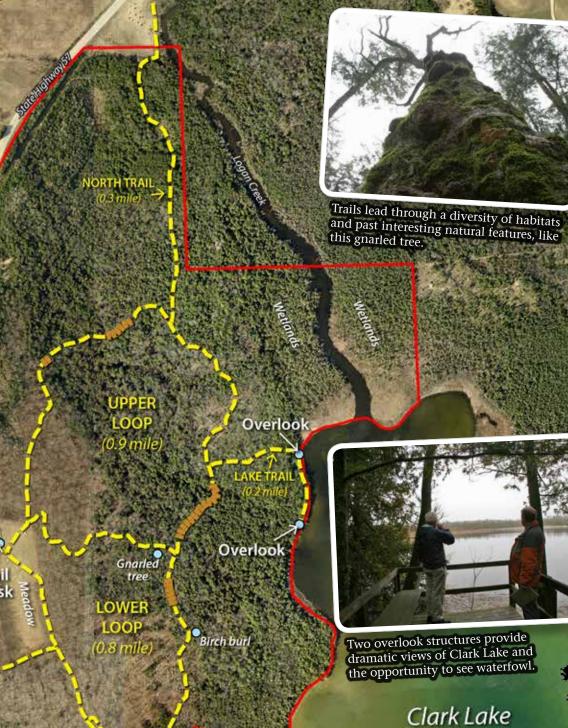
The Ridges Sanctuary also manages the 170 acre Logan Creek State Natural Area (designated in 2007) located south of Jacksonport on the north end of Clark Lake. This property is open to the public year-around. Spring wildflowers and neotropical birds delight nature lovers. The trees put on their gorgeous fall colors in October, and winter snows create a wonderland for cross country skiing and snowshoeing. Recommendations for enhancing the visitor experience include:

- 1. Install signs on State Highway 57 to inform visitors of the existence of Logan Creek. They should include the distance to the parking lot entrance, identification as a SNA site managed by The Ridges (logos of both), and symbols indicating hiking and wildlife watching.
- 2. Improve the existing parking lot kiosk and map by replacing the bulletin board with a professional high-pressure laminate interpretive panel. The sign would include a map of the site with trail overlay, a description of the significant features, and an invitation to visit in all seasons.
- 3. Wayfinding map panels will be placed at intervals along the trail where visitors might be unsure about where they are and where the trail continues.
- 4. Panels will be placed at key locations to interpret topics such as: the forest trees, birds, and wildflowers; Logan Creek and why it is designated an Outstanding Water Resource; and Clark Lake.



Adding a high-pressure laminate map and informational panel would enhance the attractive trailhead kiosk.

strength di



### **Unified Design Standards**

It is essential that all interpretive media be graphically and visually unified. At present, The Ridges Sanctuary media, like most programs, are somewhat eclectic pieces developed over the years for a specific need without a longterm regard for unification. A graphic standards system can unify exhibits, wayside and trail panels, publications, and the website. This unification will enhance public recognition of The Ridges and its programs.

#### Materials

The traditional use of rustic stone and timber should be replicated in buildings and in major trail structures, like kiosks and benches. Advanced signage materials, like **digital highpressure laminate (dHPL)**, should be used for outdoor interpretive exhibits. The material is environmental friendly,



durable, and weather and vandal-resistant. Attaching the signs to carved wooden supports will help them be harmonious with the natural setting and maintain the rustic park design.

#### Colors

A standard set of colors helps to unify media and evoke feelings about the organization. Fast food restaurants, for example, use bright yellow and red to catch a person's attention and signify fast-paced excitement. Colors chosen to represent the Sanctuary, on the other hand, should demonstrate the preservation, research, and education qualities that the organization has fostered. Muted natural colors are recommended that complement each other, but contrast enough to provide emphasis and attract attention. Some recommended colors used to develop prototype designs in the plan are listed below:

Dark Green:	Light Green:	Rust:
CMYK =	CMYK =	CMYK =
68,39,100,29	48,0,76,3	18,86,90.7
Dark Blue:	Light Blue:	Cream:
CMYK =	CMYK =	CMYK =

35.11.0.0

2.0.31.0

100.0.0.64

#### Typeface

Each typeface has its own unique personality. Font styles used for The Ridges media should be friendly, readable, and versatile. For titles and headings, a serif font (letters with bars on the ends) can add character and evoke a sense of leisure and quiet. A font such as Giovanni Black conveys elegance and importance, while still being welcoming to readers.

Although a serif font works well for short titles or headings, it does take more effort to read. Sans-serif fonts (letters without bars on the ends) have less character, but can be read quickly with little effort. To provide maximum readability, the main text and captions should be a clear sans-serif font, such as Helvetica.

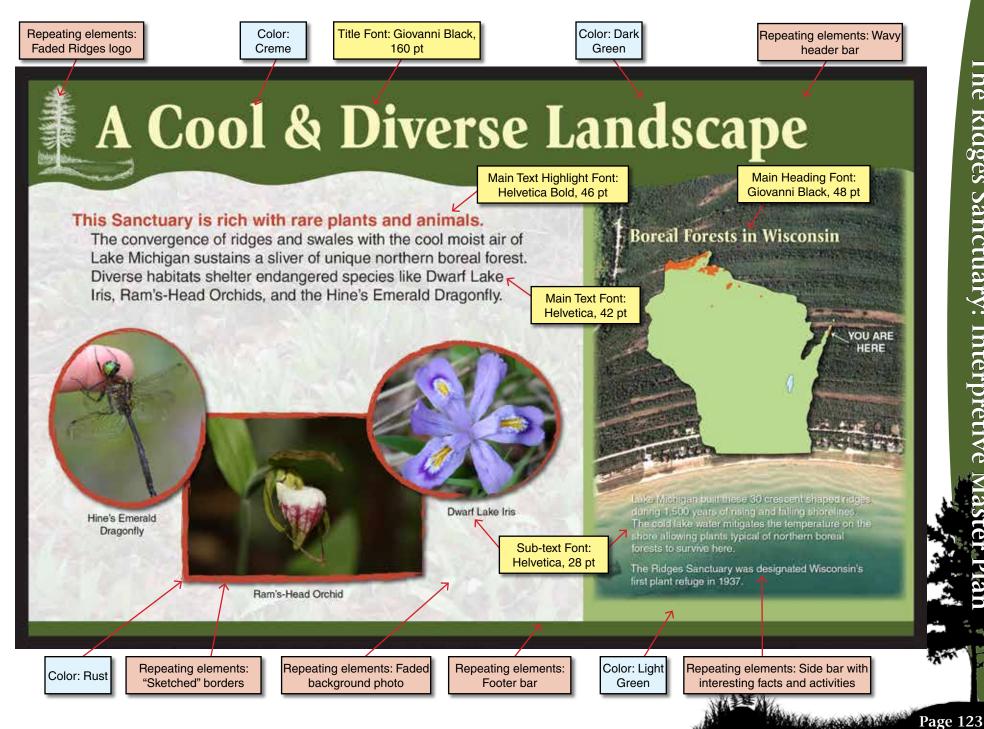
Titles and headings (serif font):

# **Giovanni Black**

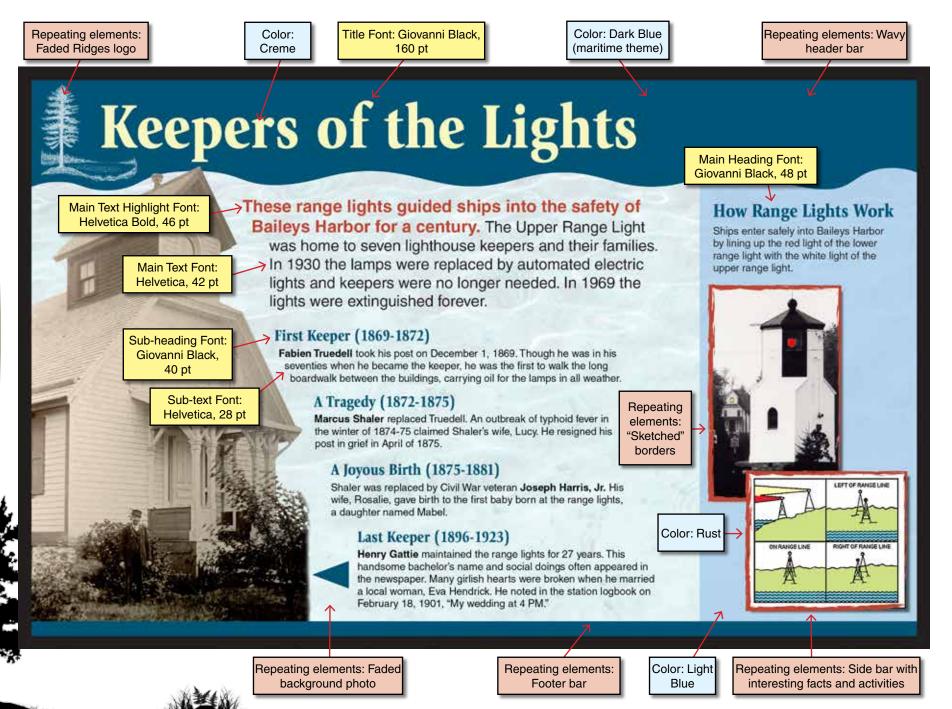
Main text and captions (sans-serif font):

Helvetica

### **Recommended Unified Design Standard for Wayside Exhibits**



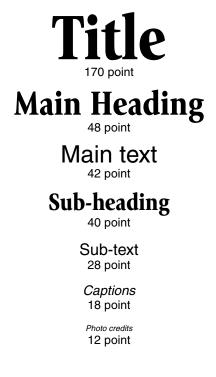
### Recommended Unified Design Standard for Wayside Exhibits



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#### **Type Size Hierarchy**

A hierarchy of text sizes emphasizes the importance of different sections of text. Titles are the largest, followed by main headings, main text, subheadings, sub-text, captions, and photo credits. Some visitors will only spend a few seconds looking at a media piece. Visitors should be able to grasp the main interpretive message just by looking at the headings and graphics. Media should be developed according to the 3-30-3 rule: visitors can receive a message in 3 seconds (headings and graphics), 30 seconds (lead paragraph), or <u>3 minutes</u> (sub-paragraphs). The typeface and size proportions should be unified for all interpretive media.



#### **Repeating Elements**

Certain graphic elements should be replicated on all media. The Ridges Sanctuary logo, for example, should be clearly visible on interpretive panels, exhibits, publications, websites, and other types of media.

Other elements might be replicated on specific types of media. For example, wayside exhibits might include a wavy dark green (or blue for maritime themes) header bar and footer bar. A "sketch-like" border on photographs fits the more rustic design of The Ridges. A faded photograph in the background provides contrast for the main message. while supporting the theme of the media. A side bar with a color variation (based on the header/footer bars) provides a separate space for interesting facts or family activities. Some of these elements could also be incorporated into publications, exhibits, and websites, but would need to be modified based on the medium.

Grid systems (boiler plates) can also be designed for each type of media to unify text, graphic, and object placement. By using templates, new media can be quickly and easily developed, and old media updated.



The Ridges logo is an essential visual element to tell a unified story.



A "sketch-like" border around pictures makes media design less formal and fits the rustic style of The Ridges.



Children catch insects as part of a summer program at The Ridges.

Appendices

### **Appendix 1: Visioning Meeting Results** (July 13, 2010)

#### Purpose of the Visioning Session

A visioning meeting was facilitated by the Schmeeckle Reserve Interpreters team of Ron Zimmerman, Jim Buchholz, and Michael Gross on July 13, 2010. The purpose was to gather input from stakeholders of The Ridges Sanctuary about the direction of planning for the new interpretive/ education facility. This included clarifying the uniqueness of The Ridges, identifying important target audiences, gathering significant stories, and determining appropriate activities and developments for the facility.

#### **Meeting Participants**

A diversity of stakeholders were invited to participate in the visioning session in order to represent a variety of perspectives.

#### Visioning Meeting Participant List:

- ► Vicki Amundson, Ridges Member
- ► Eric Bauman, Boldt Construction
- ► Susan Crawford, Ridges Member
- Mike Grimm, The Nature Conservancy
- Jon Jarosh, Door County Visitor Bureau
- ► Roger Kuhns, Geologist
- ► Steve Leonard, Ridges Staff
- ► Mike Madden, Ridges Member
- ► Jeanne Majeski, McArdle Library
- ► Maureen McGrath, Ridges Member
- ► Vicki Medland, Ridges Board
- Bryan Nelson, Baileys Harbor Business



Visioning session participants "score" the importance of responses on July 13, 2010.

- ► Karen Newbern, Ridges Staff
- ► Kristin Peil, Baileys Harbor Business
- ► Ed Pentecost, Ridges Board
- ▶ Betsy Rogers, Ridges Board
- ► Jeffrey Rosemann, Ridges Member
- ▶ Ron Stieglitz, UW-Green Bay
- ► Gene Sunstrom, Door County Business
- ► Lee Traven, Ridges Member

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#### **Results of the Visioning Meeting**

Five focus questions were presented to participants as part of the visioning process. For each question, participants were given 10-15 minutes to answer in writing on a worksheet. Responses were then shared verbally with the rest of the group and transcribed onto large sheets of paper. When all participants had shared their ideas, similar items were grouped. For some questions, the participants "scored" the answers to provide a hierarchy of importance.

#### **Question 1: Visioning**

# What makes The Ridges special? How is it different from any other place?

The participant responses were grouped based on similar ideas by the facilitators. The major categories (in bold) were created as grouping devices. Actual participant responses are listed under each category. All responses from the session are represented below. Categories are organized based on the <u>number of responses</u> that fit within the category (numbers are in parentheses).

#### The Ridges site harbors great biological and ecological diversity. (12)

- One of the most biological diverse areas in Wisconsin and the Midwest
- Boreal forest plants, ridges, and swales in the same place
- Unusual ecological associations

- Interplay of geology, hydrology, ecology, and land use
- ► Orchids
- Understanding of the past-glacial history of Wisconsin
- Dynamic changing environment (dune ecology)
- Diversity of habitats in close proximity-excitement
- ► Hine's Emerald Dragonfly
- ► Wildflowers and birds
- Link to pre-European settlement; pristine habitats
- ► Large size

# The Ridges has a unique sense of place/spirit of place. (12)

- ► An escape from everyday life
- Uncompromising courage to be unique and independent
- ► Sense of place-"wow factor"
- ► Unique spirit of the sanctuary
- Can become totally absorbedphysically and emotionally
- Impression it makes with peoplepeople return
- ► Serenity
- Capture what The Ridges means
- Gathering place for return visits
- ► Not overused- private experience
- Universal feeling/attraction to the site
- ► Many great stories in a small space

# The Ridges mission has a strong education focus. (7)

- ► Education focus
- Serves as an introduction to nature
- Connecting youth with the environment
- ▶ Programs for children
- ► Family-friendly outreach activities
- Outdoor schoolroom
- ► Opportunity for awareness

# The Ridges is open and accessible to the visiting public. (6)

- Accessibility to the public
- ► Year-round opportunities
- ► Well developed self-use trail system
- ► Accessibility
- Offers a rustic experience outdoors
- ► Cost friendly experience

# The Ridges organization is effective and diverse. (6)

- The Ridges organization has stayed true to its mission- on task
- Passion for place and organization
- Diversity of membership
- ▶ Board is diverse and strong
- Multiple generations of people that volunteer and visit
- Strong volunteer commitment

# The Ridges offers many opportunities for research. (5)

Living laboratory for sustainable resource use and preservation



- Serves as an indicator habitat (relic forest that will change first)
- ► Great opportunities for research
- Major scientific research site within a major tourist area
- Human and biological documentation is good

# The Ridges has potential for expanding to a larger audience. (4)

- Expanding impacts on a local, national, and international level
- Attracts international visitors
- Strategic planning, risk management- guides development
- ► Focus on The Ridges

#### The Ridges was built from grassroots environmental pioneers that serve as an inspiration today. (4)

- Historical perspectiveenvironmental pioneers
- The Ridges founders and the pureness of their intent
- Grassroots beginnings is an inspiration
- Connections-maintain values

# The Ridges is involved in many partnerships. (4)

- ▶ Partnerships in Door County
- Connected to Toft Point Natural Area
- ► Consider Logan Creek Natural Area
- Ecological landscape with land trust combination

# The Ridges preserves the cultural history of Door County. (3)

- Historic range lights are a link to maritime history
- Stewards of the range lights preservation
- ► Heritage of First Nations

# The Ridges has a close link to the community of Baileys Harbor. (3)

- Longtime presence in Baileys Harbor
- Link between preserved area and growing community-serves as a case study for others.
- ► Adjoins a village

# The Ridges is a leader in conservation efforts. (2)

- Leader in uncovering and education citizens regarding environmental issues
- ► Leadership in conservation

#### **Question 2: Audience**

# Who are the target audiences and potential audiences of The Ridges Sanctuary?

Participants were asked to score the relative importance of each identified target audience. Each participant had 10 points to distribute among the responses, with no more than 4 points per response. Numbers in parentheses at the end of each response indicate the total number of points all participants attributed to that response.

*Target audiences are organized based on the <u>number of points</u> they received by participants. Responses with the same number of points are grouped, but not listed in any particular order.* 

- ► Children (26)
- ► Tourists and vacationers (17)
- ► Academic researchers (all fields) (16)
- ► Families (14)
- Potential donors (people with money, open to everyone) (11)
- ► Door County businesses (9)
- ► Lighthouse enthusiasts (8)
- ► Passive recreational visitors (7)

- ► All visitors and all residents (6)
- Teachers (including summer classes)
   (6)
- Local decision-makers/government officials (6)
- ► Local Baileys Harbor residents (5)
- ► Adult seasonal residents (5)
- Visitors interested in Green Building/LEED (5)
- ► The Ridges staff and volunteers (including potential) (5)
- ► Granting organizations (Scenic Byways, etc.) (5)
- Wildflower enthusiasts (including garden clubs, botanic gardens, arboretums) (5)
- Arts organizations (music, theater, visual) (4)
- ► Corporations (4)
- Environmentalists (whole world view) (4)
- ► Members of The Ridges (3)
- ► State and federal agencies (3)
- ► Retirement community (3)
- Churches/religious organizations (3)
- ► Tour agencies (3)
- ► Library users (3)
- Local landowners interested in sustainable practices (3)

- Artists (writers, photographers, philosophers, sculptors, poets seeking inspiration) (2)
- ► Students of Door County (2)
- Other conservation organizations
   (2)
- People curious about environmental information (2)
- ► Grandparents (2)
- Groups that might learn from The Ridges (Trust Organizations, etc.) (1)
- ▶ Birding community (1)
- Class participants (specific topics) (1)
- ► Repeat visitors (1)
- ► Native American community (1)
- People seeking maritime history (0)
- Someone who is clueless about nature (0)
- Seekers of contemplation/ meditation (0)
- ► Youth organizations and camps (Scouts, etc.) (0)
- School children as potential members (0)
- ► Home schooled community (0)
- ► Underserved audiences (0)
- Active recreationists (boaters, bicyclists, motorcyclists) (0)
- ► Potential board members (0)
- ► Internet users (0)

# Question 3: Purpose of New Facility

- A. What activities can a new facility help The Ridges to achieve?
- B. What activities are not appropriate to the new facility?

Participants were asked to separately score the relative importance of both questions. Each participant had 10 points to distribute for each question, and could give no more than 4 points per response. Numbers in parenthesis at the end of each response indicate the total number of points all participants attributed to that response.

Activities for both questions are organized based on the <u>number of points</u> they received by participants. Responses with the same number of points are grouped, but not listed in any particular order.

# A. Activities a new facility can help to achieve:

- ► Model sustainability (16)
- ► Visibility of the organization (16)
- ► Natural history interpretation (13)
- ▶ Portal to a "sense of place" (12)
- Year-round welcome center and trailhead (9)



- ► Nature Store (8)
- ► Space for researchers (8)
- Landscaping should reflect values

   (8)
- Beacon for environmental stewardship, community, economics (7)
- Utilize digital technology to connect with kids (7)
- ► Model values of The Ridges (7)
- ▶ Better office space (6)
- ► Incorporate outdoor space (6)
- ► Year-round program space (6)
- ► Archive storage area for data (5)
- Interpretive exhibits-focused on interaction (4)
- Connection to the community of Baileys Harbor (4)
- ► Accessibility to the site (3)
- ► Educational work space (3)
- ► Educational displays (3)
- ► Space for reflection/gathering (3)
- Must demonstrate restoration and remediation (3)
- Bring the outside in (2)
- ► Space for reference information (air
- photos, bird lists, etc.) (2)
- Meeting room (facilitates collaboration) (2)

- Environmental outreach programs (invasive species, etc.) (2)
- Serve as an open invitation to everyone (2)
- ► Show a regional ecological view (2)
- ► Space for children (2)
- ▶ Place where people are welcomed (1)
- ► Tell history of The Ridges (1)
- ► Show the whole picture-"Portal to the Peninsula" (1)
- Sufficient and comfortable restrooms (1)
- ► Focus services into one area (0)
- Bring in new members/supporters

   (0)
- Environmental library and/or display (0)
- ► Storage space (0)
- ► Focus on The Ridges (0)
- ► Donor area (for meetings) (0)
- Communication with outside world
   (0)
- Example of multi-use with village (0)
- ► Help people appreciate <u>their</u> environment (0)
- Must look at the <u>campus</u> of facilities (0)
- Link orientation to the Nature store
   (0)
- ► Model Door County character (0)
- Move all visitor/education services to one space (0)

# B. Activities not appropriate to the new facility:

- Should not be pretentious... should fit into the community (21)
- Should not be a community center (16)
- Shouldn't be a dead end-encourage outdoor visits (16)
- Avoid anything that conflicts with mission/priorities (15)
- Should not have a large auditorium (14)
- Avoid standard HVAC and energy systems (14)
- ► Avoid formal landscaping (11)
- Should not be a storage/ maintenance facility (8)
- Avoid any food operations (including vending) (8)
- Should not be a tourist information center (6)
- Need to mix solid with flexible space (5)
- Avoid a large building-should be a portal to the outdoors (5)
- Avoid musical performance area (auditorium with stage) (4)

- Question placement of library in building (4)
- ► Should not be a little kid's playroom (3)
- ▶ Nothing that requires a variance (2)
- Do not interpret range light at new facility (1)
- Not just be limited to summer tourists (1)
- Researcher's needs should be in another facility (0)

#### **Question 4: Stories**

# What are the important and unique stories that should be told at The Ridges?

These responses were recorded from worksheets turned in or messages sent after the visioning session was completed. They were not discussed by the visioning participants group. Responses were grouped by major topic category.

#### Natural History Related

- Geological and biological history of the ridge and swale complex
- ► Geology of the Niagara Escarpment
- ► Biodiversity
- ► Endangered species
- ► Plant uniqueness

- ► Geological
- Post-glacial history of the Great Lakes
- Succession of ecosystems

#### **Cultural History Related**

- ► Founding The Ridges
  - ► Tofts and Founders
  - Emma standing in front of bulldozers, swearing at plant stealers
  - Roy Lukes cleaning a bathroom and meeting a large donor.
  - History of an environmental organization—how did this happen?
  - Conservation establishment history
  - Emma Toft/Olivia Traven/Jens Jensen/Albert Fuller — The Ridges founding
  - Connection of the range light buildings to the formation of The Ridges organization
- Loggers and potato planters (human history)
- ► Maritime history of Baileys Harbor
- Early naturalists'/botanists' explorations

#### **Other Stories**

- Sustainability practices
- Steady expansion through land acquisition

- ► Scientific research through 75 years
- Education program development through the years
- The ways The Ridges benefits Baileys Harbor and Door County
  - Environmentally: wetlands' role in water quality; services like Door County Invasive Species Team
  - Economically: bringing in visitors and tourist dollars
  - ► Educationally
- The Ridges partnerships: Nature Conservancy, Land Trust, DNR, UW-GB, YMCA, DC libraries, others
- Not-for-Profit organizations (the good, the bad, and everything in between)
- ► Radio Free Europe (?)

#### Techniques

Utilize/integrate technology when telling these stories. Things such as an iPhone/iPod touch app about The Ridges that people could utilize throughout The Ridges property to help learn about the land, the plants, and the animals. Also, perhaps utilize GPS technology to guide visitors in and around the property, to specific points of interest, almost like a virtual tour when a guide/naturalist is not available. Embrace technology and utilize it to help maximize The Ridges' mission.

#### **Question 5: Resources**

These responses were recorded from worksheets turned in or messages sent after the visioning session was completed. They were not discussed by the visioning participants group. A number in parenthesis after a response indicates the number of participants who listed the same resource. No number indicates just one participant recommended the resource.

#### Who are some <u>key people</u> we should interview who know the cultural and natural history of this site?

- ► Roy Lukes (past director) (11)
- ► Lee Traven (7)
- Carl Scholz (Board member instrumental in acquisition of Ridges property near Jacksonport, school superintendent) (5)
- ► Paul Regnier (past director) (5)
- Bill Schuster (Department head for Door County Soil and Water, past Board president) (2)
- ► Mike Madden (retired teacher) (2)
- ► Gary Fewless (UW-Green Bay botanist) (2)
- Mary Ann Johnson (local historian, history of Baileys Harbor) (2)
- Bob Howe (UW-Green Bay, Biology)
   (2)
- Paul Sager (UW-Green Bay, Director of arboretum)
- Lincoln McGurk

- ► Fred Anderson
- ► Kathleen Harris
- Fran and Paul Barton (Former board members: endowment and dragonfly research)
- Aurelia Stampp (original planning project member and programming)
- ► Maureen McGrath
- ► Mike Draney (UW-Green Bay, insects)
- ► Mike Grimm (Nature Conservancy)
- Mark and Sue Martin (DNR, grew up with Ridges, Birding Trail)
- Bob Brogan (Board member, donors)
- ▶ Bob Ragotzkie (Sea Grant, research)
- Tim Beyer (UWSP, Master's thesis on The Ridges)
- John Brann (former Treasurer, wife Claire also on board, live in The Oakes in Baileys Harbor)
- Cathleen Haskins (Memory Project)
- ► Trudy Toft (sister of Emma Toft)
- Baileys Harbor Historical Society
- Founders relatives
- Other past employees, board members, and people with a long history of involvement (Hammerberg's, Klepp's)

#### What are some <u>key print and digital</u> <u>resources</u> we should review as we continue to learn about the site?

- The Ridges Sanctuary by Roy Lukes, 1987 (written for 50th anniversary) (7)
- ► *The History of Door County* by H.R. Holand, 1993 (2)
- ► The Ridges Archives (2)
- Geology and Natural History of the Baileys Harbor-Ridges Sanctuary Area by Roger Kuhns, 2010
- Various Baileys Harbor books (ask Jeanne at the library)
- The Laurie Room in Sturgeon Bay Branch of Door County Library has extensive resources on Door County history, including the Door County Advocate on microfilm.
- Cathleen Haskins interviews
- Board issues and meeting notes
- Slideshow by Mike Madden from the early 80s (Steve has a copy)
- Baileys Harbor Smart Growth Comprehensive Plan
- Documents that cover history and scientific research at Toft Point
- Roy Lukes might have some records.
- Albert Fuller's publications on the flora of Baileys Harbor (especially orchids)
- Door County Maritime Museum: maritime history connections and the range lights.

Appendices

What are some <u>other facilities or sites</u> we should visit that tell similar stories or serve as good models for The Ridges?

- Northern Great Lakes Visitor Center near Ashland
- ► Aldo Leopold Center
- Crossroads at Big Creek (also listed as an inappropriate example below)
- ► Urban Ecology Center in Milwaukee
- Schlitz Audubon Center in Milwaukee
- Riveredge Nature Center in Newberg, WI
- Cool museum on French in Nova Scotia (physical model)
- Baileys Harbor Town Hall library addition- a "sensitive" addition to a historic structure
- Nathan Nichols building in downtown Baileys Harbor-the reuse and connection of two historic buildings
- Inappropriate examples: Door County Auditorium, Birch Creek Music Performance Center, Crossroads at Big Creek main building, Bjorklunden (too large), Peninsula Players (large and inaccessible).
- ► None in Door County quite do it!
- Bryce Canyon National Park, Utah: trail system
- Bruce Peninsula National Park, Ontario: the Niagara Escarpment

- Kartchner Caverns, Arizona: minimizing visitor impact on fragile environment
- The Arch, St. Louis: exceptional film about the history and development of the monument
- International Crane Foundation, Wisconsin: creative exhibits
- Lincoln Presidential Library, Illinois: cutting-edge exhibit technology

#### Other notes

 Be sure not to forget about potential grant funding through the new Door County Coastal Scenic Byway

*Plan developed and submitted by:* **Schmeeckle Reserve Interpreters** University of Wisconsin-Stevens Point February 22, 2013 SANDY