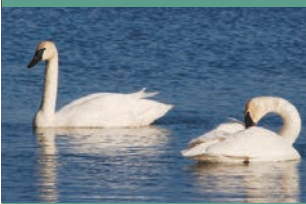


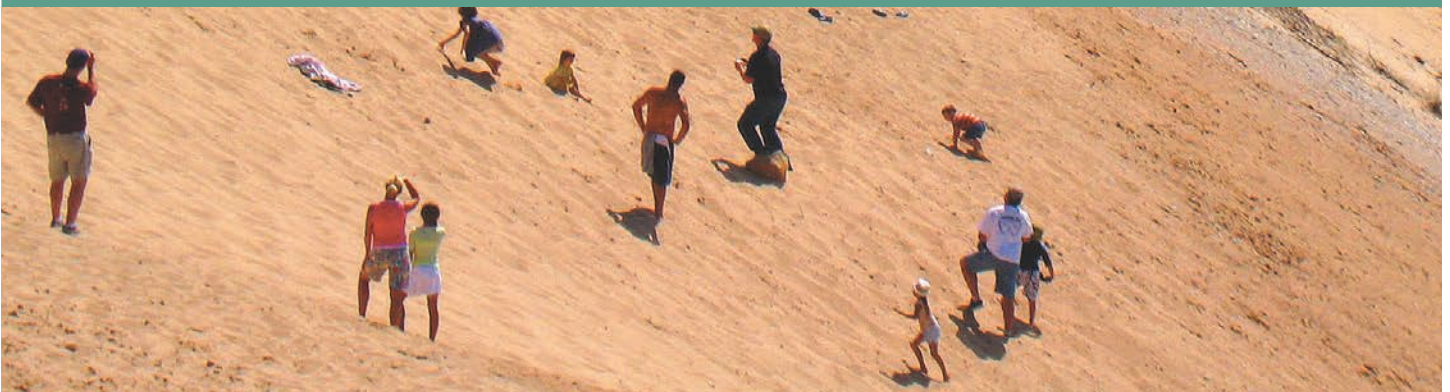


# Sleeping Bear Dunes National Lakeshore

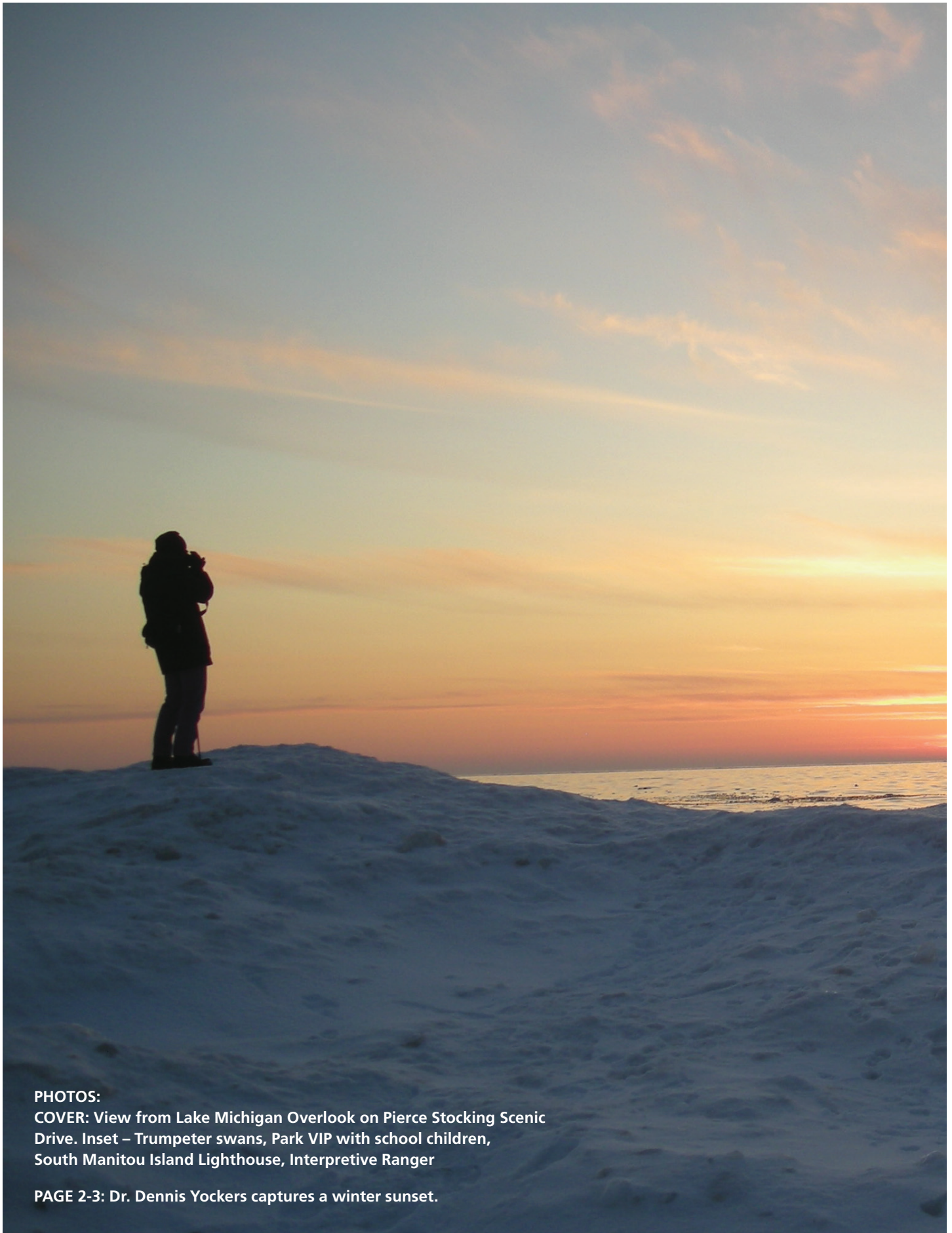
## Long-Range Interpretive Plan



SEPTEMBER, 2011








**PHOTOS:**

**COVER:** View from Lake Michigan Overlook on Pierce Stocking Scenic Drive. Inset – Trumpeter swans, Park VIP with school children, South Manitou Island Lighthouse, Interpretive Ranger

**PAGE 2-3:** Dr. Dennis Yockers captures a winter sunset.





# **Sleeping Bear Dunes National Lakeshore**

## **Long-Range Interpretive Plan**

**Prepared by:**

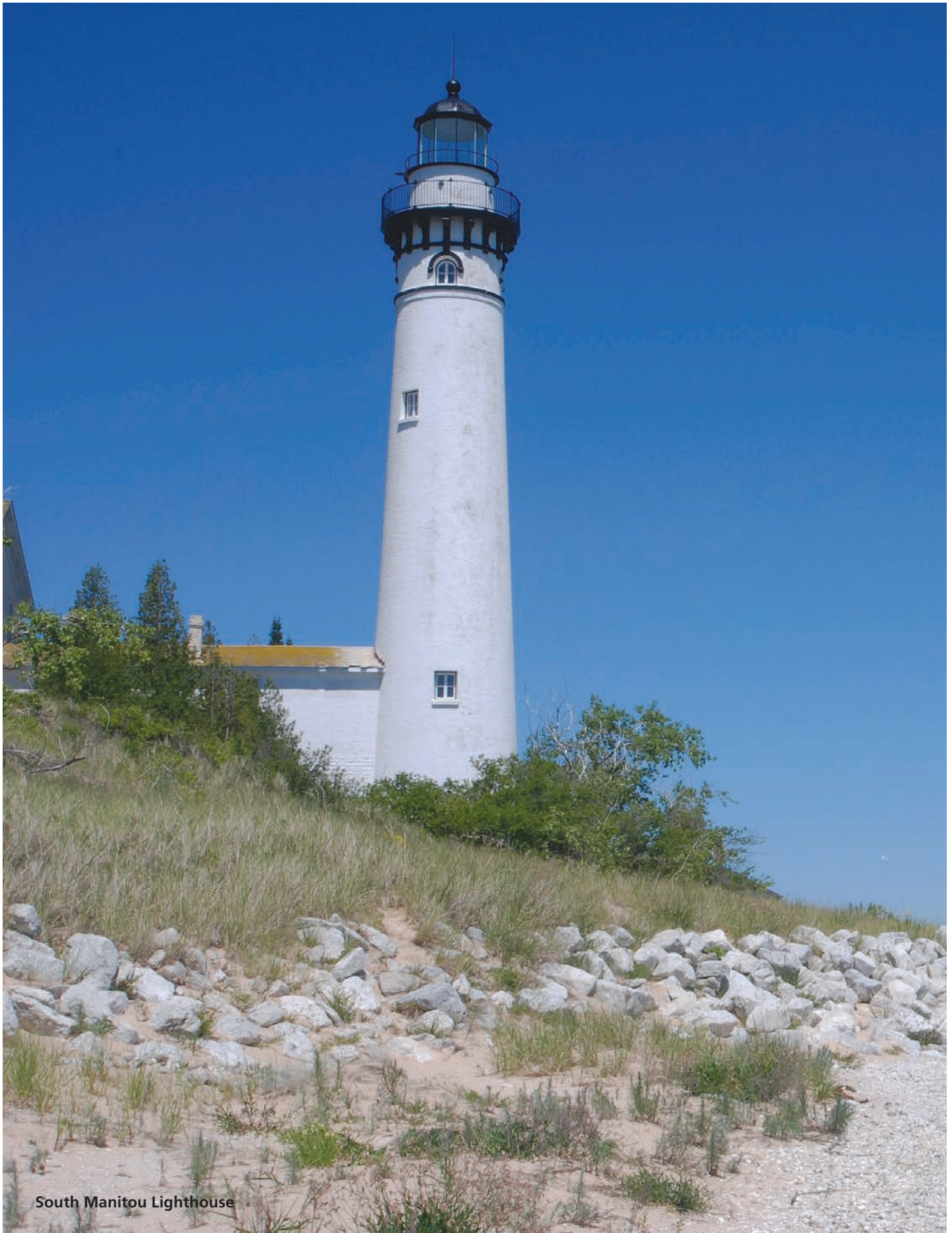
**National Park Service  
Department of the Interior**

**Sleeping Bear Dunes National Lakeshore**

**September, 2011**

**Harpers Ferry Center  
Interpretive Planning**





South Manitou Lighthouse



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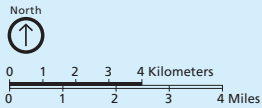


# Sleeping Bear Dunes National Lakeshore



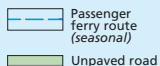
Interpretive ranger leads a beach walk





## LAKE MICHIGAN

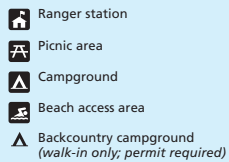
Lake Elevation: 580 feet (177 meters)



Authorized parkland

Park boundary extends ¼ mile into Lake Michigan.

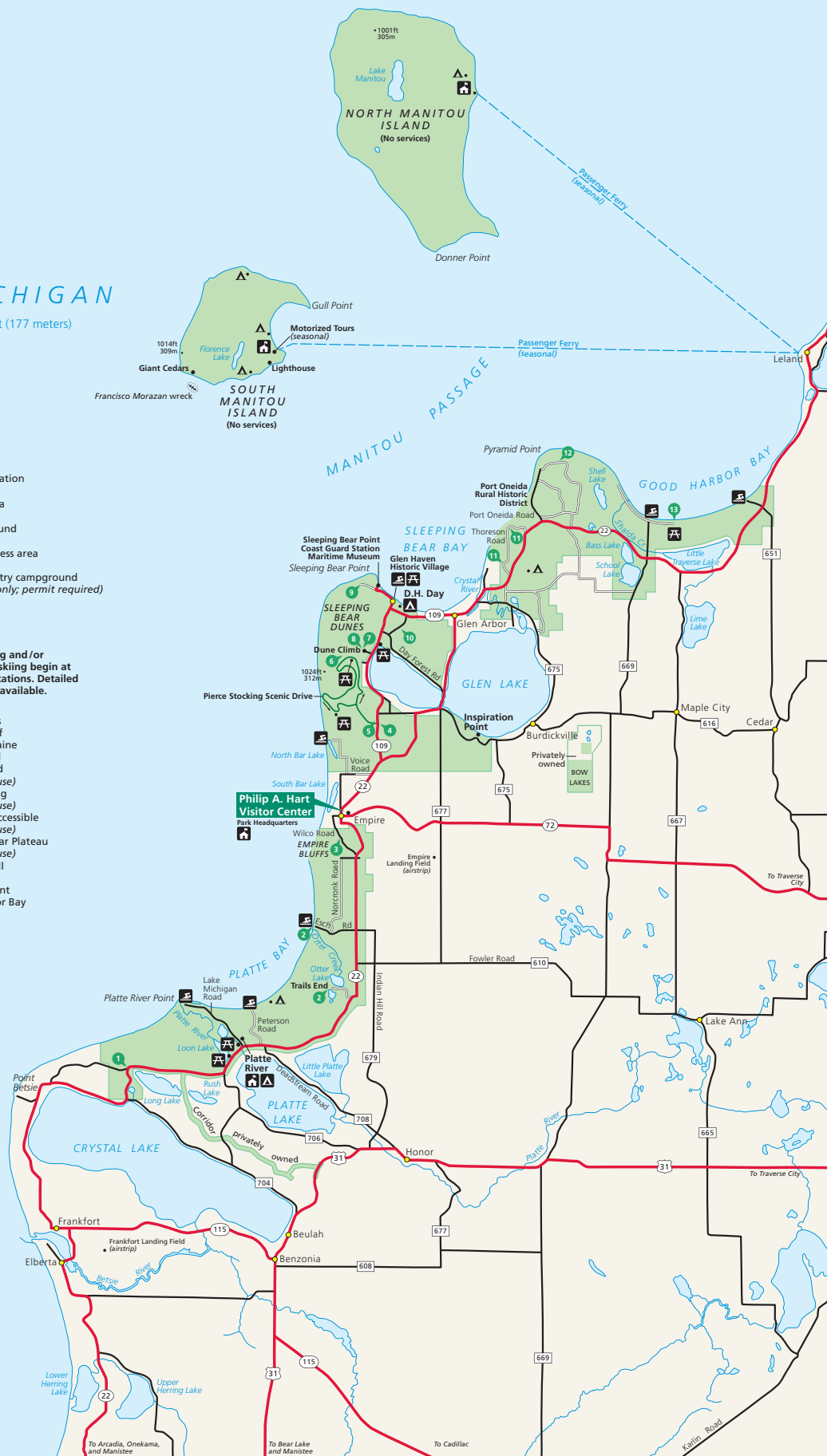
Parcels of private property exist within the park's authorized boundary. Many small areas are not shown on the map. Respect all property owner's rights.



### 5 Trails

Trails for hiking and/or cross-country skiing begin at designated locations. Detailed trail maps are available.

- 1 Old Indian
- 2 Platte Plains
- 3 Empire Bluff
- 4 Windy Moraine
- 5 Shauger Hill
- 6 Cottonwood (no winter use)
- 7 Dunes Hiking (no winter use)
- 8 Duneside Accessible (no winter use)
- 9 Sleeping Bear Plateau (no winter use)
- 10 Alligator Hill
- 11 Bay View
- 12 Pyramid Point
- 13 Good Harbor Bay







Blowout on the dunes



## Introduction

**S**leeping Bear Dunes National Lakeshore (hereafter referred to as the Lakeshore) was established by the U.S. Congress in 1970 with the passage of Public Law (PL) 91-479. The Lakeshore, which consists of a mainland portion plus North Manitou and South Manitou Islands (71,291 acres total), is in the northwestern portion of Michigan's Lower Peninsula. The mainland portion straddles the dividing line between Benzie and Leelanau Counties. The Manitou Islands, in Leelanau County, are located to the northwest in Lake Michigan, about seven miles from the nearest mainland shore. The closest city is Traverse City, Michigan, which is 30 miles east of the Lakeshore. Smaller communities such as Empire, Glen Arbor, Leland and Frankfort are nearer to the Lakeshore.

Named after a complex of coastal sand dunes, the Lakeshore features white sand beaches, steep bluffs reaching 450 feet above Lake Michigan, thick maple and beech forests, and clear inland lakes. The Lakeshore's most notable features — the ancient sand dunes — are products of the actions of wind, ice, and water over thousands of years. During the Ice Age, continental glaciers spread southward from Canada, repeatedly burying the Upper Midwest under sheets of ice. These massive glaciers enlarged river valleys, carved out the Great Lake Basins, and left behind conditions promoting the formation of sand dunes. Over the years, prevailing winds blowing across Lake Michigan



built beach dunes on low-lying shores and “perched” dunes on high glacial plateaus. Sculpted by wind, the active dunes shift and advance over time, sometimes burying trees and creating “ghost forests” of stark, bleached trunks. These high, perched dunes afford spectacular views across Lake Michigan, along its shores, and into adjacent landscapes. The contrast between the open, sunny environment of the dunes and the adjacent lush beech-maple forests is striking.

Long before the area became a National Lakeshore, American Indians, lumbermen, merchant sailors, and farmers visited or settled here. Archeological evidence reveals that the Anishinaabek and their ancestors lived in this area for 3,000 years. They hunted, fished, gathered, gardened, harvested maple sap, and traveled on the off-shore water trails of the Manitou Passage. French explorers, fur traders, and missionaries arrived in the mid-1600s. Not long thereafter, other groups settled in the area, and shipping on the Great Lakes increased, along with the region’s population and commerce. Vast forests were cleared between the early 1800s and the turn of the 20th century to supply lumber for construction and fuel for steam ships that sailed the Great Lakes. By the 1920s, lumbering subsided as a major industry as the supply of hardwood dwindled. Subsistence farms evolved, followed by cash-crop farms and orchards. Visitors to the area found that its pleasant climate and stunning scenery made for a great place to spend leisure time so many vacation cabins and homes were built, especially near the water.

Today, a lighthouse and U.S. Life-Saving Service stations, coastal villages, and picturesque farmsteads reflect the National Lakeshore’s rich maritime, agricultural, and recreational history. The region surrounding the Lakeshore is still a popular vacation and summer home destination. In recent times, the area has undergone considerable growth as new homes and support services expanded full-time and summer populations.

The Lakeshore attracts over one million visitors a year. Most recreate during the summer months and climb dunes, hike trails, sightsee on the scenic roads, camp, swim, boat, fish and explore beaches. In the spring, mushroom hunting, birdwatching and wildflower admiring are the most popular activities. The fall colors are stunning while the northern winters, usually white with snow, attract outdoor enthusiasts who like to ski, snowshoe, and hike with little or no crowds. Year-round, the Lakeshore offers places in which to play, dream, refresh, heal, create, and connect to nature and history.

## The Planning Process

This Long-Range Interpretive Plan (LRIP) recommends actions that should occur over the next seven to ten years. It identifies Lakeshore themes, describes visitor experience goals, and recommends a wide variety of both personal and non-personal interpretive services and outreach activities that will best communicate the Lakeshore’s purpose and significance. In concert with the Lakeshore’s Annual



Implementation Plan and Interpretive Database, it completes a Comprehensive Interpretive Plan, as called for in Director's Order 6 (DO-6). Since the process has been customized for Sleeping Bear Dunes National Lakeshore, the ultimate product is an effective and efficient interpretive program that achieves management goals, provides appropriate visitor opportunities, and facilitates desired visitor experiences.

Harpers Ferry Center (HFC) Interpretive Planner Rick Jones began working with Chief of Interpretation, Lisa Myers, in 2008. They conducted a Foundations Workshop that summer and a Recommendations Workshop followed in August 2009. The HFC Planner would also collect information to finalize a Project Agreement and address any unique circumstances or concerns with management.

Barring legislative changes or major new revelations, the foundational elements expressed in this LRIP—purpose, significance, themes, and visitor experience goals—will remain constant over the life of the plan. They are based on those developed for the General Management Plan which was completed in 2009.

Specific recommendations about media and programs may need to be updated as staffing, funding, technology, and/or resource conditions change. Further design documents must be produced to implement some of the goals and recommendations in this plan.

## Lakeshore Purpose

Purpose describes why an area was set aside and what specific purpose

exists for this area. Purpose is derived from legislation, legislative history, public participation, and public rule making. Grounded in this analysis of Lakeshore legislation and legislative history, purpose statements also provide primary criteria against which the appropriateness of plan recommendations, operational decisions, and actions are tested.

**In accordance with the language of the enabling legislation and the General Management Plan of 2009, the purpose of Sleeping Bear Dunes National Lakeshore is:**

---

*To preserve outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena in their natural setting and protect them from developments and uses that would destroy the scenic beauty and natural character of the area, for the benefit, inspiration, education, recreation, and enjoyment of the public.*

---

## Lakeshore Legislation

The Lakeshore legislation reveals the congressional intent for establishing the Lakeshore.

Public Law 91-479  
91st Congress, H.R. 18776  
October 21, 1970

In the years since the Lakeshore was originally set aside by Congress on October 21, 1970 (Public Law 91-479),

some new emphasis (Wilderness, historic preservation), properties (Miller Hill, Bow Lakes and Crystal River) and legislation (1981 Wilderness Recommendation, 1982 PL97-361) have added to the complexity and management of the Lakeshore. The complete record of Legislation is available on-line.

### Lakeshore Significance

Significance statements describe the distinctiveness of the combined resources of a National Park Service unit. These statements:

1. Reflect the uniqueness of the Lakeshore's natural, cultural, scientific, recreational, and inspirational resources and their importance within regional, national, and global contexts;
2. Embody the power of the place through a factual representation of what makes it special;
3. Summarize the importance of the resources to our natural and cultural heritage and;
4. May evolve over time as a result of new discoveries, updates, and research.

**The Lakeshore has national significance for the following reasons:**

- **The Lakeshore contains compactly grouped features of continental glaciation, including post-glacial shoreline adjustment, ridge/swale complex, wind-formed dunes, perched dunes, and examples of associated plant succession. These features are of global importance due to their relatively un-impacted**

**state, the variety of features present, and their proximity to one another.**

- **The Lakeshore preserves outstanding scenic and publicly accessible resources. Its massive glacial headlands, expansive Lake Michigan beaches, diverse habitats, superb water resources, and rich human history offer an exceptional range of recreational, educational, and inspirational opportunities.**
- **The collection of historic landscapes — maritime, agricultural, and recreational — in the Lakeshore is of a size and quality unsurpassed on the Great Lakes and rare elsewhere on the United States' coastline.**
- **The Lakeshore's native plant and animal communities, especially the northern hardwoods, coastal forests, dune communities, and interdunal wetlands, are of a scale and quality that is rare on the Great Lakes shoreline. These relatively intact communities afford an opportunity for continuation of the ecological processes that have shaped them.**

### Fundamental Resources and Values

Fundamental resources and values are systems, processes, features, visitor experiences, stories, and scenes that deserve primary consideration in planning and management because they are critical to maintaining the Lakeshore's purpose and significance. The fundamental resources and values listed below are only a portion



of the Lakeshore's total resources and values; all resources and values were derived from the 2009 General Management Plan, with the exception of dark night skies, which has been identified more recently.

## **GEOLOGIC PROCESSES**

- Ridge and swale topography resulting from old shorelines (e.g., along the Crystal River and the Boekeloo area)
- Perched dunes (e.g., Sleeping Bear Plateau dune complex)
- Kettle lakes and glacial origins (e.g., Bow Lakes)

## **VISITOR OPPORTUNITIES AND SCENERY**

- Dune Climb
- Pierce Stocking Scenic Drive
- Scenic views of historic farmsteads, inland lakes, Lake Michigan shoreline (Empire Bluffs, Sleeping Bear Plateau, Pyramid Point), to/from the shoreline of Manitou Islands, and emergence from dense canopy to open dunes
- Lake Michigan beaches
- North Manitou and South Manitou Islands
- Quiet, solitude, and wilderness
- Dark night skies
- Platte and Crystal Rivers
- Learning about the natural and cultural heritage of the area (glacial phenomena, diverse habitats, human history)
- Understanding the complex and rapidly disappearing natural history of the ecosystems that evolved along the Great Lakes shoreline
- Ranger-led activities, interpretive programs and educational visits

## **CULTURAL RESOURCES AND HISTORY**

- Three U.S. Life-Saving Service stations
- South Manitou Island Lighthouse Complex
- Port Oneida Rural Historic District
- Glen Haven Historic District

## **ECOLOGICAL COMMUNITIES**

- Excellent examples of plant succession transition from shoreline edge to climax hardwood forest (e.g., Esch Road and Good Harbor areas)
- Extensive intact tracts of northern hardwood forest
- Sleeping Bear Plateau dune community complex
- Interdunal wetlands (e.g., Boekeloo marsh, Crystal River area)
- Freshwater resources (Lake Michigan, 26 inland lakes and three rivers/creeks)

Fall colors on School Lake







## Primary Interpretive Themes

Primary interpretive themes are those ideas and concepts that are vital to helping visitors gain an understanding of the Lakeshore's significance and resources. The themes, based on the park's mission, purpose, and resource significance, provide the foundation for all interpretive media and programs. The themes do not include everything that may be interpreted, but they do address those ideas that are critical to understanding and appreciating the Lakeshore's importance. All interpretive efforts—personal and non-personal services—should relate to one or more of the themes and each theme should be addressed by some part of the overall interpretive program.

All Lakeshore audiences should have the opportunity to form intellectual and emotional connections with the meanings and significance inherent in its resources. When that happens, they are more likely to make informed choices regarding the long-term stewardship of the Lakeshore. Tangible resources are objects, places, events, and people related to the themes. Quality interpretation combines intangible meanings (commonly felt emotions, relationships, concepts or values) with the tangibles to facilitate visitors in making their personal connections to the resources.

**The following theme statements will provide the basis for interpretation at the Lakeshore; attached to them are examples of related topics and intangibles:**



## GLACIATION

The tall dunes and dramatic sweep of Lake Michigan shoreline at the Lakeshore, along with other more subtle glacial features, provide an outstanding illustration of glaciation and help people to discover and understand the continually evolving surface of the Earth and how it influences the environment in which we live today.

### Topics:

- Geology
- Weather
- Wind
- Water
- Geography
- Dune ecology
- Perched dunes
- Great Lakes
- Ice Age
- Climate change
- Ridge and swale
- Ancient shorelines
- Creation stories

### Intangible Meanings

- Change
- Survival
- Beauty
- Awe
- Infinity
- Perseverance
- Power
- Force of nature

## RECREATION

The spectacular, yet accessible terrain and sublime beauty of the landscapes at the Lakeshore beckon to all who seek opportunities for exploration, discovery, recreation, and solitude that fulfill the human need for inspiration and renewal through connection to the land.

### Topics:

- Trails
- Scenic roads
- Beaches
- Forests
- Lakes
- Rivers
- Farmsteads
- Historic buildings
- Islands
- Vistas
- Wilderness
- Night skies
- Art

### Intangible Meanings

- Peace
- Gratitude
- Enjoyment
- Relaxation
- Refuge
- Inspiration
- Challenge
- Traditions
- Mother Nature

## HISTORY

The diversity of landscapes and structures at the Lakeshore, including the towering sand dunes with a “cap” of trees called by the region’s Anishinaabek people “Misha Mokwa” (Great Bear) illustrates the rich American Indian, maritime, agricultural, and recreational history of the area, and provides an opportunity to understand and appreciate the traditions, struggles, resourcefulness, and heroism of the people who have lived here using the abundant natural resources for food, shelter, clothing, and commerce.

### Topics:

- Legends
- People
- Boats

- Shipping
- Logging
- Farming
- Tourism
- Conservation
- Adaptation
- Land
- Cultural landscapes
- Natural resources
- Museum collection
- Labor

### **Intangible Meanings**

- Survival
- Family
- Home
- Stewardship
- Time
- Endurance
- Change
- Leisure
- Inspiration
- Legacy

### **BIODIVERSITY**

The diverse post-glacial landscapes protected by the Lakeshore support relatively intact, but fragile, native plant and animal communities that continue to be shaped by natural ecological processes, affording people the opportunity to understand, cherish, and help save the rapidly vanishing natural heritage of the Great Lakes shoreline.

#### **Topics:**

- Succession
- Threatened and endangered species
- Ecosystems
- Flora
- Fauna
- Food chain
- Web of life
- Invasive species

- Climate change
- Populations
- Research
- Inventory and monitoring

### **Intangible Meanings**

- Conservation
- Extinction
- Survival
- Evolution
- Dominance
- Disease
- Education
- Threat
- Biology
- Hope

### **Desired Visitor Experiences**

Desired visitor experiences describe the physical, intellectual, and emotional experiences that should be available for visitors to Sleeping Bear Dunes National Lakeshore. These experiences should be available to visitors of all abilities and backgrounds, including those with visual, auditory, mobility, or cognitive impairments.

Sleeping Bear Dunes National Lakeshore will manage visitor-resource interactions in a manner that the resources will remain unimpaired for the enjoyment of future generations while ensuring that opportunities exist for the visitors to forge meaningful connections to those resources. Programs, facilities and media throughout the Lakeshore will provide information and interpretive opportunities. All visitors should have access to:



## INFORMATION AND ORIENTATION

- A way-finding/orientation sign system that indicates key points of interest throughout the Lakeshore and ensures safe visits.
- A user-friendly website that has all the information needed to plan a visit, offers a virtual experience, and attracts the interest of the under-engaged audiences to the Lakeshore.
- Publications and programs, both hardcopy and digital, that lead to safe, educational, and enjoyable park visits.
- Friendly, professional staff and volunteers who will anticipate and meet visitor's needs and leave a positive impression of the National Park Service.
- Factual and relevant information from accessible waysides and exhibits.
- Cooperating association sales outlets that carry mission-related, interpretive and memorable items which help visitors stay connected to the Lakeshore long after their visit is over.
- Find opportunities for reflection, solitude and personal discovery while enjoying the Lakeshore's diverse natural and cultural resources.
- Enjoy the night sky without intrusion from artificial lights.
- Step onto the grounds of one of the many historic sites preserved in the Lakeshore.
- Gain an appreciation and understanding of the Lakeshore by establishing personal connections and meanings with its flora, fauna, landscapes, history, sights, sounds, and people.
- Join the Volunteers-in-Parks (VIP) program to share individual talents, learn more about the park, and acquire new skills.

## FACILITIES

- Main Visitor Center that provides orientation, information, and interpretation that inspires visitors to further explore and learn about the Lakeshore.
- Facilities, including but not limited to, campgrounds, picnic areas, beaches, historic structures, and restrooms that are clean, safe, and accessible.
- See, feel, hear, and smell life on a rural Port Oneida farm in the early 1900s and as a U.S. Life-Saving Service surfman at the Maritime Museum.

## PERSONAL EXPERIENCES

- Feel welcome and informed about the various ways to enjoy a visit.
- Observe sweeping vistas of Lake Michigan, its shoreline and the Manitou Islands from atop a high dune.
- Experience interpretive products and programs that involve newer technologies including, but not limited to, smart phones, tablets, and social media platforms.
- Participate in a service learning program for students that provides opportunities to learn and practice skills related to interpretation, resource management, the National Park Service, and community service.

- Understand the mission of the National Park Service and the Lakeshore's connection to the rest of the National Park System.
- Participate in a free Junior Ranger program that is fun, educational, and encourages physical activity.
- Attend special events and programs that highlight the significance, purpose, and value of the Lakeshore.
- Engage in curriculum-based education programs that include hands on materials, in-class ranger visits, on-site experiences, and pre- and post-site visit exercises.

### RECREATIONAL ACTIVITIES AND EXPERIENCES

- Access to Lake Michigan and its sandy, expansive beaches given the full range of visitors' abilities and disabilities.
- Enjoy a variety of recreational activities that are compatible with the protection of resources and that afford year-round experiences.
- Areas to play and hike on the dunes.
- Float, paddle and boat on beautiful rivers and inland lakes.
- Have opportunities for physical activities with a degree of personal challenge and adventure that result in a sense of accomplishment and achievement (i.e., wilderness camping, long hikes/skis).
- Drive, hike, or bike on seasonal roads and bicycle trails.
- Harvest food for personal consumption, including fish, nuts, and fruit.
- View the Lakeshore from a boat on Lake Michigan.
- Explore Lake Michigan islands.

- Enjoy the soon-to-be Sleeping Bear Heritage Trail via foot, bike, stroller, or wheelchair.

## Lakeshore User and Audience Profiles

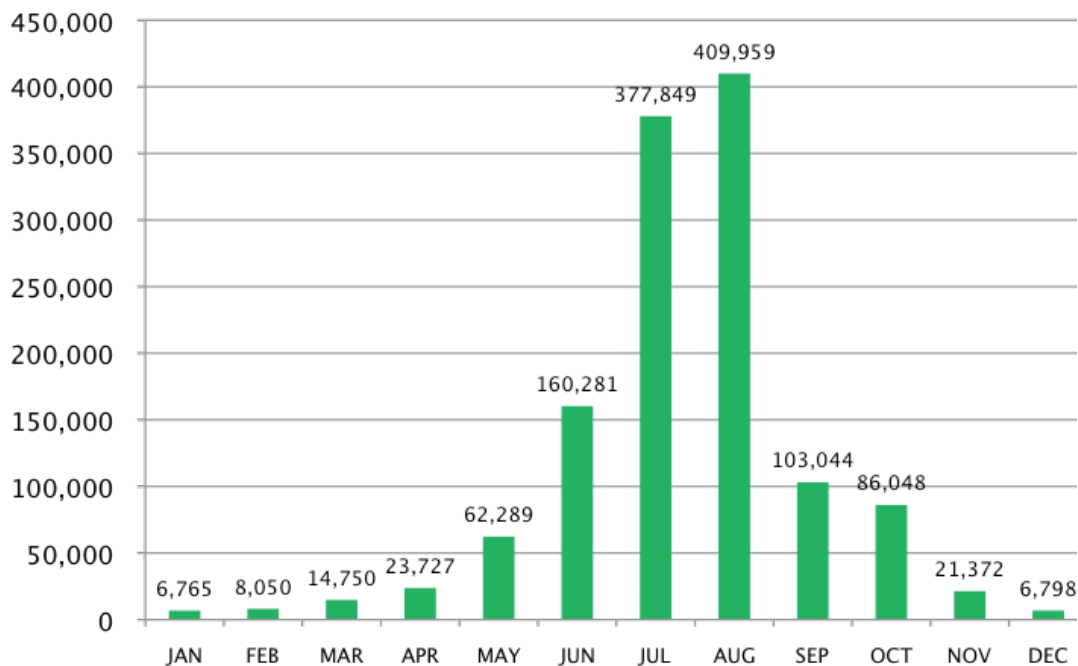
### VISITOR USE

The following annual and monthly visitation figures are based on computations by the National Park Service Public Use Statistics Office which estimates data based on counts at a variety of locations within the Lakeshore. These and more statistics are located at <http://www.nature.nps.gov/stats/park.cfm>.

SLBE VISITATION 1996-2010	
2010	1,280,932
2009	1,165,836
2008	1,104,597
2007	1,134,314
2006	1,147,314
2005	1,218,412
2004	1,114,615
2003	1,153,962
2002	1,170,873
2001	1,127,007
2000	1,195,084
1999	1,364,834
1998	1,298,205
1997	1,157,616
1996	1,091,005



## Sleeping Bear Dunes National Lakeshore 2010 Monthly Visitation



### VISITOR SURVEY BY THE UNIVERSITY OF IDAHO

A Visitor Services Project (VSP) survey was conducted in July 2009. It provided detailed information about visitors, visitation, demographics, economic impact, etc. and is available at <http://psu.uidaho.edu/vsp.profile.htm?ID=o281>.

Highlights from the survey include:

- United States visitors comprised 98% of total visitation, with 57% from Michigan, 10% from Illinois, and smaller proportions from 37 other states and Washington, D.C. International visitors were from 12 countries and comprised 2% of total visitation.
- Forty-seven percent of visitors were visiting the Lakeshore for the first time in their lifetime and 25% had visited six or more times. Seventy-eight percent of visitor groups came once during the past year and 5% had visited five or more times.
- Forty-two percent of visitors were ages 36-60 years, 25% were ages 15 years or younger and 9% were 66 years or older.
- Eight percent of visitor groups reported physical conditions that made it difficult to access or participate in Lakeshore activities or services.
- Most visitor groups (94%) obtained information about the park prior to their visit:
  - through previous visits (66%)
  - friends, relatives, or word of mouth (48%).

- Most visitor groups (92%) received the information they needed.
- Sixty-eight percent indicated they would prefer to obtain information for a future visit from the park website.
- For 56% of visitor groups, visiting the Lakeshore was the primary reason for visiting the area.
- Sixty-five percent of visitor groups stayed overnight within one hour of the park;
  - of these, 25% spent two nights in the park
  - 33% spent five or more nights in the area outside the park.
- Of the visitors who stayed overnight inside the park, 55% tent camped in developed campgrounds; of those staying outside the park, 66% stayed in a lodge, motel, cabin, vacation rental, bed & breakfast, etc.
- Of visitor groups that spent less than 24 hours visiting the park, 29% spent three to four hours. For those who visited for more than one day, 55% spent two to three days. The average length of stay was 39.5 hours, or 1.6 days.
- The most common sites visited were the Dune Climb (61%), the Pierce Stocking Scenic Drive (56%) and the beaches (42%).
- The most common visitor activities were walking, hiking, dune climbing (83%), and general sightseeing (78%). The most important activities were walking, hiking, dune climbing (34%) and general sightseeing (22%).
- Fourteen percent of visitor groups attended a ranger-led talk or program. Of those who did not attend a ranger-led program, 51% indicated that a lack of time prevented them from doing so.
- The visitor services and facilities most commonly used by visitor groups were the park brochure/map (83%) and the restrooms (82%). Nearly all visitor services and facilities were rated as above average in their importance and quality.
- The resources/attributes most commonly rated very important or important were clean water (96%) and clean air (95%).
- The average group expenditure in the park and the surrounding area (within a one-hour drive) was \$702, with a median (50% spent more and 50% spent less) of \$300. The average total expenditure per person was \$199.
- Fifty-two percent of visitor groups were aware that the Lakeshore is open year round. Sixty-two percent of visitor groups would consider visiting the park in a season other than summer, and of those, 91% would consider visiting in the fall.
- Most visitor groups (95%) rated the overall quality of facilities, services, and recreational opportunities at Sleeping Bear Dunes NL as very good or good. Less than 1% of visitor groups rated the overall quality as very poor or poor.



## AUDIENCES

**Vacationers** are mostly from Michigan and the Midwest. They primarily come between May and September to sightsee, play on the beaches, ascend the Dune Climb, and camp. Since most of these visitors are focused on recreation, the challenge is to reach them with interpretive messages and to convey the fact that the site is a National Park Service unit within a greater system.

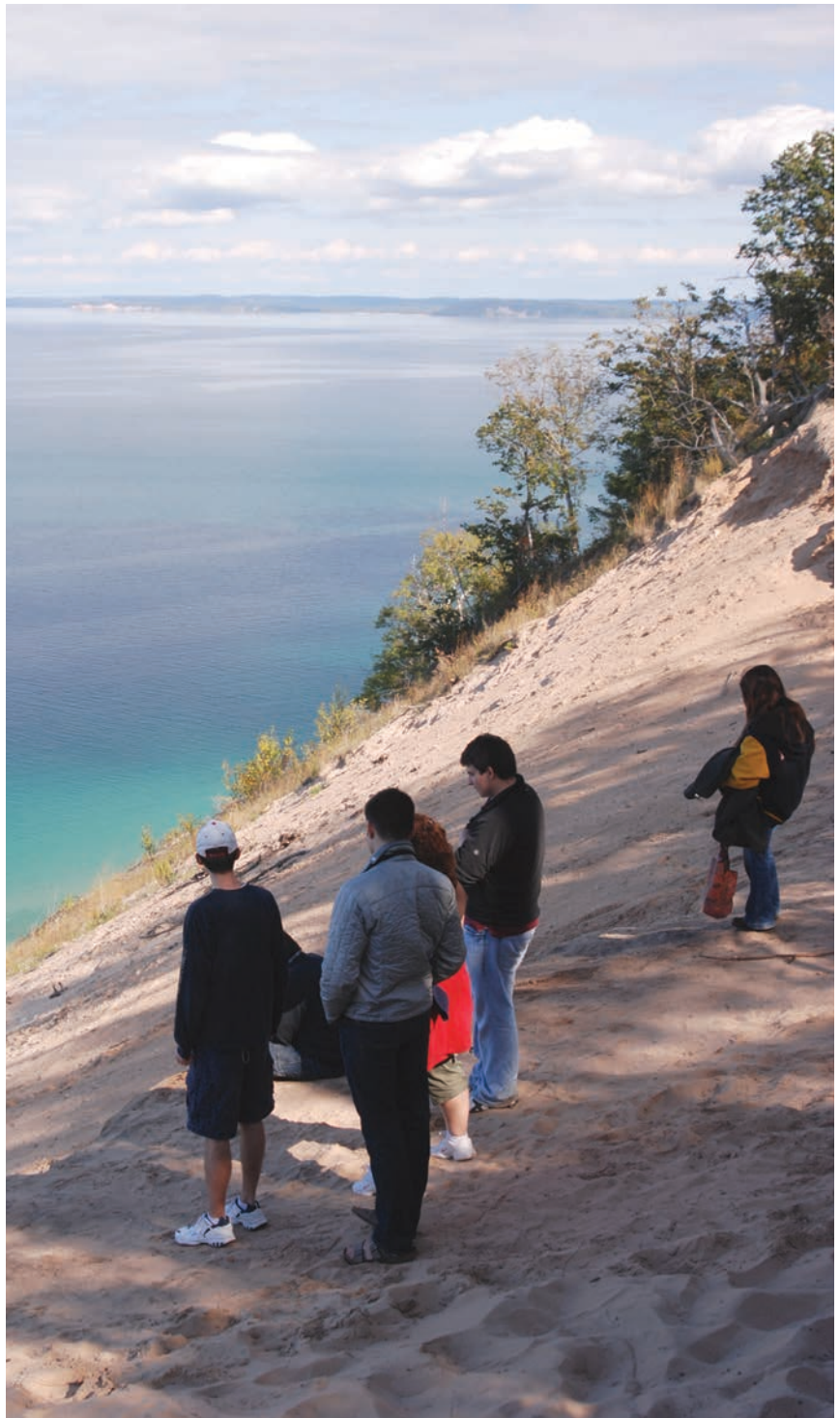
**Locals** live in the Grand Traverse Region and frequent the Lakeshore to recreate, contemplate, walk their dogs, show their guests around, collect berries and mushrooms, and enjoy “their” park in the quieter off-seasons. Many participate in the “Saturdays at the Lakeshore” programs and special events throughout the year.

**Educational Groups** (elementary to college) mostly visit during peak times of the school year (September-October and May-June). They independently schedule programs and guided tours directly with the interpretive staff. Nearly all stop at the Visitor Center for an introduction/orientation to the Lakeshore. Park rangers try to meet the requests for education programs on dune ecology, habitats, communities, and maritime history. However, there is limited interpretive staffing from mid October through the end of May, so many schools are not accommodated, but are given information to conduct activities without a park ranger’s guidance.

**Virtual Visitors** and the technologically adept may or may not ever physically visit the Lakeshore. The website ([www.nps.gov/slbe](http://www.nps.gov/slbe)) is the most popular tool

for these visitors to plan a visit or gain information about the cultural and natural history. In 2011, the Lakeshore launched a Facebook page and with the addition of a media specialist in 2010 to the staff, the website and social media platforms will be enhanced.

Hikers at  
Pyramid Point







Park rangers interpret coastal dunes



# Lakeshore Existing Conditions

## Overview

The most concentrated visitor use areas in the Lakeshore include the Dune Climb, Pierce Stocking Scenic Drive, beach access areas, overlooks, campgrounds, picnic areas, Glen Haven Historic Village, Sleeping Bear Point Life-Saving Station, the Platte and Crystal Rivers, and North and South Manitou Island villages. Opportunities for solitude are often not available in these areas during the summer. However, early in the morning and during the spring, fall, and winter months, there are plenty of times and places where it is possible to walk or hike for miles without encountering another person. In most other areas of the Lakeshore, especially on the islands, outstanding opportunities for solitude are more easily available year-round.

There are opportunities for primitive, unconfined recreation in nearly every portion of the Lakeshore. Backcountry camping is available in two locations on the mainland (White Pine and Valley View) and all over the islands. There are more than 100 miles of hiking trails on the mainland alone, and many more on the islands. There is something for everyone with various degrees of difficulty, elevation gain/loss, distance, and environs.

Popular activities include hunting, fishing, canoeing, kayaking, exploring, swimming, beach-going, wildlife watching, stargazing, snowshoeing, and cross-country skiing. Opportunities for these types of activities are plentiful.



The Lakeshore is largely natural and undeveloped, with expanses of forest land, dunes, and wetlands. Some areas that were once agricultural fields are gradually returning to woodland, while many fields are mowed in order to maintain the cultural landscape. Numerous former home sites, buildings, and driveways have been removed and the sites restored to more natural conditions. Several large areas in the Lakeshore, such as Good Harbor, Sleeping Bear Plateau, Otter Creek, and Platte Plains have little, if any noticeable human imprint other than hiking trails, backcountry campgrounds, and an occasional historic structure, all of which are consistent with the Wilderness Act and NPS wilderness management policies. Most of the visitor support facilities, such as visitor contact stations, campgrounds, trailheads, and picnic areas are clustered on the periphery of the Lakeshore, well outside of these natural and undeveloped areas.

North Manitou Island (15,000 ac) is the largest of the Lakeshore's natural and undeveloped areas. This island is nearly all forested and has no roads. Development (other than hiking trails) is concentrated within easy walking distance of the ferry dock, in what is known as the village. Here, the U.S. Life-Saving Station and associated boathouses are elements of the Lakeshore's only National Historic Landmark.

Most development on South Manitou Island (5,000 ac) is also concentrated within walking distance of the dock. This island, however, has a few county roads that are used during the summer by concession tour

vehicles and administrative vehicles. Historic farmsteads and a schoolhouse are featured along the tour route. Compared to North Manitou Island, this island has more old fields that the Lakeshore is maintaining as cultural landscapes. Nonetheless, much of South Manitou Island is relatively natural and undeveloped.

### Orientation and Wayfinding

Information regarding Sleeping Bear Dunes National Lakeshore is available by mail, phone, and on the official website. Information is also available at local Chambers of Commerce, from the American Automobile Association (AAA), and from area hotels/motels. Some of the Michigan Travel Centers carry Lakeshore information, too. The Cherry Capital Airport in Traverse City would also be an excellent place for park information and orientation exhibits.

Visitor Use Assistants provide information and orientation at campgrounds, entrance stations, and the Visitor Center where they collect fees and are usually the first park employees to greet the public.

Wayfinding in the Lakeshore is challenging. The physical layout of the park is complicated by the number of state and county roads, private properties within the boundary, remoteness of the islands, and the villages of Empire and Glen Arbor that dissect the park. Directional signs along the major access roads are not plentiful or uniform. There are no recreational (brown) highway signs with the NPS arrowhead on any major roads leading to the Lakeshore. Road end beaches



and trailheads are not indicated on main roads. They do not require more than small, brown international symbols, at the least.

The Lakeshore plans to update their sign program, utilizing design components from the NPS Graphic Identity Program to become more significant, visible, and user-friendly.

## Interpretive and Visitor Contact Facilities and Locations

Interpretive programs are easily accessible and meet the needs of visitors at the most popular areas of the Lakeshore. The interpretive staff provides talks (formal and informal) at the Visitor Center, the campground amphitheaters, Glen Haven area, Dune Climb, Pierce Stocking Scenic Drive, Port Oneida, and on mainland trails. Interpretation on the islands is conducted by protection park rangers, interns, volunteers, and the concessioner.

### EMPIRE

Information and visitor orientation is offered at the centrally located Philip A. Hart Visitor Center (VC) in Empire, not within the Lakeshore boundaries. The VC offers information, orientation and interpretation under one roof. Open year-round and staffed by visitor use assistants and volunteers, it is a place for visitors to get questions answered, purchase Lakeshore and national passes, plan visits, explore interpretive exhibits, view the slide show, obtain free informational brochures, and purchase educational and informational items from Eastern

National, the Lakeshore's cooperating association. There are two short audiovisual programs on shoreline straightening and glaciers in addition to the 15-minute "Dreams of the Sleeping Bear" orientation slideshow. The other half of the building is the park's headquarters with staff offices, a library and dispatch center. The entire building is leased through GSA.

### GLEN HAVEN

The Glen Haven Historic District provides many informational, interpretive, and educational opportunities from May - September. The restored General Store is staffed and operated by Eastern National. It appears much as it did in the 1920s and offers typical merchandise and items related to the history of the Glen Haven area, including kitchenware, packaged foods, toys, maritime-related items, and books. In 2009, a new exhibit about the life of David H. Day, the store's owner and town's leader, was installed in the side room of the store. Exhibits were planned, created and installed by interpretive staff and volunteers.

At the restored Blacksmith Shop, visitors learn about blacksmithing and local history from volunteers who fire up the forge and demonstrate the trade. The Glen Haven Cannery, once a bustling fruit packing plant, has been transformed into a boat museum which is also staffed by volunteers who help showcase this unique collection of Great Lakes small craft.

The Sleeping Bear Point Coast Guard Station Maritime Museum (Maritime Museum) is open seasonally. Waysides

## Existing Conditions



Great Lakes boats on display in the Glen Haven Cannery

and museum exhibits focus on the United States Life-Saving Service, the United States Coast Guard, and Great Lakes shipping history. There is a restored boat house complete with surf boats, beach cart rescue apparatus and Lyle guns. Volunteers staff the facility and NPS interpreters demonstrate shipwreck rescues on a daily basis and fire the Lyle gun once a week, during the summer months.

There is a cell phone tour in Glen Haven and new wayside exhibits for the village are in development. They should be installed in 2011 after the completion of a new parking area, installation of an historic boardwalk and the relocation of the fishing tug, *Aloha*.

### PORT ONEIDA

The agricultural landscapes of the Port

Oneida Rural Historic District (Port Oneida) sustain a unique preserve of late 19th and early 20th century upper Midwest agriculture. The 19 farms and more than 3,400 acres are framed by Lake Michigan coastline and forested dunes. This large collection of farmsteads reveals the area's vibrant history. Visitors take scenic driving tours, bicycle on the dirt roads, explore on their own, participate in interpretive activities, and/or attend the annual, 2-day Port Oneida Fair. Park rangers offer programs throughout Port Oneida on a variety of topics related to barns, immigration, and farming. Bicycle tours premiered in 2008 and remain quite popular on the back roads. A partner group, Preserve Historic Sleeping Bear (PHSB), is currently working with the Lakeshore on plans for interactive interpretive



exhibits at the Olsen House, which they adaptively use as their offices. There is a cell phone tour, driving tour with the Friends' booklet, and walking tour with PHSB's pamphlet. Plans to improve interpretation in Port Oneida include a contact station, signs, waysides and trails connecting different farmsteads. The Lakeshore protects additional farmsteads in other areas of the park that offer interesting insights into the history and culture.

## ISLANDS

On South Manitou Island (late May through September), visitor interpretation and orientation are concentrated in the village and lighthouse complex area. A former general store serves as an unstaffed visitor contact station. It houses a collection of photos and artifacts that depict life of the loggers, farmers, and United States Life-Saving Service members who once lived on the island. Motorized interpretive tours of historic farms (farm loop tours), and to the Giant Cedars area are offered by the Manitou Islands Transit concessioner. Interpretive tours are also available of the lighthouse by protection park rangers, interns, and volunteers. In 2008, a replica Fresnel lens was installed in the lighthouse and is now lit from May through October. The lighthouse had ceased to operate after the U.S. Coast Guard left the island in 1958.

North Manitou Island does not generally see day visitors. It is a backpacker's destination. Protection park rangers provide orientation and information directly to visitors as they arrive on the ferry. The island is home to a historic United States Life-Saving Service



station (now park ranger housing) and the oldest life-saving boathouse in the Great Lakes, built in 1864. It is open and unstaffed late May – October (or whenever the special deer hunt is scheduled).

## CAMPGROUNDS AND PICNIC AREAS

Campsites at D.H. Day and Platte River Campgrounds have picnic tables, grills, tent pads, recreational vehicle pads, and restrooms. The D.H. Day Campground is first-come, first-served with vault toilets and no hook ups, open April through October. Only 1/3 of the Platte River Campground is first-come, first-served. The rest of the sites are available by reservation and some have electric hook ups.

This campground is open year-round and has flush toilets and showers.

**Historic farm equipment sets the scene in Port Oneida**



## Existing Conditions

Ranger guides  
students on the  
Cottonwood Trail

There are group campsites at both mainland campgrounds (reservations required). The amphitheaters at D.H. Day and Platte River Campgrounds offer visitors a beautiful natural setting to enjoy nightly (July – August) evening interpretive programs and occasional off-season programs. Since it stays light so late in the summer, most programs are non-illustrated, but rich with props and activities.

There are three campgrounds on South Manitou Island and dispersed camping on North Manitou Island. Mainland backcountry sites are limited to White Pine and Valley View.

Formal picnic areas are at Little Glen Lake, stops #3 and #11 on the Scenic Drive, and at Platte River (sheltered).

There are also some picnic tables located at the VC, Dune Climb, Glen Haven, the Maritime Museum, and 651 and 669 road ends.

### PIERCE STOCKING SCENIC DRIVE

This 7 ½ mile, one-way loop road is one of the most popular destinations for Lakeshore visitors. It affords those with mobility challenges the opportunity to stay in their vehicles and drive through forests, up and over glacial moraines, through a dunescape and by a pine plantation. Those with more time and agility can stop at several overlooks to view inland lakes, massive dunes, Lake Michigan and the Manitou Islands. Hikers are welcome to enjoy trails through forests and dunes, too.





Available to all are:

- Self-guided tour book
- Audio tour
- Multiple waysides
- Cell phone tour

The drive is closed from early November through mid-April, but can be walked, skied or snowshoed during that time.

### DUNE CLIMB

This is the other most popular destination for visitors and is the only dune face where people are encouraged to climb up and down. Open and accessible year-round, people flock here to challenge themselves and marvel at nature's wonders. Also located at this site are:

- Dune Center (Eastern National outlet)
- Dune Box with exhibits (open only when personnel is available)
- Self-guiding accessible trail with waysides

### TRAILS

There are more than a dozen trails and trail systems, ranging in length from just over a mile to nearly 15 miles on the mainland. The trails vary in terrain and habitat. In addition, North Manitou and South Manitou Islands have extensive trail systems. Empire Bluff, Cottonwood, Windy Moraine and the Duneside Accessible Trail are all self-guiding trails. Only the latter trail has waysides. The other three trails have printed guides associated with them.

In 2011, ground will be broken for the Sleeping Bear Heritage Trail, a hard-surfaced, multi-use trail to be constructed parallel to state highways M-22 and M-109 through Leelanau County in the Lakeshore.

## Interpretive Media Resources

### 1. AUDIO-VISUAL:

- a. "Dreams of the Sleeping Bear", a 15-minute VC program is an introduction to the history, beauty, and significance of Sleeping Bear Dunes National Lakeshore. It was converted from slides to a digital, high-definition format in 2009. It is captioned and audio-described. A new projector, screen, surround-sound audio system, and audio enhancement loop have greatly improved the show's impact.

However, it does not address the primary interpretive themes of glaciation or biodiversity, nor does it proclaim the Lakeshore as part of the National Park System. Since we have the technology to show a variety of programs, we should have a menu of options and topics to show to different audiences.

Another shortcoming is that we lack the authority to sell copies of it in our sales outlets and a substantial number of visitors ask for it each year. Any new production must be made available for distribution.

- b. Two short programs in the VC demonstrate glaciation and shoreline straightening. They are in the exhibit area, on a loop, fully accessible, and self-started by a push button. The information is good, but the presentation is outdated. Newer technology could be used to better describe these topics.
- c. Cell phone tours were introduced in 2008 and enhanced in 2009 to include three specific "tours" (Scenic Drive, Glen Haven, and Port

## Existing Conditions



Signage at  
Platte Point

Oneida). There are new options available through the vendor to enhance programs and add audio, video, maps and more for smart phones and other applications.

- d. At the Maritime Museum, there is a short, captioned video program on the Breeches Buoy drill that plays on demand on a small monitor. There is also an oral history station where visitors can listen to or read the transcripts of several stories of Admiral Smith who once worked at the life-saving station. The segments are long and the program could use refreshing.

### 2. WEBSITE:

The official website, [www.nps.gov/slbe](http://www.nps.gov/slbe), is a popular way to gain information about the Lakeshore as noted in the VSP survey of 2009. Virtual visitors access the website to learn about the Lakeshore's natural and cultural resources, recreational

opportunities, activities, current events, operating hours, and directions. The website has become one of the most widely used forms of media by the public and it includes approximately 500 pages of information.

Most of the present content on the website was designed and created by a volunteer in 2007. Until 2011, the role of webmaster had been a collateral duty of the Supervisory Fee and Business Manager. Therefore, it did not get the attention it deserved. The new media specialist is now responsible for the upkeep and improvement of the website.

### 3. WAYSIDES:

The majority of the outdoor exhibits throughout the Lakeshore are weathered, not theme-based, and do not meet the standards of the NPS Graphic Identity Program. A Wayside Plan is sorely needed.

- a. On the grounds of the Maritime Museum, there is a set of three theme-related waysides interpreting the Manitou Passage and role of the U.S. Life-Saving Service in rescuing shipwreck victims.
- b. Along the Scenic Drive, waysides relating to geology and dune formation are disjointed and ineffective.
- c. There are wayside exhibits located throughout the Lakeshore. Tri-panels are located at the Visitor Center and Dune Climb area. These signs, updated in 2006, were designed to primarily provide visitors with basic orientation and information by including a new map and suggested visitor activities.



d. In 2010, a piping plover wayside was created to replace an outdated, generic U.S. Fish and Wildlife Service panel at Platte Point. That same panel may be installed on each of the islands, too.

e. In 2011, a set of over a dozen waysides will be created for Glen Haven Historic Village. The majority will focus on people, land and water, but the few along the beach will be dedicated to Pitchers thistle and piping plover habitats.

#### 4. SELF-GUIDED TRAILS:

The content of the Empire Bluff, Cottonwood and Windy Moraine trails is more informative than interpretive and text-heavy. Graphics are simple or lacking. The signs along the Duneside Accessible Trail are in disrepair yet are the only tactile outdoor exhibits in the Lakeshore. The imminent creation of the Sleeping Bear Heritage Trail, which will follow some of the same route, should be the impetus to revamp and update the trail signs.

#### 5. INDOOR EXHIBITS:

a. Visitor Center exhibits are currently being refreshed to replace worn off reader rails and to add two endangered species to the display cases. (The piping plover and Pitchers thistle were never represented in the original habitat displays installed in the 1980s). There is little opportunity for interactivity in these exhibits. However, for their age, they are still somewhat effective in addressing three of the four interpretive themes (glaciation, human history, and natural ecosystems). The relief map

in the lobby of the VC lacks any orientation or interpretive messages and should be replaced. The information kiosk is not being used to its potential. Without regular updating, information quickly becomes less useful to the public.

b. The General Store has the newest set of exhibits in the Lakeshore. Designed and fabricated in-house with donations from the Friends of Sleeping Bear Dunes and general donation account, the D.H. Day exhibits are fresh, compelling, interactive and a great addition to the interpretation of the maritime, logging, agricultural and tourism history of the region. The last piece of the exhibit to finish in 2011 is the audio component that includes some oral history.

c. Exhibits in the Cannery mostly speak for themselves since they are boats of the Great Lakes. Interpretive text for the boats are computer-generated by staff and volunteers. There is nothing to interpret the fact that the building was once a fruit cannery, so most visitors assume it was used to process fish. Research is necessary to fill that void.

d. The Sleeping Bear Point Maritime Museum includes the life-saving station and boathouse. The boathouse is furnished as if it were 1903 complete with two surf boats, a beach cart, Lyle gun, and an assortment of other rescue equipment. There are no formal exhibit panels but the facility is only open when there is an employee or volunteer available to answer questions and engage the public. In the station,

some of the exhibits that were installed in 1984 are showing their age. This is where we highlight some of our best museum objects (i.e., ship name boards, boat fittings, shipwreck remnants, and U.S. Life-Saving and Coast Guard artifacts).

- e. Partner group Preserve Historic Sleeping Bear has designed interactive indoor exhibits for the Olsen House, a historic home in Port Oneida adaptively used as their offices, and open to the public. Although funding is still being sought for fabrication, they do display a mock-up of these exhibits in the interim. The exhibits focus primarily on the agricultural history of Port Oneida, but touch on broader historic themes in the Lakeshore as well.

### 6. PUBLICATIONS:

- a. A 16-page park newspaper, called the *Visitor Guide*, is produced and published once a year, usually in late spring. It does not serve visitors well between November and May since most information is focused on the summer and fall.
- b. Sleeping Bear Dunes National Lakeshore Unigrid brochure (official map and guide) is scheduled for a complete revision in FY2012. The current map is based on a 1980s template. The new map will be full-sized versus the existing half-size. With the revision, there will be a large-print version developed for the visually impaired.

- c. A full-color, newly designed Junior Ranger book was introduced in August 2010. The activities are plenty, address multiple learning styles, and were created to encourage learning, fun, safety, and physical activity. All primary interpretive themes are addressed. It is available at the VC, campgrounds and islands, as well as online.

- d. The Lakeshore produces too many site bulletins and maps. In an effort to reduce the number of publications, for example, all mainland trail information is now included in the Visitor Guide and on the website. However, traditionally each trailhead has had free maps available and repeat visitors are used to that. Better trail signs and use of technology could help to eliminate the need for handouts at each trailhead.

- e. The Friends of Sleeping Bear Dunes has developed a series of publications that are available for a donation at the VC, Glen Haven, and mainland campgrounds. The current titles are: *Glen Haven Village, Farms and Cabins, Lighthouses, Geology, The Manitou Islands, Port Oneida, Ghost Towns, Pierce Stocking Drive, U.S. Life-Saving Service, Birding, Wildflow-ers*, and *Environmental Impacts*.

### DIGITAL IMAGE AND SLIDE FILES

Interpretive slides were digitized by a volunteer between 2006 and 2009. However, the directory is yet to be organized. All original slides are now within the museum collection. Digitization of



other historic images began in 2011 for use by researchers and park staff.

### LAKESHORE LIBRARY

There is a large collection of reference materials at Headquarters specific to the Lakeshore's natural, cultural and human history, in addition to information about other NPS sites. Years worth of NPS, Great Lakes, and national magazine titles are also available. Without a dedicated volunteer or librarian, these materials are not well organized or updated. The Library should be expanded and refined. The collection needs to be catalogued into the on-line, shared system that other NPS sites use.

### MUSEUM COLLECTION

In FY 2010, there was a total of 79,958 museum objects (artifacts and archives), in the following categories:

1. Archives: 6,770
2. Biology: 20
3. Archeology: 69,410
4. History: 3,758

Museum objects are stored or exhibited in 12 different locations. Currently, there are approximately 50 objects displayed in the VC museum exhibits. The majority on display are in the buildings in Glen Haven. There are two dedicated storage facilities in the maintenance area. These, however lack proper fire suppression and neither have space for an office for museum technician or an archives research room.

Of the total collection of 79,958 objects, only 53,659 objects have been

cataloged, leaving a catalog backlog of 26,299 objects. The majority of the backlog is archeological materials stored and processed at the Midwest Archeology Center. The collection and cataloging process had been handled by a part-time Museum Technician, until 2011, when funds were secured for a four-year term position. Since SLBE's collection stands alone, there is enough work and mandatory requirements for the proper care of the collections to warrant a full-time Museum Curator.

### MEDIA OUTREACH

Lakeshore staff informs the public of upcoming events and special programs through public service announcements and press releases sent to area publications, partners, radio stations, local access television, the Lakeshore website, and by posting information on the campground bulletin boards and Facebook. Both the Leelanau and Benzie County's weekly newspapers often feature Lakeshore-related stories, as does *Traverse Magazine*, a monthly publication. One Lakeshore volunteer hosts a blog site dedicated to information about the Lakeshore.

### Personal Services

Lakeshore staff offer many interpretive programs and services centered on the interpretive themes, including guided walks, hikes, snowshoe tours, evening campground programs, and a variety of educational/interpretive programs for school groups of varying ages. Detailed information about these programs is available at the VC and on the website. From January

Volunteer-in-Parks  
works with  
school group.



through October, Saturdays at the Lakeshore programs are offered each week focusing on different topics and taking place at different locations.

The Division of Interpretation and Visitor Services manages interpretive and educational programming, fee collection, information/orientation, publications, campgrounds, and library and museum collections. The main base of operations is in Empire. The VC is staffed by visitor use assistants as it is the main fee collection site in the Lakeshore and is open year-round.

In 2011, in addition to the Chief of Interpretation and Visitor Services, there was one full-time interpreter, one STF Media Specialist, one STF Volunteer Coordinator (starts 10/11), one full-time Supervisory Fee Specialist, and two STF Visitor Use Assistants (one vacant) in the division. Close to 20 seasonal employees are visitor use assistants (fee collectors) who take in revenues of over \$1 million annually in the VC, entrance stations, campgrounds, donation boxes, and pipe safes. Their salaries are covered by Cost of Collections funds.

In order to maintain basic core interpretive offerings, the Lakeshore relies heavily on volunteers and interns to assist six seasonal interpreters with educational and interpretive programs. Base funding provides salary for four permanent (two STF) and six seasonal interpretive employees. A 2010 Staffing Chart for interpretation is in Appendix 2.

### **CURRENT PERSONAL SERVICES PROGRAM ASSESSMENT**

The interpretive staff works to meet the needs of its audiences through formal and informal interpretation. Despite a small staff, interpretation and education are high priorities. This is reflected in the number of interpretive and educational programs given throughout the year.

Visitors from diverse backgrounds can experience a range of opportunities consistent with the purpose, significance, and fundamental resources and values of the Lakeshore. According to the annual survey distributed each summer, more than 90% of our visitors understand the significance of the Lakeshore. They demonstrate how



they value their own stewardship roles in helping to preserve the natural and cultural features through appropriate use, behavior, and the fact that each year, for the past five years, there has been an increase in both the number of Volunteers-in-Park and Junior Rangers.

Visitor use levels and activities are consistent with management and NPS goals and provide opportunities for recreation, education, and inspiration. Management decisions are based on scholarly and scientific information. When such information is lacking, managers make decisions based on the best available information, adapting as new information becomes available.

#### **FORMAL WALKS AND TALKS**

Guided public walks are scheduled during the peak season (June-August). The topics vary from year to year, but always address the primary interpretive themes of the Lakeshore and relate to glaciation, recreation, human history, and diversity of natural systems and resources. Walks are also available on request for some visiting school groups during their fall and spring field trips season.

#### **EDUCATION PROGRAMS**

Educational programs conducted by interpretive staff are very popular on-site activities for schools. Educators call in advance to set up a guided tour or education program on topics including: land formations, Michigan history, geology, dune ecology, maritime history, and local flora and fauna. Demands for these programs are mostly in May/June and September/October. Teachers fill out evaluation

forms following the programs to provide a tool to gauge the success of the programs.

During the 2008-2009 academic year, Dr. Dennis Yockers from the University of Wisconsin-Stevens Point spent his sabbatical at the Lakeshore and developed an Education Plan which will be incorporated into the Comprehensive Interpretive Plan. The most important recommendation in his plan calls for the Lakeshore to establish a curriculum-based education program that correlates with the Michigan Grade Level Content Expectations. Additional staff will be necessary to accomplish this proposal. See more of his recommendations in Appendix 6.

#### **INFORMAL INTERPRETATION**

Informal interpretation (roving) allows interpretive rangers to interact with visitors throughout the Lakeshore. This activity normally takes place during the summer season and is very effective at the overlooks on the Pierce Stocking Scenic Drive, the Dune Box at the base of the Dune Climb, Glen Haven Historic Village, and in the campgrounds.

#### **OUTREACH**

Off-site programs at schools and community organizations are presented when staffing permits. The programs are tailored to the groups' requests and include standard talks on the local history and culture, plants and animals of the region, geology and information specific to the National Park Service (opportunities and careers). Staff speaks at libraries, garden clubs, conservation organizations, fairs, and

Interpretive park ranger (in USLSS uniform) “rescues” a shipwreck victim.



conferences upon request. Participation at community events such as Naturefest, Leelanau Bird Fest, Bay Days, Fishtown Festival, Inland Seas Summer Festival and the Michigan Schooner Festival are excellent opportunities to reach new audiences. Whenever staffing allows, the Lakeshore will be represented.

### JUNIOR RANGER PROGRAM

An on-site Junior Ranger program was updated in 2010 and designed for children of all ages. Prior to FY 2008, participants had to purchase the booklet, which limited the interest in the program. The average participation during the 5-year period (2004-2008) was only 1,800 people. That number rose to 3,122 in 2008. In 2009, the National Park Foundation sponsored a Student Conservation Association intern to serve as the park's Junior Ranger Ambassador. She offered specific Junior Ranger interpretive programs, created and staffed a Junior Ranger traveling exhibit, and did extensive research, development, and field-testing of new or proposed activities. Thanks to her efforts, 5,677

visitors participated in the program (82% more than the previous year!) and the park received special funding to create and produce the new, full-color Junior Ranger book that debuted in August 2010 as a free publication.

Completion of site-specific activities, the number of which depends on the age of the person, results in new Junior Rangers receiving a badge, patch and certificate. With parental permission, park rangers post the names of new Junior Rangers on the Lakeshore's website.

### RESEARCH

The Lakeshore's archives and other historical resources are accessible to researchers, visitors, and staff. Requests for access and responses to research questions are handled by the Museum Technician.

### TEACHER-RANGER-TEACHER PROGRAM

In 2009, the first Teacher-Ranger-Teacher (TRT) was recruited from Grand Rapids Public Schools and she returned for the summer of 2010. The goal of the program is to enhance the park's capacity to connect with underserved audiences and youth by hiring teachers to work on site during the summer, then return to the classroom and inspire students to learn more about their national parks. The Lakeshore's TRT laid the foundation for implementing a future curriculum-based education program by developing programs, outlining Michigan curriculum objectives for kindergarten through sixth grade, and creating lesson plans to be used by park rangers and teachers. Without special funding, the Lakeshore will



not be able to build up or sustain this program. Our goal would be to invite several teachers each summer to work with the NPS and use these folks to make those connections with the underserved audiences and youth with whom they work during the school year.

## Partnerships

The Lakeshore benefits from valuable ongoing relationships with several partners.

- **EASTERN NATIONAL** is a nonprofit cooperating association that provides educational products and services to Lakeshore visitors. A portion of the proceeds are donated back to the Lakeshore for interpretive and educational programs. Eastern National operates and staffs sales areas in the Visitor Center in Empire, the Dune Center (at the Dune Climb), and the Glen Haven General Store. The donation fund has paid for:
  - Teacher workshops
  - Special events
  - Park newspaper (*Visitor Guide*)
  - Training opportunities
  - Volunteer supplies
  - Dr. Yocker's support costs
- **FRIENDS OF SLEEPING BEAR DUNES** helps with preserving and restoring the Lakeshore's natural, historic, and recreational resources by raising funds, writing grants, and recruiting volunteers. The Friends publishes and distributes a series of informative publications specific to the Lakeshore and collects donations from the public. Their volunteers work on

a variety of projects, such as trail maintenance, revegetating disturbed areas, Adopt-a-Beach, -Trail, -River, etc. They also conduct interpretive and education programs.

- **PRESERVE HISTORIC SLEEPING BEAR** is a nonprofit organization committed to preserving historic structures and cultural landscapes of the Lakeshore through fund-raising and volunteer services. Their volunteers repair, paint, and stabilize barns, outbuildings, and farmsteads. They plan on installing exhibits in the historic

Local students  
participate in  
Earth Day cleanup



Volunteer-in-Park  
demonstrates  
blacksmithing  
to public



house in Port Oneida that they occupy through an agreement with the Lakeshore.

- **MANITOU ISLANDS MEMORIAL SOCIETY** helps preserve the Manitou Islands' cultural traditions. Many members of this non-profit are relatives of or former island residents who provide educational materials and programs, promote the care and maintenance of the islands' historic assets, keep island burial records, and provide hands on volunteer help on the islands.

In addition, the Lakeshore continues to develop relationships with other partners and stakeholders including affiliated American Indian Nations, local educators (formal and informal), Conservation Districts, Michigan State Extension/Sea Grant, the

Traverse Area Motel and Hotel Association, the Visitor and Convention Bureau in Traverse City, and special interest groups. Local Youth Corps members work in the park on a variety of projects where they develop work skills while learning more about career opportunities with the NPS. Boy and Girl Scout groups come to the Lakeshore to earn their special scout ranger badges through a program established nationwide in 2009.

### COMMERCIAL SERVICES

A variety of necessary and appropriate commercial visitor services are provided through Commercial Use Authorizations or concession contracts. Manitou Island Transit, a concession based in Leland, offers ferry service for day trips to South Manitou Island and overnight



camping trips to both North Manitou and South Manitou islands. They also provide interpretive vehicle tours on South Manitou. Vending machines at the Dune Climb and VC, firewood sales in the campgrounds, boat and bike rentals, and tour operators also conduct business in the Lakeshore.

### **Volunteers-in-Park Program**

The VIP program is ever-growing, successful and one of the largest in the Midwest Region. In FY2008, funding through the Centennial Challenge was granted to hire a STF Volunteer Coordinator. It was first filled temporarily and then, permanently through an open, competitive search in FY2009. In FY2010, however, the VIP Coordinator moved into the new media specialist position and since then has been trying to do both jobs (with the help of a full-time volunteer assistant both summers). That position should be selected from a competitive search by the end of FY11.

Approximately 35% of the total volunteer hours are attributed to interpretive programs and services. Volunteers staff the Maritime Museum, the Cannery, and the Blacksmith Shop in the Glen Haven Historic District from Memorial Day through Labor Day. Sometimes, VIPs arrive earlier in May to assist with school programs or stay on through the fall and keep some of the facilities open for visitors. They conduct tours of the lighthouse on South Manitou Island. Some volunteers even provide step-on narration services for bus tours.

About 100 demonstrators of traditional crafts and trades also donate their time at the annual, two-day Port Oneida Fair which is held in early August. Many other VIPs whose hours are logged as maintenance, natural or cultural resource management, and protection interact with the public while they are working on the stabilization of historic structures, hosting the campgrounds, patrolling trails and beaches they have adopted, and monitoring the natural resources of the Lakeshore.

Annual VIP allotments from the Midwest Regional Office fund a substantial percentage of all meal reimbursements, uniform costs, supplies, housing utilities, and recognition awards. However, divisions use base and/or project funds to support volunteers, too. The two most current Annual VIP reports are available in Appendix 5.

### **Issues and Influences**

This section describes the forces that have a bearing on the Lakeshore's interpretive program. Since no program operates in a vacuum, this information provides context for understanding, planning, and implementing the park's interpretation and education program. Issues often include topics such as long-range Servicewide initiatives, critical resource challenges, staffing and funding, employee development, changing demographics, and concerns of neighboring communities and stakeholders.

**SERVICEWIDE:**

**1. *NPS Interpretation and Education Renaissance Plan***

As the National Park Service approaches its centennial in 2016, this plan recommends a renewed focus and change, all of which are relevant to Sleeping Bear Dunes National Lakeshore.

**a. Establishment of national standards for interpretation and education.**

These are currently under development. When they are complete, it will be essential for the Lakeshore to evaluate its program and adjust it to meet the national standards.

**b. Engaging new and diverse audiences.**

The demographics of the American population are changing drastically. It is critically important that national park audiences reflect the face of a richly diverse nation. Everyone must feel welcome at national parks, and everyone must see their own heritage reflecting the stories and meanings interpreted at national parks. The Lakeshore must work to engage traditionally underserved audiences including, but not limited to American Indians, low-income urban and rural audiences, and minority populations.

**c. Use new technology.**

Changing technology is profoundly impacting the way people communicate, learn, find community, express themselves, find and process information. To fully embrace 21st

Century audiences, national parks must use new media and current technologies to interpret park resources, without abandoning traditional methods and techniques. The Lakeshore needs to incorporate new and currently used technologies in its menu of interpretive media to make intangible meanings available in ways never before imagined.

**d. Embrace Partnerships.**

It is clear that with ever growing audiences, and ever dwindling budgets and personnel, the only way to meet the demand and need for fully serving park audiences is to work closely with partners. Luckily, the Lakeshore has been nurturing and building partnerships for many years already. However, we must continue to forge new partnerships, improve existing ones and reevaluate others in relation to offering interpretation and education programs.

**e. Evaluation.**

Traditionally in the NPS, the interpretation and education program has not made decisions on what programs to offer, how to allocate funding, personnel and other critical resources based on solid research and evaluative data. In this time of scarce resources, it is critical to make decisions based on what works, and what audiences want. To accomplish this, parks must start to conduct evaluations and learn from evaluative and research data. The Lakeshore must consider the outcomes of our programming and adapt, if necessary to meet today's audiences.



## 2. *NPS Centennial*

In 2016, the NPS will celebrate its 100 anniversary. Jon Jarvis, the Director of the National Park Service, has directed the agency to focus on our role in stewardship, environmental leadership, recreational experiences, education, and professional excellence as we approach this milestone. The present plan must take these major themes into consideration when making recommendations for future programs and media.

## 3. *Global Climate Change*

Scientific evidence is clear that climate change is a reality and presents myriad challenges for protecting and preserving the natural and cultural resources of the National Park System. There is potential for climate change to profoundly affect the natural and cultural resources of the Lakeshore. Interpreters will need to synthesize the information and use a variety of interpretive techniques to communicate the evidence and projected consequences of climate change, as well as ways the public/individuals can affect change.

## 4. *Invasive Species*

The presence of non-native, invasive plant and aquatic species is wreaking havoc on natural ecosystems throughout the National Park System. Around the Great Lakes, it seems like every day a new threat to native species is introduced. There is ongoing research taking place in the Lakeshore by staff, regional team and outside researchers. Interpreters at the Lakeshore use



Park ranger engages youngster in a fishing program

the research to educate the public about the challenges invasive species present, what the Lakeshore is doing to combat them, and how things they do here and at home may influence the outcomes.

### **PARK SPECIFIC:**

#### **1. *General Management Plan***

Approved in 2009, this document states the strategies for interpretation and education as:

- Develop and implement a comprehensive interpretive plan, with emphasis on providing information, orientation, and interpretive services in the most effective manner possible. Use both personal (involving authorized staff) and non-personal (not involving staff) services (including state-of-the-art technologies) as appropriate.
- Stay informed of changing visitor demographics and preferences to effectively tailor programs for visitors. Develop interpretive media supportive of park purpose, significance, interpretive themes, and fundamental resources and values.
- Continue to promote improved pre-trip planning information and orientation for park visitors through the park's website and other media. Work with local communities and other entities to provide services outside park boundaries, where appropriate.
- Cooperate with partners, other governmental agencies, educational institutions, and other organizations to enrich interpretive and educational opportunities locally, regionally, and nationally.

- Create and implement an education strategy plan, which outlines goals and actions for providing curriculum and place-based education programs.
- Continue to regularly update plans and prioritize actions needed to serve visitors and provide effective interpretation.
- Continue to educate staff, visitors, and the public about park interpretation/education programs.

#### **2. *Port Oneida Rural Historic District Environmental Assessment***

This document assessed action alternatives that would provide physical improvements to Port Oneida by creating visitor amenities, rehabilitating or stabilizing historic structures, and restoring or stabilizing historic landscape features. Visitation is increasing, yet the area currently lacks visitor support services. There are no basic facilities such as public restrooms, a visitor contact station, picnic shelters, or adequate parking areas. Plans call for the following:

- Visitor contact station at the Kelderhouse farmstead; self-serve orientation/information (not funded)
- Interpretation of the Dechow/Klett farmstead focusing on agriculture in the community (not funded)



- Indoor exhibits will be in the Charles Olsen House and focus on immigration, cultural landscapes and Preserve Historic Sleeping Bear (plans completed in 2011)
- A Port Oneida Cultural Landscape Plan (in progress)

### 3. *Fiftieth Anniversary of Sleeping Bear Dunes National Lakeshore*

In 2020, the Lakeshore will be 50 years old. Celebrations, programs and activities should begin in October 2019 and end on October 20, 2020. NPS areas historically find opportunities to upgrade services and their ability to protect resources in advance of such landmark events. The Lakeshore will attempt to upgrade interpretation, education and its media in preparation for the anniversary.

#### DIVISION OF INTERPRETATION:

##### *Staff/Funding Shortage*

Currently the interpretive staff is extremely limited with only two permanent full-time positions (Chief of Interpretation and Visitor Services and a GS-9 Lead Park Ranger) and two subject-to-furlough (six months) positions (Media Specialist and Volunteer Coordinator). There is year-round demand for both of these positions, so project money must be secured to shorten their furloughs. Creative use of project funding, volunteers, seasonal staff, interns, and partners must be considered to fulfill the goals and objectives of this plan. The most important void to be filled is that of an education specialist.



##### *Education*

There is no formal curriculum-based education program at the Lakeshore. School groups are accommodated as staffing permits. Programs are planned with the teacher and relate to the local school district's learning outcomes but have not been intentionally planned in relation to Michigan's Grade Level Content Expectations. Rangers are not available to do in-school visits. We do not have pre- and post-visit materials for teachers, nor do we offer teachers professional development programs on site.


Interpreter leads school group through Glen Haven





Dune view of Day farm and Sleeping Bear Bay





**I**nterpretive planning assesses current conditions and formulates recommendations that would provide direction and focus to achieve the desired future interpretive program. The discussion of each program or media proposal identifies its place within the overall strategy, accounts for special considerations, and sometimes would suggest specific themes and locations that best facilitate a desired interpretive outcome. These suggestions should provide a framework for Lakeshore management's strategic vision, but should not limit the creativity and scope so essential when planning specific programs and media. These recommendations contain both long-term and short-term strategies which may be very helpful when preparing the Annual Implementation Plan and related funding requests. The priority of implementation actions are classified into three tiers: Tier 1- High Priority specifies items that are considered essential, Tier 2 - Medium Priority specifies items that are considered important and Tier 3 - Low Priority specifies items that are considered desirable. The numbers in Brackets [1] following most recommendations indicates which tier was specified for that particular recommendation in the workshops.

A primary challenge for interpreters at Sleeping Bear Dunes National Lakeshore is helping visitors visualize and understand the character and qualities of this changing landscape and its inhabitants, now and in the past. Difficulty in accessing some areas within the Lakeshore, along with challenging natural conditions and isolation adds to this challenge.





### Orientation and Wayfinding

General and trip planning information regarding Sleeping Bear Dunes National Lakeshore would continue to be provided by traditional means such as regular mail, phone, website, and email as well as emerging technologies and social media. All public information should include the website address. Critical information regarding access, trail and road conditions, water conditions, weather and safety should be included in all communications.

Adequate, clear information should be provided at appropriate thresholds of the Lakeshore so that potential visitors are given the tools and motivation for fun, safe visits.

#### RECOMMENDATIONS:

- Develop a SLBE Sign Plan that includes regional and local wayfinding signs. These signs should conform to the NPS sign standards and enhance agency identity in this region of the country. [1]
- Within the Sign Plan, include a uniform design for trailhead signs. Along the trails, improve directional signs, include mileage to and from trailheads and between junctions, and include detailed maps. [1]
- Expand the depth of the current NPS website to include increased use of webcams, technology, blogs, and interactive maps. Include weather and safety updates. [1]
- Establish and update a media mailing list to assure that changes and additions to pre-visit and way-



finding information are distributed in a timely and consistent way. [1]

- Increase SLBE's presence at the Traverse City's Cherry Capital Airport and Visitors' Bureau with an easily accessible brochure rack and exhibit panels which include wayfinding information and maps, along with large attractive photos or a graphic mural to grab visitors' attention and imagination. [2]
- Contact businesses that maintain the major GPS databases to update information on Lakeshore sites. [2]
- Continually update training for all employees and volunteers to provide accurate information, and quality informal visitor contacts. [3]
- Increase use of downloadable information including video, music, maps, and files, for orientation and wayfinding. [3]
- Assure that up-to-date orientation information is available at our partners' sites and related tourist contact points including major Michigan airports, regional visitor information centers, libraries, and other travel-related offices. [3]

## Visitor Contact Facilities

Visitor centers and related facilities and areas, offer compelling museum exhibits and information that can help reveal meanings to Lakeshore audiences with engaging text and alluring graphics and objects.

Indoor exhibits and exterior wayside exhibits provide interpretive

information, but also can subtly remind visitors that this NPS-preserved place is something of great value to our nation. Much effort has been invested at the national level to have a distinctive, easy-to-read, comprehensive system of signs and displays. This system provides off-the-shelf solutions from formal entrance signs to trailhead exhibits and campsite numbers. Built into the NPS Graphic Identity Program is a visual hierarchy that gives readers clear clues as to the relative importance of the blocks of information seen on the signs.

## RECOMMENDATIONS:

### *Visitor Center*

- Complete a comprehensive analysis of the Visitor Center facilities including flow patterns, theatre space, exhibit space, special uses, signs, cooperating association sales space, and sales items. Update and modify to most effectively use the space. [1]
- Install an easily updated, illuminated, and electronically looped information sign behind the front desk. An automated announcement for the audiovisual program would better serve visitor needs in the busy season. [1]
- Enhance orientation by upgrading or replacing the current relief map. Remove the glass so it is tactile. Install reader rails with photos and information. [1]
- Upgrade and light the external map exhibit to better address trip planning when the VC is closed. [2]

### *Port Oneida*

- Install exhibits in Charles Olsen House in collaboration with PHSB. [1]
- Complete an Exhibit Design Plan to use the Kelderhouse site as a primary visitor contact station that includes wayfinding/orientation panels, and exhibits. [1]
- Provide accessible restrooms that remain open year-round. [1]

### *Dune Climb Area*

- Design, fund and build a multi-use covered pavilion large enough to accommodate 100+ visitors (and perhaps provide secure storage for the Dune Box exhibit). The space should be flexible enough to provide a venue for orientation, education, and interpretive activities. Should have moveable seating and nearby restrooms. [1]
- Complete an assessment of current use of the Dune Center and modify if necessary. Priority should be given to enhancing the sales function and emphasizing ways to better interpret the dunes (i.e., nature center, classrooms/meeting rooms, theater). [2]
- Consider renaming the Dune Climb Area to something that reflects the changes, multiple uses, and expansion that will occur over the next 10+ years (e.g., Dunes Recreation Area). [3]
- Consider developing alternative uses or rehabilitation of the historic Great Lakes Picnic Area and perhaps, connect it to the Dune Climb area (i.e., exhibit on Pierce Stocking, native plant garden). [3]

- Improve non-personal interpretation at Glen Lake Picnic Area and build shelter(s) for some picnic tables. [3]

### *Glen Haven*

- Produce a comprehensive assessment of the vehicle access, parking, walking/bike paths and boardwalks, and formulate an optimum use plan of those resources to facilitate the best visitor experience at Glen Haven. [1]
- Update the Interpretive Site Plan for Glen Haven that reveals the continuous history of that site, connects all of the remaining buildings, and addresses wayside exhibit needs. [1]
- Upgrade, stabilize and/or replace the museum exhibits in the Lifesaving Station at Glen Haven and develop a plan to interpret the surfmen's houses. [2]
- Design and install more professional museum exhibit panels in the Cannery. [2]
- Follow the recommendations of the 2007 Cultural Landscape Report for Glen Haven to assure that those resources are protected appropriately. [2]

### *Trails*

- Redesign the Accessible Trail to make it a loop that is not entirely on the new bike path. Make it easier to find, rename it (something more creative), update the audio component, and introduce new technologies. [1]
- Consider making the Good Harbor Bay Trail an accessible, interpretive,



and educational trail that is student and visitor friendly, since there is no self-guiding trail at the northern end of the park. [1]

- Construct a trail system that connects the Kelderhouse, Charles Olsen, Dechow, Ole Olsen, Carsten-Burfiend and Martin Basch farmsteads. [2]
- Consider developing other kinds of trails (i.e., fitness, geology, Native American, children's). [3]
- Develop the Bay to Bay Trail (hiking and paddling) as proposed in the GMP. [3]
- Develop a Bow Lakes Trail with connection to the Glen Lake Schools and environmental education programs. [3]

### *South Manitou Island*

- Develop a site specific Interpretive Plan for South Manitou Island that addresses personal and non-personal services focusing on history, natural processes, and wilderness. [1]
- Revise the South Manitou Island training manual for all island employees. [1]
- Create cell phone tour loops for South Manitou Island. [1]
- Station a seasonal interpreter there from May through August. [2]
- Develop a South Manitou Lighthouse Complex Exhibit Plan. [2]
- Develop guides to the flora, fauna, and history for visitors to use while on the island, including the Valley of the Giants. [1]

- Develop an island tour that would be adaptable for use on computers and portable devices. Include footage from inside and on top of the lighthouse. [2]
- Facilitate opening the Keepers Quarters on South Manitou to the public. [2]
- Design and produce new museum exhibits for the VC. [3]
- Develop the South Manitou Boat House(s) as interpretive space(s) that would include a relief map and would reveal connections between the islands and the mainland. [3]

### *North Manitou Island*

- Develop a site specific Interpretive Plan for North Manitou Island that addresses personal and non-personal services focusing on history, natural processes, and wilderness. [2]
- Develop guides to the flora, fauna, and history for visitors to use while on the island, including information for day users should the concessioner offer day trips. [2]
- Consider developing exhibits for the saw mill. [3]

### *General*

- Designate an Artist-in-Residence facility somewhere in the Lakeshore. [3]

## **Interpretive Media**

### **1) AUDIOVISUAL**

Audiovisual distribution of interpretation and information makes the Lakeshore and its resources more accessible to all visitors, including virtual visitors. Short

AV presentations can supplement static exhibits, set the mood for exploration of a historic area, and assist those who are visually impaired with an audio description of a place or event. The current cell phone tours should be upgraded to include photos, maps, oral histories, ranger narrations, and more. A new interpretive film, as mentioned in the Visitor Center section above can provide a fresh, updated perspective on the Lakeshore's resources and history.

Distribution methods include, but are not limited to, videos, downloadable guides, smartphone applications, podcasts, distance learning, social networking, and online discussions. Audio messaging, when done well, adds emotion, perspective and authenticity. Audiovisual experiences work best if they are short and well-focused.

### RECOMMENDATIONS:

- Develop a plan for utilizing “new technologies” and social media in all facets of the Lakeshore's interpretive program. [1]
- Enhance and expand existing cell phone tours to interpret the Platte River area, the Manitou Islands and to include video, photos, oral histories, ranger narratives, and maps. Have the content accessible via the website. [1]
- Work with affiliated Tribes to produce an authentic telling of the Sleeping Bear legend to acknowledge the role of the Anishinaabek people in regional history. [1]
- Produce a new interpretive film for the Visitor Center for the 50th Anniversary of the Lakeshore. Must include primary interpretive themes, national park identity, aerial views, four-season location shoots, multiple viewpoints, and potentially an original score. Seek distribution as a national broadcast on PBS to reach varied audiences. Make it available as a sales item. [2]
- Develop a virtual island tour that would be adaptable for use on computers and portable devices. Include footage from inside and on top of the lighthouse. [2]
- Produce topical podcasts for distribution via the web and downloading points in the park. [2]
- Partner with Sleeping Bear Dunes Visitor Bureau to update information on their 1610 AM travelers' radio, if it is being utilized. [2]
- Develop and produce a media-source kiosk or exhibit that visitors can utilize to download appropriate A/V content at the VC and perhaps other areas around the Lakeshore (i.e., campgrounds). Provide this content in forms that are distributable for various audiovisual players to include podcasts and mp3 files. [3]
- In VC, upgrade and expand the number of audiovisual components to include oral histories, interactive maps, seasonal changes, island information/virtual tour, or live feed to webcam(s). [3]



## 2) PUBLICATIONS

Providing orientation and wayfinding materials on a broader region-wide basis would serve to increase the Lakeshore's exposure to greater numbers of diverse audiences. Publications must utilize the NPS Graphic Standards and use park logos or other artwork. This will serve to increase recognition of the Lakeshore's national significance and its connection to the larger NPS system. Recognizing that more and more audiences are dependent upon electronic tools to gain this same information, may force a decline in paper products and a push to offer much more electronic information.

### RECOMMENDATIONS:

- Develop a Publications Plan to assess current and future needs for printed interpretive media, facilitate updates of existing materials, and identify future alternative suppliers and funding sources.
  - o Reduce the number of site bulletins and trail maps that are free publications.
  - o Make everything accessible from the website.
  - o Determine what materials need to be available in foreign languages and which languages are most sought after. [1]
- Revise the SLBE Unigrid brochure with HFC. Develop a large-print version at the same time. [1]
- Work with Eastern National to produce a glossy, affordable, souvenir publication about the Lakeshore on the idea of KC Publications Story Behind the Scenery. [1]
- Develop guides to the flora, fauna, and history for visitors to use while on the islands. [2]

## 3) WAYSIDES

Wayside exhibits are especially valuable and greatly enhance a visitor experience in the face of reduced staffing and increased visitor exploration. Primary themes and appropriate locations need to be addressed and determined for each.

Assess the present self-guiding trails, determine which themes work best on which trails and replace printed guides with wayside exhibits, audio, and/or other technology (GPS, podcasts, and smart phones).

### RECOMMENDATIONS:

- Develop a new parkwide Wayside Exhibit Plan. [1]
- Install wayside exhibits at the base of the Dune Climb with aerial photographs of the dune complex



Typical trailhead sign with brochure box

## Recommendations

Bootbrush wayside exhibit explains how invasive species may spread



identifying the trails (to Lake Michigan, Cottonwood, and Sleeping Bear Point), the terrain, and its expanse. Highlight safety issues. [1]

- Develop a wayside exhibit plan for Port Oneida with the Dechow farm as the focal point for interpretation by the myriad structures found there. [2]
- On North Manitou, develop orientation/safety outdoor exhibits for the Village area (Cottage Row and sawmill, too). Exhibits should also expand upon the broader park themes related to the island. [2]
- On South Manitou, develop orientation/safety outdoor exhibits for the Village area and U.S. Life-Saving Service landscape. Exhibits should also expand upon the broader park themes related to the island. [2]
- Possible sites for new or upgraded wayside exhibits and outdoor exhibits:

1. Historic structures: Bufka, Eitzen, Boekeloo, Treat/Tweddle, Ken-Tuk-U-

Inn, Shalda, North Unity School, Aral town site, Good Harbor town site.

2. Popular lake access points (highlighting dune formation, succession, geologic processes, Lake Michigan statistics, water quality, threatened and endangered species, recreation, island history)
3. In non-wilderness areas along the proposed Bay to Bay Trail
4. Leland Harbor
5. Crystal River
6. Otter Creek
7. Bow Lakes
8. Orientation on North and South Manitou Islands
9. Pyramid Point
10. Railroad Grade Trail – Platte River Campground
11. Sleeping Bear Heritage Trail

### 4) EXHIBITS

#### RECOMMENDATIONS

- For the 50th Anniversary, create an exhibit about the development of the park that includes the political and personal stories involved. [2]
- Develop a site specific Interpretive Plan for South Manitou Island that addresses personal and non-personal services focusing on people, land and water, as well as biodiversity. [2]
- Design and produce new museum exhibits for the VC. [3]

### 5) WEBSITE

According to the 2009 Visitor Services Project survey, 68% of those polled indicated that they would prefer to



use the Lakeshore website over other ways to get information about the park. Providing elements of interactivity on the website will engage and attract new audiences and visitors. Virtual visitors will have enhanced experiences.

#### RECOMMENDATIONS:

- Establish an interdisciplinary website committee to regularly review content for accuracy and relevance and introduce new material. [1]
- Create and update links to partners' websites, and resource-related and trusted websites. [1]
- Connect with Google Earth and other internet databases related to geography, science and culture to make sure the Lakeshore has an appropriate presence there. [1]
- Establish a presence on social media sites (Facebook, Twitter, Flickr, and YouTube) to connect to more diverse audiences. [1]
- Work with fee staff to sell park passes on the website. [1]
- Improve the Volunteer Program information by describing jobs, profiling volunteers, recognizing volunteer accomplishments, and adding slide shows of volunteer projects. [1]
- Prepare for the 50th Anniversary of the park by possibly highlighting publications and/or oral histories. [2]
- Introduce more of the audiovisual products recommended in the previous section, including, but not limited to:
  - o Museum collection
  - o Research reports
  - o Virtual tours
- Expand the current links available on the Lakeshore website to include local and regional partners. [2]
- Create and publish optional itineraries that will enhance visitor access to park stories and address the challenges of the mandatory Content Management System. These itineraries may be theme-related (i.e., geology, historic architecture, big trees, native American, back roads) or time-based (i.e., two hours, two days). [2]
- Expand the photo database that is available online. Address copyright concerns prior to publication. Provide guidance for use of photos by media, authors, and commercial entities. [2]

#### 6) LIBRARY

The library has lacked considerable attention for many years. During the summers of 2007 and 2008, a volunteer librarian spent hundreds of hours organizing the collection with plans to convert it from the Dewey to Library of Congress (LOC) system. Illness prevented her from finishing the task and so the library has been in limbo with much of it now labeled according to the LOC, but the card catalog is still on the Dewey Decimal system.

#### RECOMMENDATIONS

- Secure staffing (paid or volunteer) to organize the collection, process new materials, and transfer the

entire catalog online. This involves mandatory Sametime web training with the NPS Librarian. [1]

- Ensure that Lakeshore research reports are catalogued, shelved, and made available on the park's website. [1]
- Research the "untold stories" of the park especially those of American Indians and ethnic groups. [2]
- Establish a library committee to review, cull from, and add to the collection. [2]
- Develop a database that would be supported by the information system in the yet- to-be developed VC kiosk and be on the Lakeshore's website to offer visitors the ability to search for and download specific information. [3]

### **7) MUSEUM COLLECTIONS AND RESEARCH NEEDS**

#### **RECOMMENDATIONS**

- Secure funding for a full-time museum curator to manage, catalog, display, and protect the collection. [1]
- Update the Collections Management Plan. [1]
- Develop Museum Collections Emergency Operations Plan. [1]
- Create an Accession Plan for the collection of oral histories including a prioritized list of interviewees. [1]
- Develop Museum Housekeeping Plan. [1]

### **Personal Services**

Personal interpretive services are those in which the Lakeshore staff interacts with visitors. They are most effective for interpreting complex, controversial, and/or conceptual themes and topics. They actively involve visitors and should provoke them to want to learn more and/or return on another visit.

The Annual Implementation Plan guides the interpretive program in supporting management goals and providing optimum opportunities for the visitor and requires a yearly re-evaluation of desired visitor experiences and subsequent assessment of the most effective combinations of interpretive themes, locations, audiences and types of personal services to best fulfill the visitors' needs. These factors can change from year to year as the Lakeshore's visitation, demographics, management policies, and other needs change.

#### **RECOMMENDATIONS:**

- Introduce fee-based interpretation for step-on bus tours and other special programs (i.e., astronomy festival, bioblitz, speaker series, field seminars). [1]
- Set up and implement a process for evaluating personal services. [1]
- Institute a roving interpretive kayak program on the rivers and inland lakes to increase contact with the paddling population. [2]
- Institute a university level interpretation and education intern program to bolster staffing and groom future employees. [2]





- Increase the availability and capacity of government housing to best recruit and retain quality employees and volunteers. [3]
- Expand the amount of informal (roving) interpretation by uniformed interpreters. [3]

### Education Program

“Through its education program, Sleeping Bear Dunes National Lakeshore will become a premier educational resource, outdoor classroom, and learning laboratory for educators and students of the greater Northwestern Michigan region and

beyond. This will ultimately result in greater understanding and protection of natural and cultural resources both inside and outside the boundaries of the national park”, said Dr. Dennis Yockers in the education plan he created in 2009. While on sabbatical from his professorship at the University of Wisconsin-Stevens Point in 2008-2009, Dr. Yockers conducted research and facilitated focus groups and workshops with Lakeshore staff, local educators and partners to formulate the plan. See the Appendix 6 for a synopsis.

In light of current staffing and budget deficiencies, it is time for a shift in programming at the Lakeshore.

**Take out at the  
Platte River**

Instead of trying to accommodate the school groups we can during the spring and fall, and turning away hundreds of students a week while seasonal staff is focusing on summer programming, more staffing should be dedicated to shoulder season education programs for K-6 students. Summer programming should be reduced. The demand for education programs is much higher than the demand for interpretive programs since groups of at least 25 students and ten adult chaperones are the minimum per program, yet some interpretive programs attract only a handful of people. A curriculum-based education program will be developed and the current programs will be evaluated for outreach and effectiveness. The other, more important factor is the audience itself. By educating the future generations and instilling a sense of stewardship in them at an early age, the National Park Service has a better chance of staying relevant to the American people in an age when park visitation nationwide is on the decline.

Students who participate in place-based educational opportunities get outside, interact with nature and history, use their senses, have fun and make personal connections to the resources with the goal that they will then care about, appreciate and protect those same resources.

Education programs can address and be adapted for multiple learning styles, levels, grades and themes. Teachers appreciate the support, materials, guides, field assistance, and classroom involvement that augment students'

experiences obtained in the park. At the center of development of any curriculum-based program should be the special significance of the Lakeshore to the surrounding region, state, country, and world community. The ultimate goal of the program is to instill in each student a sense of stewardship for this place based on an understanding and appreciation of its many resources. The formal education program should reach diverse groups, reflect cultural sensitivity, and involve parents and community members.

### RECOMMENDATIONS

- Establish an Education Specialist position, which is considered vital to fully instituting a formal Education Plan. [1]
- In the absence of that position, begin a transition from a focus on a full summer interpretive operation to shoulder season education programs that are grade appropriate and aligned with the Michigan Grade Level Content Expectations (GLCEs). [1]
- Incorporate the Junior Ranger program into school programs. [1]
- Evaluate and update materials on a regular basis and have them available on the Lakeshore's website. [1]
- Pursue funding for Teacher-Ranger-Teacher or Teacher-in-Residence programs. [1]
- Concentrate on using the Dune Climb area for educational activities. Improve infrastructure (Dune Center, covered pavilion, Great Lakes picnic area) and promote a variety of opportunities that begin or end there. [2]



- Create service-learning opportunities for middle and high school students that provide them with hands-on, resource management experience. [2]
- Reach out to the homeschooling community and welcome their involvement in education, Junior Ranger, and interpretive programs. [2]
- Collaborate with the Michigan State University Extension Service, Lakeshore partners, Inland Seas Education Association, affiliated tribal groups, and institutions of higher learning to enhance the Education Program. [2]
- Enhance relationships with the Glen Lake Schools to provide better educational access, opportunities, and assistance at the Port Oneida Schoolhouse. [2]
- Collaborate with Glen Lake Schools to develop an Environmental Education program in Bow Lakes with a trail connection to the schools. [3]
- Develop a distance learning program that would take the Lakeshore to audiences all over the world. [3]
- Increase consultation and cooperation with affiliated American Indian Nations and Tribes to enhance interpretive opportunities. [1]
- Develop concession-led interpretive day trips to North Manitou Island (per the General Management Plan). [2]
- Collaborate with boat tour operators near the Lakeshore to include interpretive programs. [2]
- Work with Manitou Island Transit, Leelanau Outdoor Center, private tour operators, and boat tours to provide interpretive training and materials. [2]
- Explore possible locations and partners that allow temporary exhibits about the Lakeshore to be displayed (airports, hospitals, banks, community centers, schools). [3]

## Partnerships

Partnerships and greater civic engagement continue to be beneficial to both the Lakeshore and its regional communities.

### RECOMMENDATIONS:

- When feasible, attend local fairs, exhibits, and gatherings to promote the Lakeshore. [1]

## Staffing and Training

According to the Lakeshore's 2003 Business Plan, interpretation accounts for only 14% of the funds expended for the functional area of Visitor Experience and Enjoyment. Over 1.1 million visitors a year come to the park. The only way to accommodate them and provide higher quality services (personal and non-personal) is to increase the number of field interpreters, especially the number of full-time staff.

Currently there are OFS requests in the system for 8.5 FTEs for interpretation, education, and outreach.

### RECOMMENDATIONS

- Increase staffing levels in order to offer more interpretation and education year-round, both on and off site. Have a dedicated interpreter stationed on South Manitou Island, at Glen Haven/Maritime Museum and at the Dune Climb during the summer. [1]
- The following is a list of additional positions, as mentioned in the Mission Critical Report, required to implement the recommendations of this Long-Range Interpretive Plan. [1]
  - o Education Specialist (PFT)
  - o Interpretive Park Ranger (STF)
  - o (3) Seasonal Interpretive Park Rangers
  - o Museum Curator (PFT)
  - o Interpretive Park Ranger (Visitor Understanding)
- Consideration should be given to establishing Branch Chiefs (fees, education, and interpretation) within this Division. [2]

### Training

Enhanced training is vital in order to field a well prepared workforce and provide incentive for retention of dedicated and skilled employees.

### RECOMMENDATIONS:

- Use the Interpretive Development Program (IDP) and online training courses through the Eppley Institute to train interpreters in essential interpretive skills and techniques. It will keep employees abreast of NPS professional standards and the most effective interpretive methods while providing insight into national

policy and trends. Involvement in the IDP should help employees advance in their careers. [1]

- Increase training and subsequent evaluation and support for the Volunteer Program. Develop training manuals for particular groups of volunteers (i.e., Glen Haven, VC). [1]
- Involve as many staff members as possible in the new NPS interpretive coaching program. [1]
- Invite partners to participate in our interpretive training. [1]
- Revise interpretive reference manuals on North and South Manitou Islands and have them available for all island employees. [1]
- Expand opportunities for interpretive staff to cross-train with other divisions, which will in turn, enhance visitor experiences and provide flexibility during field operations. [1]
- Expand involvement in the Michigan Association of Environmental and Outdoor Education (MAEOE) by attending and presenting at conferences and contributing to their publications. [2]
- Monitor training services offered by our partners and stakeholders; participate when feasible. [2]



## Coordination with Internal Partners

Communication and coordination with our internal partners can enhance our service to the public and each other.

### RECOMMENDATIONS:

- Enhance our relationship with Eastern National and consider other ways to distribute information and sales items (i.e., links to Eastern National's website from ours, separate handout or catalog for SLBE items). [1]
- Assign seasonal employees (collateral duty) to be liaisons with other divisions in order to improve visitor information, enhance safety, contribute toward addressing compliance issues, bolster teamwork, and appreciate each other's jobs. [1]
- Maintain contacts with other Great Lakes NPS sites and collaborate on common issues (exotic species, global climate change, Wilderness). [2]



Island view from mainland dunes

## Recommendations

### Implementation Plans

<b>FY 2012</b> Recommendations in Priority Order	<b>Funding and Other Resources</b>	<b>Person Responsible</b>	<b>Special Considerations and/or Partners</b>
Establish an Education Specialist position, considered vital to fully instituting the new Education Plan.	OFS request submitted	Chief of Interpretation	Support from the Management Team
Transition from a focus on a full summer interpretive operation to an operation that includes a robust shoulder season education program that is grade appropriate and aligned with the Michigan Grade Level Content Expectations.	ONPS	Lead Park Interpreter	Chief of Interpretation
Develop an SLBE Sign Plan that includes regional and local wayfinding signs, which conform to the NPS sign standards and enhance agency identity in this region of the country.	PMIS	Media Specialist and Roads & Trails Foreman	Sign Committee Members
Update the SLBE Unigrid brochure with HFC. Develop a large-print version at the same time.	HFC	Media Specialist	HFC
Establish an interdisciplinary website committee to regularly review content for accuracy and relevance, and introduce new material.	ONPS	Media Specialist	HFC
Improve the Volunteer Program information by describing jobs, profiling volunteers, recognizing volunteer accomplishments, and adding slide shows of volunteer projects on the website.	ONPS	Volunteer Coordinator	MWR VIP Coordinator
Develop a new parkwide Wayside Exhibit Plan.	ONPS	Media Specialist	Chief of Interpretation
Secure staffing (paid or volunteer) to organize the library collection, process new materials, and transfer the entire catalog online. Mandatory sametime web training with the NPS Librarian.	ONPS	Volunteer Coordinator	NPS Librarian



<b>FY 2013</b> <b>Recommendations in Priority Order</b>	<b>Funding and Other Resources</b>	<b>Person Responsible</b>	<b>Special Considerations and/or Partners</b>
Continue transition to focusing on education programs unless funding is secured for additional seasonal positions and summer programs.	OFS ONPS	Lead Park Interpreter	Chief of Interpretation
Design, fund and build a multi-use covered pavilion large enough to accommodate 100+ visitors (at the Dune Climb). Should have moveable seating and nearby restrooms.	PMIS	Chief of Interpretation	Chief of Maintenance
Enhance and expand existing cell phone tours to interpret the Platte River area, the Manitou Islands and to include video, photos, oral histories, ranger narratives, and maps.	ONPS	Chief of Interpretation	Media Specialist, OnCell (phone tour company)
Develop a Publications Plan to assess current and future needs for printed interpretive media.	ONPS	Media Specialist	All Divisions, Cooperating Association
Rehab/redesign the Accessible Trail to make it a loop that is not entirely on the new bike path. Make it easier to find, rename it (something more creative), update the audio component, and introduce new technologies.	Fee Dollars	Chief of Interpretation	Sleeping Bear Heritage Trail (SBHT), Accessibility Coordinator
Create and publish (web and hardcopy) optional itineraries, using newer technology that will enhance visitor access to park stories and address the challenges of the mandatory Web Content Management System.	ONPS	Media Specialist	Other Park Partners
Increase consultation and cooperation with affiliated American Indian Nations and Tribes to enhance interpretive opportunities.	ONPS	Chief of Interpretation, Museum Technician	Superintendent, Affiliated Tribes and Nations
Reorganize the interpretive division by establishing Branch Chiefs (fees, education, and interpretation) to address some of the current staffing and supervision challenges.	ONPS	Superintendent	Management Team
Increase training and subsequent evaluation and support for the Volunteer Program. Develop training manuals for particular groups of volunteers (i.e., Glen Haven, VC)	ONPS	Volunteer Coordinator	MWR Volunteer Coordinator, Lakeshore VIPs and Partners
Work with Eastern National to produce a glossy, affordable, souvenir publication about the Lakeshore on the idea of KC Publications <i>Story Behind the Scenery</i> .	ONPS	Media Specialist	Eastern National

## Recommendations

### Implementation Plans (*continued*)

FY 2014 Recommendations in Priority Order	Funding and Other Resources	Person Responsible	Special Considerations and/or Partners
Install wayside exhibits at the base of the Dune Climb with aerial photographs of the dune complex identifying the trails (to Lake Michigan, Cottonwood, bike trail, and Sleeping Bear Point), the terrain, and its expanse. Highlight safety issues.	PMIS	Media Specialist	Chief of Interpretation
Secure funding for a full-time museum curator to manage, catalog, display, and protect the collection.	ONPS	Chief of Interpretation	MWR Regional Curator
Produce a new interpretive film for the Visitor Center for the 50th Anniversary of the Lakeshore. Seek distribution as a national broadcast on PBS to reach varied audiences. Make it available as a sales item.	PMIS (Fee Dollars)	Media Specialist	Management Team, HFC
Enhance orientation by upgrading or replacing the current relief map. Remove the glass so it is tactile. Install reader rails with photos and information.	PMIS (Fee Dollars)	Media Specialist	Harpers Ferry Center
Provide accessible restrooms that remain open year-round at Port Oneida.	PMIS	Chief of Maintenance	Chief of Interpretation



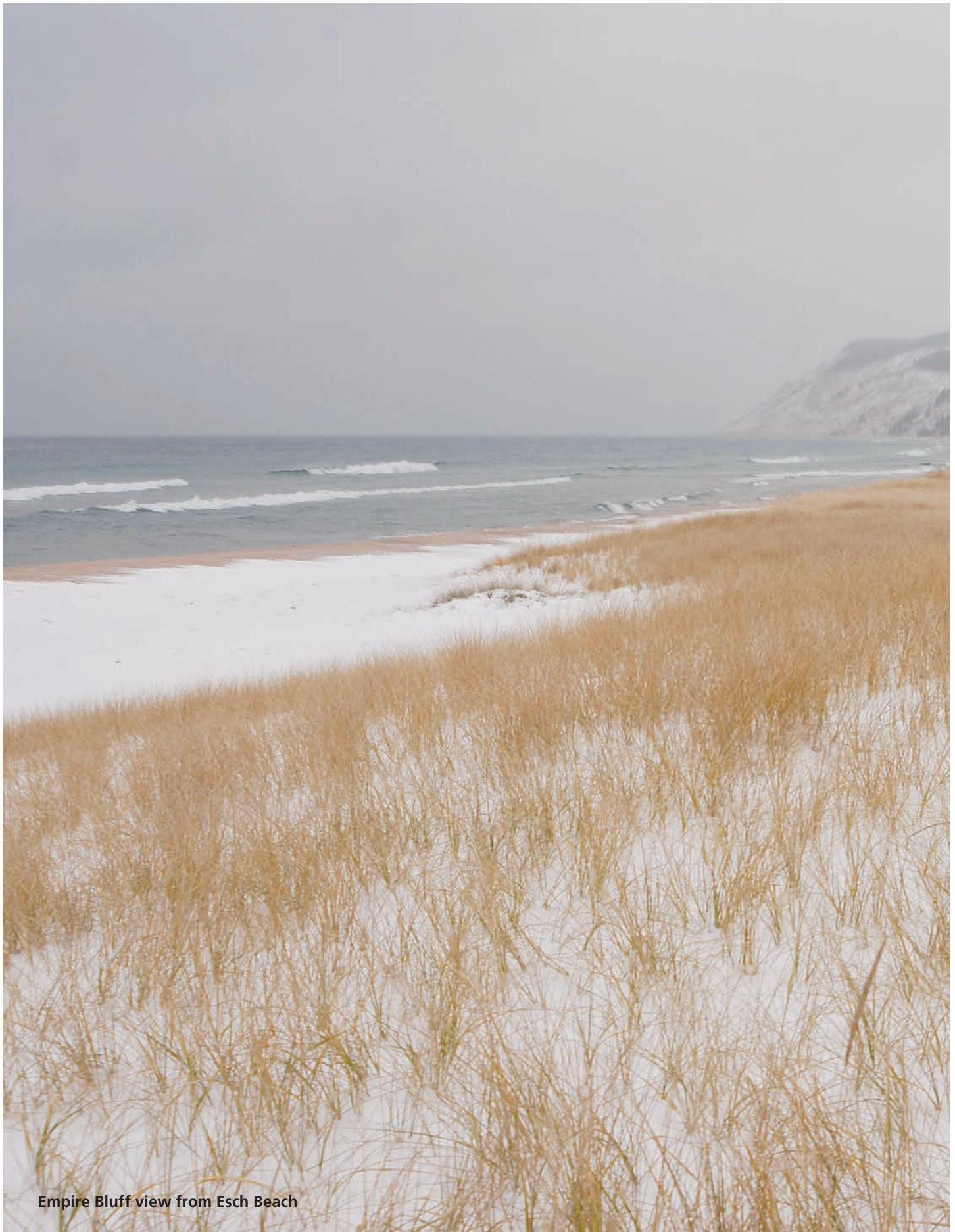


## Long Range Projects

Recommendations in Priority Order	Funding and Other Resources	Person Responsible	Special Considerations and/or Partners
For the 50th Anniversary, create an exhibit about the development of the park that includes the political and personal stories involved. Highlight local publications and/or oral histories.	ONPS	Media Specialist, Lead Interpreter and Museum Technician	Local historical museums and societies
Establish committee to plan and carry out 50th Anniversary activities and special events	ONPS, Eastern Donation	Chief of Interpretation, VIP Coordinator	Management Team
Expand the depth of the current NPS website to include increased use of webcams, technology, blogs, and interactive maps. Include weather and safety updates.	ONPS	Media Specialist	HFC New Media Specialist
Increase SLBE's presence at the Cherry Capital Airport and Visitors' Bureau.	ONPS	Lead Interpreter	Media Specialist
Everything else in the plan and all the things we never saw coming!	Miracles	Everyone	Anyone



Empire bluff view from Esch Beach



Empire Bluff view from Esch Beach





1. Role of Evaluation
2. 2010 Interpretive Staff
3. Special Populations Guidance
4. Servicewide Interpretive Reports (FY 2009- FY2010)
5. Volunteer Annual Reports (FY2009-FY2010)
6. Education Report, April 2009
7. Planning Team

## Evaluation

### THE ROLE OF EVALUATION IN EXHIBIT PLANNING AND DESIGN

Over the past thirty years it has become increasingly evident that exhibitions of all kinds in a variety of venues (including visitor centers) can significantly benefit from using various evaluation activities during the development of any medium. A recent bibliography lists over 600 studies that have demonstrated the value of getting input from target audience members to help inform decisions about both the content and presentation methods being considered, thus avoiding serious and costly mistakes discovered only after the work has been completed.

Traditionally, there are three stages during which formal visitor studies are conducted.

- 1. FRONT-END EVALUATION:** during conceptual planning when themes, story lines, and program ideas are being considered;
- 2. FORMATIVE EVALUATION:** during early fabrication of exhibits when mock-up testing can be carried out;
- 3. SUMMATIVE/REMEDIAL EVALUATION:** conducted after final installation, when the total “package” can be evaluated and final adjustments can be made.

Front-end evaluation concentrates on getting input from potential visitors by means of interviews and/or focus groups, to find out what kinds of information they need and would like to know, and how this information could be presented in a meaningful, interesting, and cost-effective way. Misconceptions about the subject matter are also revealed at this stage, often leading to specific content and presentation elements designed to counter them.

Formative evaluation is intended to “catch” design and/or content problems before they become a part of the final exhibition, when they are often difficult and expensive to “fix.” Especially critical to test at the mock-up stage are interactive exhibits, where feedback from users almost always reveals flaws or weaknesses in the program that can be easily corrected.

In a comprehensive evaluation program, the conduct of summative/remedial studies often reveal problems that were not, or could not be, identified during the earlier stages of development. For example, crowd-flow problems are often revealed only when the actual configuration of all the elements of the exhibition are in place. Similarly, orientation and sign problems become “obvious” at this point, and can often be corrected by relatively minor adjustments to wording and/or placement.

The media evaluation process requires the planning team to identify the intended exhibit target audience in terms of their ages, educational levels, and levels of entering knowledge of the subject matter of the exhibit. The team must also have clearly defined objectives – both cognitive and affective.



Cognitive objectives relate to the intended impact of the exhibit on the target audience in terms of knowledge of the subject matter (e.g., facts, concepts, controversies, comparisons). Affective objectives relate to the intended impact of the exhibit on visitors' beliefs, interests, feelings, and attitudes as related to the exhibit content. These explicit and agreed-to objectives guide not only the way the exhibit is tested at the formative and summative/remedial stages, but the entire exhibit development process, including decisions about content, sequence, media, interpretation, and presentation techniques.

*From the personal writings of evaluator Dr. Harris H. Shettel, Rockville, Maryland, and used by his permission. Edited by Neil Mackay, Harpers Ferry Center, Media Services and Interpretive Media Institute.*

### PROFESSIONAL ORGANIZATIONS

The following professional organizations are concerned with exhibit evaluation and can provide additional information on the subject:

#### **Committee on Audience Research and Evaluation (CARE)**

American Association of Museums (AAM)

1575 Eye Street, NW, Suite 400

Washington, DC 20005

tel.: (202) 289-1818

<http://www.aam-us.org/index.htm>

CARE publishes *Current Trends in Audience Research and Evaluation*, and the *Directory of Evaluators*

#### **Visitor Studies Association (VSA)**

8175-A Sheridan Blvd., Suite 362

Arvada, CO 80003-1928

303-467-2200

303-467-0064 fax

<http://www.visitor studies.org/>

VSA publishes *Visitor Studies Today*

#### **American Evaluation Association**

American Evaluation Association

16 Sconticut Neck Rd #290

Fairhaven MA 02719

Phone/fax 888-232-2275 (toll free in US and some Canada)

<http://www.eval.org/>

AEA publishes *American Journal of Evaluation*

(published three times per year).

## 2010 Interpretive Staff

Position	Status	Grade	Incumbent
Chief of Interpretation and Visitor Services	Permanent	GS-12	Lisa Myers (EOD 2004)
Lead Interpreter	Permanent	GS-9	Lisa Griebel (EOD 2010)
Media Specialist	Subject to Furlough	GS-9	Susan Sanders (EOD 2010)
Volunteer Coordinator	Subject to Furlough	GS-7/9	Vacant (EOD 2011)
Museum Technician <sup>1</sup>	Seasonal – part time	GS-5	Laura Quackenbush (EOD 2006)
Park Ranger (lead)	Seasonal	GS-7	Marie Scott (EOD 1976)
Park Ranger	Seasonal	GS-5	Peg Burman (EOD 1989)
Park Ranger	Seasonal	GS-5	Susan Schmidt (EOD 2009)
Park Ranger	Seasonal (GLRI) <sup>2</sup>	GS-7	Ryan Locke (EOD 2010)
Park Guide	Seasonal	GS-4	Sarah Chalup (EOD 2007)
Park Guide	Seasonal	GS-4	Rebekah Wierda (EOD 2008)
Park Guide	Seasonal	GS-4	Robin Czerwinski (EOD 2009)
Park Guide	Seasonal	GS-4	Lauren Kline (EOD 2010)
Park Ranger – Youth Coordinator	Seasonal (YIP) <sup>3</sup>	GS-7	Amie Lipscomb (EOD 2010)
Biological Science Aid	STEP	GS-1	Troy Bailey (EOD 2010)
Biological Science Aid	STEP	GS-1	Miles Chisolm (EOD 2010)

1. In 2011, funding was secured through PMIS project for a 4 year term, GS-7, Museum Technician. Laura Quackenbush was selected for the position.

2. Great Lakes Restoration Initiative (GLRI) is funding this position, Invasive Species Interpreter, through Environmental Protection Agency agreement for two years. It may be renewed after FY11.

3. Youth Intern Program (YIP) funding was secured through a PMIS project to engage underserved youth in park programs. The team worked with several divisions on a variety of projects. They calculated the Lakeshore's carbon footprint helping this park to become a "Climate Friendly Park". Funding was not secured in FY11, although the team was interested in returning and building upon the skills they had acquired.



## Special Population Guidance

In 2009, Harpers Ferry Center revised the *Programmatic Accessibility Guidelines for NPS Interpretive Media*. It clarifies how to provide programmatic access to people with disabilities and those from special populations. The document is written for media specialists, interpreters, rangers, superintendents, and other National Park Service employees and contractors who approve or develop interpretive media and programs. It provides guidance regarding personal services programs, audiovisual programs, audio tours, exhibits, publications, and web-based media. Topics include:

- Highlights of the new Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (ABAAS).
- New chapters on the laws, regulations, and policies that govern accessible interpretive media.
- Useful links to laws and best practices in accessible media.
- NPS units and Harpers Ferry Center accountability for accessible media.
- The latest pictographs and links for pictograph downloads.
- How to plan and scope for accessibility.
- Accessibility for web-based media.
- Updates on new technology.
- How to prepare a report or document so that computers can read the text content aloud.
- How NPS units can get the word out about their accessible sites and programs.
- Lots of diagrams to help NPS employees and contractors understand the specifications.

Successful programmatic accessibility begins with comprehensive park-wide interpretive planning so that all media and personal services can work together. Where one may not be accessible to all persons, other services can fill the gaps. Early recognition of, and sensitivity to, accessibility issues will result in the most successful visitor experiences. The guidelines are available now in PDF format at [www.nps.gov/hfc](http://www.nps.gov/hfc).

# Servicewide Interpretive Report FY 2009

Form 10-769  
(Rev 8/98)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
**SERVICEWIDE Interpretive REPORT**

Park Org. Code:	Unit Name:	Fiscal Year:
SLBE	Sleeping Bear Dunes National Lakeshore	2009

## Funding Sources

### Fiscal Year Interpretive Expenditures

Park Interpretive Funds Spent (ONPS Base only)	<b>\$340,912</b>
Servicewide Fee Funds Spent	<b>\$354,588</b>
Reimbursable Fee Funds Spent (16USC 1a-2g)	<b>\$0</b>

### Interpretive Staffing for Fiscal Year

Permanent FTE	<b>2.10</b>	No. of Perm Positions	<b>3.0</b>
Temporary FTE	<b>3.50</b>	No. of Temp Positions	<b>9.0</b>
Total FTE	<b>5.60</b>	Total Positions	<b>12.0</b>

## Personal Services

	Number of Times Service Provided	Number of Different Facilities	Number of Different Services	Total Work Years	Total Number of Visitor Contacts	Number Distributed	Total ONPS Salary & Benefits Only	Total All Other Funding Costs
Visitor Centers/Contact Stations		7		13.70	565,279		\$30,442	\$379,822
Informal Interpretation				0.90	16,012		\$30,444	\$5,489
Formal Interpretation	993			1.60	28,473		\$54,797	\$9,879
Demonstrations & Performing Arts	133			0.40	9,939		\$15,221	\$3,744
Junior Ranger Programs				0.30	5,677		\$3,043	\$25,377
Special Events	11			0.40	7,057		\$15,222	\$7,244
Education Programs	5			0.10	193		\$3,044	\$2,744
Subtotal Personal Services	1,142	7		17.40	632,630		\$152,213	\$434,299

## Non-Personal Services

	Number of Times Service Provided	Number of Different Facilities	Number of Different Services	Total Work Years	Total Number of Visitor Contacts	Number Distributed	Total ONPS Salary & Benefits Only	Total All Other Funding Costs
Park-Produced Publications			42	2.70		329,250	\$76,107	\$31,270
Audio-Visual/Electronic Media			25	0.90	448,364		\$30,493	\$8,418
Subtotal Non-Personal Services			67	3.60	448,364	329,250	\$106,600	\$39,688

## Outreach Services

	Number of Times Service Provided	Number of Different Facilities	Number of Different Services	Total Work Years	Total Number of Visitor Contacts	Number Distributed	Total ONPS Salary & Benefits Only	Total All Other Funding Costs
Community Programs	50			0.90	4,285		\$30,440	\$4,940
Loan Materials	0			0.00	0		\$0	\$0
Park Web Site				0.10		0	\$0	\$2,865
Subtotal Outreach Services	50			1.00	4,285	0	\$30,440	\$7,805

Column Totals	1,192	7	67	22.00	1,085,279	329,250	\$289,253	\$481,792
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## Program Highlights

This year, special focus was put on connecting children with the park's natural and cultural resources through a National Park Foundation-funded Junior Ranger Ambassador, a park-funded Teacher-Ranger-Teacher, and an environmental education professor who spent his sabbatical as a volunteer at the park developing an Education Plan as the foundation for providing curriculum-based education programs in the future.

Thanks to a grant from the National Park Foundation, we were able to hire a Student Conservation Association intern to serve as the park's **Junior Ranger Ambassador**. During her 12-week internship, Robin Czerwinski promoted awareness of and participation in the park's Junior Ranger program in several ways. With the park's Teacher -Ranger-Teacher, she designed interpretive programs specifically for visitors interested in learning about and participating in the Junior Ranger program and offered these programs 26 times for a total of 581 participants. This was an increase of approximately 270% in the number of specific Junior Ranger interpretive programs offered and 460% attendance at these programs over last year! She also created and staffed a Junior Ranger field table to increase program participation through informal contacts at several of the park's high visitation sites, like the Dune Climb. Furthermore, she did extensive research, development, and field-testing of activities to be incorporated into a new Junior Ranger booklet. Thanks to her efforts, 5,677 visitors participated in the Junior Ranger program (an 82% increase over last year!), and the park will be eligible for special funding to create and produce a new, full-color Junior Ranger booklet in FY2010.

Likewise Linda Bowman, our first-ever **Teacher-Ranger-Teacher** from C.A. Frost Science Academy in Grand Rapids, was instrumental in enhancing the park's capacity to connect with youth. In addition to assisting with the Junior Ranger programs mentioned above, Linda provided community outreach at children's programs at the local library. Furthermore, she helped lay the foundation for implementing a future curriculum-based education program by outlining program topics, on-site locations, and Michigan curriculum objectives to be met for kindergarten through sixth grade. She then used her experience from teaching early elementary to develop detailed curricula for on-site education programs for kindergarten, first, and second grade. She will continue to educate students on the significance of the park's resources off-site in her classroom throughout the 2009/2010 school year, incorporating park-themed lesson plans and sharing her experiences as a park ranger with all the students in her school through presentations during National Park Week 2010.

The park was also extremely lucky to receive the services of a skilled education volunteer. **Dennis Yockers**, a professor in environmental education at the University of Wisconsin-Stevens Point, spent almost a year on sabbatical developing and presenting education programs at Sleeping Bear Dunes National Lakeshore. As the culmination of his intensive research, Dennis held a planning meeting with local educators, park partners, and park interpretive staff, the outcome of which was a detailed Education Plan for Sleeping Bear Dunes National Lakeshore that will serve as the cornerstone for creating and implementing a curriculum-based education program at the park in the future.

Report prepared by: Jennifer Wurts

Date: 10/20/09

Phone number: 231-326-5134



# Servicewide Interpretive Report FY 2010

Form 10-769  
(Rev 8/98)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
SERVICEWIDE Interpretive REPORT

Park Org. Code:	Unit Name:	Fiscal Year:
SLBE	Sleeping Bear Dunes National Lakeshore	2010

## Funding Sources

### Fiscal Year Interpretive Expenditures

Park Interpretive Funds Spent (ONPS Base only)	\$270,000
Servicewide Fee Funds Spent	\$368,772
Reimbursable Fee Funds Spent (16USC 1a-2g)	\$0

### Interpretive Staffing for Fiscal Year

Permanent FTE	2.00	No. of Perm Positions	3.0
Temporary FTE	1.80	No. of Temp Positions	6.0
Total FTE	3.80	Total Positions	9.0

## Personal Services

	Number of Times Service Provided	Number of Different Facilities	Number of Different Services	Total Work Years	Total Number of Visitor Contacts	Number Distributed	Total ONPS Salary & Benefits Only	Total All Other Funding Costs
Visitor Centers/Contact Stations		6		15.50	516,218		\$9,388	\$379,572
Informal Interpretation				0.20	13,162		\$23,470	\$19,650
Formal Interpretation	865			0.60	20,121		\$49,288	\$38,968
Demonstrations & Performing Arts	200			0.50	13,804		\$9,388	\$7,168
Junior Ranger Programs				0.30	6,869		\$7,041	\$13,296
Special Events	13			1.20	3,962		\$16,429	\$6,254
Education Programs	4			0.10	162		\$2,347	\$9,282
Subtotal Personal Services	1,082	6		18.40	574,298		\$117,351	\$474,190

## Non-Personal Services

	Number of Times Service Provided	Number of Different Facilities	Number of Different Services	Total Work Years	Total Number of Visitor Contacts	Number Distributed	Total ONPS Salary & Benefits Only	Total All Other Funding Costs
Park-Produced Publications			42	1.30		338,950	\$35,206	\$6,420
Audio-Visual/Electronic Media			19	0.50	473,118		\$11,735	\$8,755
Subtotal Non-Personal Services			61	1.80	473,118	338,950	\$46,941	\$15,175

## Outreach Services

	Number of Times Service Provided	Number of Different Facilities	Number of Different Services	Total Work Years	Total Number of Visitor Contacts	Number Distributed	Total ONPS Salary & Benefits Only	Total All Other Funding Costs
Community Programs	55			0.20	3,139		\$11,735	\$9,282
Loan Materials	10			0.10	65,127		\$2,347	\$350
Park Web Site				0.10		0	\$0	\$2,980
Subtotal Outreach Services	65			0.40	68,266	0	\$14,082	\$12,612

Column Totals	1,147	6	61	20.60	1,115,682	338,950	\$178,374	\$501,977
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### Program Highlights

This year the interpretation division focused on a few different areas. Special funding sources and grants were received for a YIP (Youth Intern Program) program to introduce high school and college age underserved youth to careers in the National Park Service and, GLRI (Great Lakes Restoration Initiative), who provided a seasonal Park Ranger to educate visitors about invasive species and exotics in the Great Lakes region. A new F.U.N. (Families United in Nature) program was developed to get families to experience the outdoors in new and exciting ways. This year was also the first time a full time seasonal museum curator was hired to manage the park's collections. There were a few changes in public programming and visitor center/contact stations as well.

This summer began the inaugural year for Sleeping Bear Dunes National Lakeshore's **Youth Intern Program (YIP)**. The goals for the eight week program were for the interns to receive park-wide training and orientation, learn the history of the NPS, receive Climate Friendly Park training, and to be introduced to jobs and people within the National Park Service (NPS). Bailey and Chisolm wore NPS uniforms, complete with badges and flat hats. They earned an above minimum wage along with sick leave and vacation hours. The YIP was designed to introduce youth 15-25 years of age to career fields in the NPS.

The efforts of the **invasive species interpreter**, Ryan Locke, have been focused in two areas. One is through a conducted activity in the park, and the other is by attending public events outside the park. The conducted activity was the "Pedal the Lakeshore" bike tour program, focusing on invasive species interpretation. During the season, sixteen programs were led; each of the programs averaged 10 participants over eight weeks. Five outreach events were attended and the interpreter made contact with 1,931 people over 42 hours. At each event, a booth was set-up where visitors could discover and ask questions in regard to information about the park and the relevant invasive species such as Garlic Mustard, Baby's Breath, Spotted Knapweed, Black Locust, Phragmites, Purple Loosestrife, Zebra and Quagga mussels, Round Goby, Eurasian Ruffe, Sea Lamprey, Emerald Ash Borer (EAB), and others.

**F.U.N. (Families United in Nature)** is an outdoor activity club for families. F.U.N. was started as a joint effort of Sleeping Bear Dunes National Lakeshore and Bonnie Ricord's Girl Scout Gold Award Project. The mission of F.U.N. is to increase awareness of nature, while providing enjoyable, informative activities for families. We have hosted activities about once a month and the members are enjoying the events. There have been new recruits at many of the activities.

The park has never had more than a part time seasonal devoted to **museum collections**. There is a backlog of cataloging that is in need of completion. Laura Quackenbush has devoted much needed time and effort to properly catalog, store and preserve our artifacts. Laura has also spent much of her time involved in the cannery restoration project. She has taken the lead in developing a plan for proper storage of boats and other artifacts as well as moving these large items. The cannery, one of our visitor contact stations, was closed for the season for a major renovation. This impacted visitors in the Glen Haven area as well as visitors having less contact with park employees and VIPs. The park plans to have a re-opening event in the spring of 2011. The Lyle Gun demonstration was performed again this season. Last year the demonstration was not performed for the public because the projectile was lost during training. This program is very successful and enjoyed weekly by many visitors. We look forward to continuing the demonstration in upcoming seasons.

Report prepared by: Lisa Griebel

Date: 10/25/10

Phone number: 231-326-5134

## Volunteer Annual Report FY 2009

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Annual Activity and Expense Report  
Sleeping Bear Dunes National Lakeshore  
Report Date: October 31, 2009  
Fiscal Year: 2009

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### VOLUNTEER COORDINATOR AND PARK INFORMATION

#### TOTAL VOLUNTEERS: 1,303

Alpha Code: SLBE  
VIP Coordinator: Lisa Myers  
VIP Coordinator Phone: 231-326-5134  
Coordinator Email: lisa\_myers@nps.gov

#### VOLUNTEER HOURS BY CATEGORY:

Administration: 22.00  
Campground Host: 6,204.00  
Cultural Resource Management: 6,980.00  
Interpretation: 9,718.00  
Maintenance: 7,434.00  
Natural Resource Management: 6,980.00  
Protection/Operations/Law Enforcement: 2,249.00

#### [TOTAL HOURS: 39,587.00]

#### PROGRAM COSTS BY CATEGORY:

Housing: \$ 21,842.00  
Meals: \$ 8,880.00  
Recognition/Award: \$ 2,831.00  
Supplies: \$ 5,729.00  
Training: \$ 2,026.00  
Transportation: \$ 6,196.00  
Uniforms: \$ 2,432.00

#### [TOTAL COSTS: \$ \$49,936]

#### VOLUNTEER PROGRAM HIGHLIGHTS:

The Platte River is a beautiful, clear, shallow river that meanders through the south end of the Lakeshore. Paddling down the slow moving river or cooling off with a relaxing float on a tube on a hot summer day are a couple of the Lakeshore's most popular summer recreational activities. The river is a very busy place. Of course, this popularity takes its toll on the resource. Luckily the Platte River has been adopted by **Lois Goldstein and her Traverse Area Paddle Club**. Since 2005, the Traverse Area Paddle Club has held at least three Lower Platte River cleanups cleanup trips each year—donating a total of 622 hours so far. The group hops into their canoes and kayaks armed with garbage bags and grabbers and plucks trash from the river. They clean the river thoroughly. They don't just pick up a few wrappers and beer cans; they fill their canoes with garbage: flip flops, shoes, beer bottles, soda cans, water bottles, T-shirts, towels, lighters, plastic cups, ship bags, and jackets. They have also pulled toy swords, crutches, outboard motor parts, grill lids, and deck chairs from the bottom of the river. The best news is they are finding less and less trash, and they are inspiring stewardship in other recreationists: other river users see what they are doing and if they don't actually help out, they at least think before they toss empties anywhere but a trash bag.



## Volunteer Annual Report FY 2010

Annual Activity and Expense Report  
Sleeping Bear Dunes National Lakeshore  
Report Date: October 31, 2010  
Fiscal Year: 2010

### VOLUNTEER COORDINATOR AND PARK INFORMATION

#### TOTAL VOLUNTEERS: 1,116

Alpha Code: SLBE  
VIP Coordinator: Lisa Myers  
VIP Coordinator Phone: 231-326-5134  
Coordinator Email: lisa\_myers@nps.gov

#### VOLUNTEER HOURS BY CATEGORY:

Administration: 573.00  
Campground Host: 6,133.00  
Cultural Resource Management: 8,444.00  
Interpretation: 8,803.00  
Maintenance: 7,399.00  
Natural Resource Management: 8,529.00  
Protection/Operations/Law Enforcement: 2,499.00

#### [TOTAL HOURS: 42,380.00]

#### PROGRAM COSTS BY CATEGORY:

Housing: \$ 1,104.00  
Meals: \$ 6,617.00  
Recognition/Award: \$ 1,007.00  
Supplies: \$ 2,139.00  
Training: \$ 10.00  
Transportation: \$ 0.00  
Uniforms: \$ 4,243.00

#### [TOTAL COSTS: \$ 15,120.00]

#### VOLUNTEER PROGRAM HIGHLIGHTS:

Our volunteers are indeed very important people. They share their precious time and talents with the Lakeshore, enhancing the spectacular resources and enriching visitors' experiences. We have shown our thanks, in the past, by giving VIPs gifts according to the total hours they have volunteered in the park. These gifts, chosen by park staff, were usually nice NPS mementos (pins, mugs, books, note cards) or wearables (shirts, hats, fleeces). In order to streamline the recognition process and provide VIPs with gifts THEY choose, we changed our awards program this year to a **Dune Dollars Program**: VIPs are given Dune Dollars commensurate with the total hours they have volunteered in the park. These dollars are redeemable at SLBE's Eastern National outlets. Dune Dollars are far more flexible for the VIP and easier to manage by the VIP coordinator; and the VIPs love them!

One special VIP this year has been **Lois Veenstra**. Lois helped out the VIP program for seven months—volunteering more than 800 hours handling the day-to-day tasks of the volunteer coordinator position keeping the program moving. Lois entered new volunteers into the database, tracked VIP hours, inventoried and coordinated uniform distribution, made nametags for new volunteers, and made the VIPs feel welcome. Lois has volunteered more than 3,000 hours since she first signed up as a VIP with SLBE six years ago.

**Sleeping Bear  
Dunes Education  
Program Report  
April, 2009**

*The following were submitted by  
Dr. Dennis Yockers after his sabbatical  
at the Lakeshore 2008-2009.*

**Education Programming at  
Sleeping Bear Dunes National  
Lakeshore**

**OVERVIEW**

Sleeping Bear Dunes National Lakeshore education program connects students with the resources and experiences of Sleeping Bear Dunes National Lakeshore. Organized school groups or other education groups visit the Lakeshore primarily during the autumn and spring months. These groups have little impact on park resources other than use of facilities. However, they do impact park staff in time required to prepare and present educational programs.

The program employs one permanent interpretive ranger, as well as seasonal interpretive rangers as funding allows. The program serves students from grades one through university. Most of the students are from the elementary level. During the 2006-2007 fiscal year approximately 300 onsite school programs were offered reaching 10,500 students/teachers. Another 67 off-site programs reaching 2641 people were offered during 2006-2007.

The programs are presented from early May to mid-June and from early-September to mid-October. School programs (which combine winter ecology and snowshoeing) are offered in the winter when staff is available. Programs are planned with the teacher and relate to the local

school district's learning outcomes but have not been intentionally planned in relation to Michigan's Grade Level Content Expectations. The education program is well-grounded and firmly established with several partners participating in both program delivery and logistics. No formal curriculum-based education programming exists on the Lakeshore. The park has and will continue to rely heavily on alternate sources of staff including volunteers and other partners.

Many of the same education programs offered to schools are modified for groups using the Lakeshore. The groups include, Boy Scouts, Girl Scouts, summer camps and other groups that organize trips to the Lakeshore. Groups make reservations for these programs which are modified to serve the range of ages using the Lakeshore. Groups are required to make reservations for these programs so staff has time to prepare for them.

Written materials produced by the interpretation division include *The Activity Guide: An Educator's Guide for Planning a Visit* containing background park information, ranger-led programs, and other information needed for planning a class trip. The Lakeshore has minimal information about available education programs on its web site. *The Activity Guide: An Educator's Guide for Planning a Visit* should be on the Lakeshore's website. School visits are scheduled in the spring and fall.

All of the education programs have been prepared by Lakeshore staff, with little or no direct involvement of area educators, or field testing

in schools. Although many of the programs probably connect with local and Michigan curriculum standards, the programs were not developed with that in mind. Pre- and post- visit activities are also not easily identified by teachers. The Lakeshore is literally in the backyard of many different communities. Unfortunately, Lakeshore staff has very few opportunities to visit the many schools in our gateway communities and to work with teachers to develop new curriculum-based lesson plans and activities.

Current program assessment involves a written teacher evaluation, verbal feedback from participants, letters of appreciation and the number of repeat registrations. Currently, there are no teacher professional development programs taking place which are offered by the park. There are a variety of regional education professional development programs that the park has been involved with.

Because of budgetary and staffing constraints, Sleeping Bear Dunes' on-site education programs can not expand much beyond their current level in the near future. However, there are opportunities to offer more diverse services to reach a wider audience via computer technology. There is no substitute for consistent and high quality staff.

The potential to present environmental education to local schools and youth organizations is tremendous because of the numerous school districts, towns and cities within a short distance of the Lakeshore. There are 18 school districts involving portions of 5 counties that are within a one-hour drive of the Lakeshore.

However, many schools cannot afford bus transportation to education programs at the Lakeshore. During spring and fall, when most current programming occurs because of the climate, some requests for programs with interpreters have been denied because staff was not available to present the programs.

## **RECOMMENDATIONS FOR EDUCATION AT SLEEPING BEAR DUNES NATIONAL LAKESHORE**

### *Sleeping Bear Dunes National Lakeshore Education Program Mission Statement*

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*To provide quality education experiences and materials related to the resources of Sleeping Bear Dunes National Lakeshore and the National Park Service for students or teachers, whether or not they actually visit the park.*

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### *Sleeping Bear Dunes National Lakeshore Education Program Vision Statement*

Through its education program, Sleeping Bear Dunes National Lakeshore will become a premier educational resource, outdoor classroom and learning laboratory for educators and students of the greater northwestern Michigan region and beyond. This will, ultimately, result in greater understanding and protection of natural and cultural resources both inside and outside the boundaries of national parks.

**1. There is a need for an identifiable Standards-Based Curriculum** – all SBDNL school programs need to be developed/designed in a standardized



lesson plan format with correlations made to the Michigan Grade Level Content Expectations (minimally science and social studies). The lessons should be aligned to specific grade levels and topics best suited to SBDNL themes and resources. The lessons should be structured place-based experiences.

Current interpretation and education programs should be assessed and new programs developed in order to address specific grade level needs and Michigan Learner Expectations. For example, a 6th grade unit focusing on ecology and a 3rd and 4th grade social studies unit on Michigan/U.S. history should be developed. All lessons need to have authentic assessment strategies which can be used to determine whether lesson objectives and learner expectations have been achieved. The lessons should be made available electronically (website) to teachers before coming to SBDNL. Lessons should be developed by park staff in cooperation with teachers. Lessons could be developed through professional grant-funded programs. There are many excellent curriculum models already being used by other NPS units. Look into offering different grade level programs in fall versus the spring.

*2. A more in-depth evaluation of education programs needs to be undertaken. A teacher survey could be developed and used.*

*3. The evaluation form used for school programs need to be updated to gather more desired information for program improvement.* The evaluation form could be made available on-line for the teachers to fill out after program completion. A thank you e-mail could be sent to the teacher/school along with

the website link to the evaluation form.

*4. Pre-visit and post-visit activities should be identified/developed for SBDNL education programs.* These activities should be made available to teachers on the park's website. These activities could be developed through a Teacher-Ranger-Teacher program and/or professional development teacher workshop at SBDNL.

*5. Explore possible education program options for middle and high school students.* These programs could have a service-learning, resource-based component and tied to appropriate Michigan Grade Level Content Expectations. The programs would provide for students to participate in resource monitoring and stewardship initiatives (water quality monitoring, invasive plant management, plant restoration, GIS and GPS, monitoring animal and plant populations). A series of field trips with lessons could be developed related to various subjects - geology, ecology, biology.

*6. Glen Haven Days should become an on-going part of SBDNL's education program.* The program should be focused on 3rd and 4th grades- Michigan/U.S. history. Maybe even incorporating the Port Oneida Historic District with an education program using farmhouse and school-house. Glen Haven Days could be expanded to a longer time period (1-2 weeks). SBDNL should explore the possibility of getting involved with the NPS – Teaching with Historic Places (TwHP) program. This program uses properties listed in NPS's National Register of Historic Places to enliven history, social studies, geography and other subjects

(Glen Haven, Port Oneida, Manitou Islands and other historic structures in the Lakeshore).

**7. Park staff needs continuous professional development related to school-based curriculum programs.** Programs would focus on lesson planning/curriculum development, instructional learning strategies and assessment, and other pertinent topics.

**8. SBDNL should research the need for education traveling trunks for use by teachers.** Trunks focusing on the topics of dune ecology/issues and local maritime/agricultural history would support SBDNL education programs. These trunks could be developed in cooperation with other museums, agencies and organizations.

**9. The Teacher's section of the SBDNL website needs to be enhanced.** The section should include: electronic formats of the educator's guide, lesson plans (pre-visit, on-site and post-visit), self-guided vs. ranger-guided hikes/programs, other useful SBDNL references – references to materials and activities, suggested reading list, professional development opportunities (T-R-T, workshops, etc.), interactive questions/answers. Creation of an “interactive” classroom for students and educators.

**10. The Student's section of the SBDNL website needs to be enhanced.** The Junior Ranger program should be made available on-line. There could also be a Web Rangers component.

**11. The Lakeshore's Teacher-Ranger-Teacher program needs a stronger marketing initiative.** The T-R-T program can be promoted through other regional education partners.

**12. Electronic mailing/contact lists for teacher/schools should be developed and used for program information/dissemination.**

**13. The use of the park by schools during the non-peak months (November – March) should be investigated.** Weather/travel is an issue. There is some current use but it is minimal. The primary reason is lack of staff to conduct programs. However, many unique seasonal programs/activities could be developed and correlated to the Michigan Learner Expectations.

**14. SBDNL education program initiatives especially as it relates to teacher professional development should be coordinated with other local institutions/organizations.** (i.e., Grand Traverse Region ISD, Michigan Sea Grant, Grand Traverse County Conservation District, TCAPS and other school districts, higher education colleges/universities). Professional development opportunities could be one-day workshops or multi-day institutes. Programs should be grade-level and topic focused. Educators should be introduced to curriculum-based materials and on-site experiences. These opportunities could be offered for continuing education units and/or graduate credit. There is a great potential for multi-group initiatives and grant opportunities.

**15. SBDNL could provide a summer internship position focusing primarily on education.** The position could work directly with the Education Coordinator/Specialist. The intern could be involved in planning, developing and evaluating park education programs. The intern could be involved with summer

school programs. There may also be an interest in fall/spring education internships where the interns would work directly with school visiting school programs. These fall/spring internships would be tied to university semesters and allow for some non-regular program times along with outreach in schools.

***16. SBDNL should explore the possibility of an electronic eTrip to the park and other technology learning options.***

The eTrip would allow greater access to the park by school districts that are too far away or not able to get to the park. The eTrip could focus on the park's biodiversity especially the dunes and maritime/agricultural history. Most schools do not get a chance to see the islands when they visit and an eTrip that focuses on the islands would provide a unique learning experience with a special part of SBDNL. The park should work with local educational agencies/institutions/Michigan Public TV regarding the development of the eTrip. Use of podcasts and other supporting technology should be explored. Explore the use of the Earth Cache Website for Teachers involving SBDNL resources (coastal bluffs, perched dunes, islands) and develop a supporting lesson plan. SBDNL could partner with Northwestern Michigan College and other institutions in the development of technology-based education initiatives.

***17. SBDNL should investigate the possibility of developing/conducting distance learning programs for schools.*** For some schools that cannot get to the park maybe the park could be brought to the students. These programs could be offered during

the winter months (December through March) when on-site programming is low. These programs could focus on geology/physical geography of SBDNL, the biodiversity of SBDNL or cultural history of SBDNL. The programs should be curriculum-based with supporting learning activities. The park should work with local educational agencies/institutions regarding the development of distance learning opportunities.

***18. SBDNL could investigate the possibility of working with universities and co-hosting a teacher workshop on pod-casting – focus on field-based learning activities and have the teachers create audio-podcasts and develop accompanying lesson activities.***

***19. SBDNL should have its curriculum-based education programming connected with the NPS Website – Exploring the Real Thing – SBDNL Field Trip Guide.***

***20. There should be recommended Lakeshore trails for self-guided field trips by education groups.*** Each trail should have a field trip guide with supporting activities.

***21. SBDNL should develop service learning opportunities for high school students involving the park's resources*** (resource management focused – similar to Keep America Clean Program done during Earth Week involving 9th grade Benzie Area students). Maybe an opportunity to provide high school students with a Manitou Island experience focusing on resource management issues.

***22. Explore the development of a SBDNL education program advisory group involving appropriate stakeholders.***



## SUMMARY

There is a critical need for a full-time education coordinator/specialist position.

The coordinator/specialist would facilitate all school programming – school-based curriculum development and assessment, SBDNL staff and teacher professional development opportunities, oversight of the Teacher-Ranger-Teacher program, supervision of park staff and education interns dealing with school programs, grant writing related to education program development, development of web and electronic based learning programs (eTrips, distance learning), and coordination of education programming with regional education institutions and programs.

There are a large number of school districts within an hour's ride of SBDNL. There is potential for greater use of SBDNL by schools. At the current time there are only seasonal park staff to conduct programs during May/June and September/October. The coordinator needs to be available during the summer months to facilitate program development and teacher professional development, too.



## Planning Team and Consultants

### SLEEPING BEAR DUNES NATIONAL LAKESHORE STAFF:

**Lisa Griebel**, *Lead Park Ranger*

**Lisa Myers**, *Chief of Interpretation*

**Laura Quackenbush**, *Museum Technician*

**Susan Sanders**, *Media Specialist*

**Marie Scott**, *Seasonal Park Ranger*

**Dusty Shultz**, *Superintendent*

**Tom Ulrich**, *Deputy Superintendent*

**Jennifer Wurts**, *Park Ranger*

### CONSULTANTS AND PARTNERS:

**Kerry Kelly**, *Chairman, Friends of Sleeping Bear Dunes*

**Cathy Nagle-Ervin**, *Great Lakes Regional Manager, Eastern National*

**Susan Pocklington**, *Executive Director, Preserve Historic Sleeping Bear*

**Dr. Dennis Yockers**, *Professor, University of Wisconsin –Stevens Point*  
(Spent academic year 2008-2009 on sabbatical at the Lakeshore)

### MIDWEST REGIONAL OFFICE:

**Tom Richter**, *Chief of Interpretation and Education*

**Roberta Wendel**, *Interpretive Media Specialist*

### HARPERS FERRY CENTER:

**Rick Jones**, *Interpretive Planner and Workshop Facilitator*

**Neil Mackay**, *Senior Exhibit Planner*

**Mark Southern**, *Audiovisual Producer*



Harpers Ferry Center  
National Park Service  
U.S. Department of the Interior



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South Manitou Island and Sleeping Bear Plateau from Empire Bluff