Park News

National Park Service
U.S. Department of the Interior

View From The Dunes

The official newspaper
of Sleeping Bear Dunes
National Lakeshore

Summer 2002

Welcome to Sleeping Bear Dunes National Lakeshore

ARE YOU LOOKING FOR A PLACE WHERE YOU CAN EXPERIENCE NATURE with its myriad of sights and sounds? A place to experience peace and calm? A fun and educational place to take your family and enjoy a day along some of the best beaches Lake Michigan has to offer? A place where you can feel the excitement of climbing a massive sand dune, but then also hike down tree-shaded trails that lead to secluded wilderness locations where you can observe wildlife and plants in their natural environment, and feel (possibly for the first time in your life) that you are removed from the pressures and busy pace of everyday life?

At Sleeping Bear Dunes National Lakeshore you have an opportunity to enjoy and encounter all of these. The Lakeshore is a place where you can recreate yourself, shed your cares of the everyday world and recharge your natural energy.

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 to protect them from development and uses that would destroy the scenic beauty and natural character of the area.

For thousands of visitors each year, Sleeping Bear Dunes National Lakeshore offers a wealth of opportunities to enjoy nature and the outdoors. Many come to play at the Dune Climb or to savor sweeping views of land and water from the park's roadsides. Others come to hike the trails, where they find a rich variety of wildflowers, mammals, and birds. Beachcombers enjoy a walk along Lake Michigan's shore, pausing occasionally to examine an interesting pebble or shell. Canoeing down a slow flowing stream offers a quiet, intimate look at the countryside. The excellent fishing peaks in the fall, when coho and king salmon (sport fish introduced from the Pacific) return to the Platte River to spawn. Many visitors choose to stay in one of the campgrounds available in the park. In winter, cross-country skiing and snowshoeing are favorite pastimes. The possibilities for relaxation and challenge are almost unbounded.

There were many people whose lives were tied to this land long before it became a parkland - native americans, lumbermen, merchant sailors, farmers. Glen Haven and the Manitou Islands were once busy communities supplying lumber for construction and fuel for wood-burning ships that sailed the Great Lakes in the mid to late 1800's. Ruins of sawmills and fueling docks can still be seen today. Crop farming followed the cutting of the forests, but it, like lumbering, soon faded. Many farmers abandoned their fields, leaving them to return to their natural state. Orchard growers had more lasting success growing cherries and apples. Many fruit trees still grow in the park.

Top: The ghost forest of Sleeping Bear Dunes National Lakeshore.
Bottom: The Platte River moves slowly along towards Lake Michigan.

South Manitou Island Lighthouse was built in 1871 to guide ships through the Manitou Passage. The Life-Saving Stations at North Manitou Island, Sleeping Bear Point, and South Manitou Island are reminders of earlier times, when rescue crews launched small oar-powered wooden boats into giant waves to save ship wreck survivors. The Life-Saving Stations at Sleeping Bear Point and South Manitou Island celebrate their 100th anniversary this year. See page 5 for a listing of special events and activities.

Greetings from the Superintendent

Welcome to the Sleeping Bear Dunes National Lakeshore! It's a privilege and honor for me to serve as the new Superintendent of this magnificent National Park site!

Sleeping Bear Dunes National Lakeshore is one of the most scenic and publicly accessible portions of the Lake Michigan shoreline. Some of the Lakeshore's most prominent features include forests, beaches, lakes, dune formations and ancient glacial phenomena in their natural setting. These resources are of global importance due to their relatively unimpacted state, the variety of features present, their proximity to one another, and their protected status. As you travel throughout the Lakeshore, you will notice the park's historic maritime, recreation, and agricultural landscapes which are of a size and quality that are unique on the Great Lakes. As you can see, the park offers a broad range of recreational, educational, and inspirational opportunities. What a very special place!

Each year, people from all over Michigan, the nation and foreign countries visit and experience the Lakeshore - one of the most beautiful places in the Midwest. The staff and I are very proud that *Family Fun Magazine* has once again named Sleeping Bear Dunes National Lakeshore the "Top Family Friendly Nature Escape in the Midwest".

The Sleeping Bear Dunes National Lakeshore staff and volunteers will continue to provide a high quality service to our customers – you, the visitor. We will strive to enhance the quality of service provided, while protecting and preserving the natural and cultural resources entrusted to our care. As part of the National Park Service, we consider it a privilege to uphold the mission and goals of the NPS and the park.

We hope that you will assist us in keeping this national treasure a special place – for this – and future generations. Together, as we experience and care for this special place, we can preserve and protect these outstanding resources from uses that could destroy the scenic beauty and natural character of the area.

On behalf of the entire staff members and volunteers of Sleeping Bear Dunes National Lakeshore – Welcome and enjoy your stay! We wish you a safe, rewarding and memorable experience and hope that you will visit again soon.

Dusty Shultz
Superintendent

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2002 is the 100th anniversary of the Life-Saving Stations at Sleeping Bear Point and South Manitou Island. These stations, along with North Manitou Life-Saving Station, are the best adjacent collection of Life-Saving Stations in the country. Sleeping Bear Point is one of the most accurately restored and interpreted, and South Manitou is one of the best examples of a station adapted for a new use (Park Ranger Station) while still preserving the station's historic character.

Special Events...5

Each year Sleeping Bear Dunes National Lakeshore hosts a variety of special events. This year is most special due to the anniversary of the Life-Saving Stations at Sleeping Bear Point and South Manitou Island. Numerous special events marking the anniversary are planned, including a day-long celebration and Centennial Open House at the Sleeping Bear Point Life-Saving Station on August 20th. See page 5 in this newspaper for a complete schedule of special events.

Planning your trip to the Dunes

National Park Service
U.S. Department of the Interior

Sleeping Bear Dunes National Lakeshore

Authorized by Congress on October 21, 1970, Sleeping Bear Dunes National Lakeshore encompasses a 60 km (35 mi) stretch of Lake Michigan's eastern coastline, as well as North and South Manitou Islands. The Park was established primarily for its outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena. The Lakeshore also contains many cultural features including an 1871 lighthouse, three former Life-Saving Service/ Coast Guard Stations and an extensive rural historic farm District.

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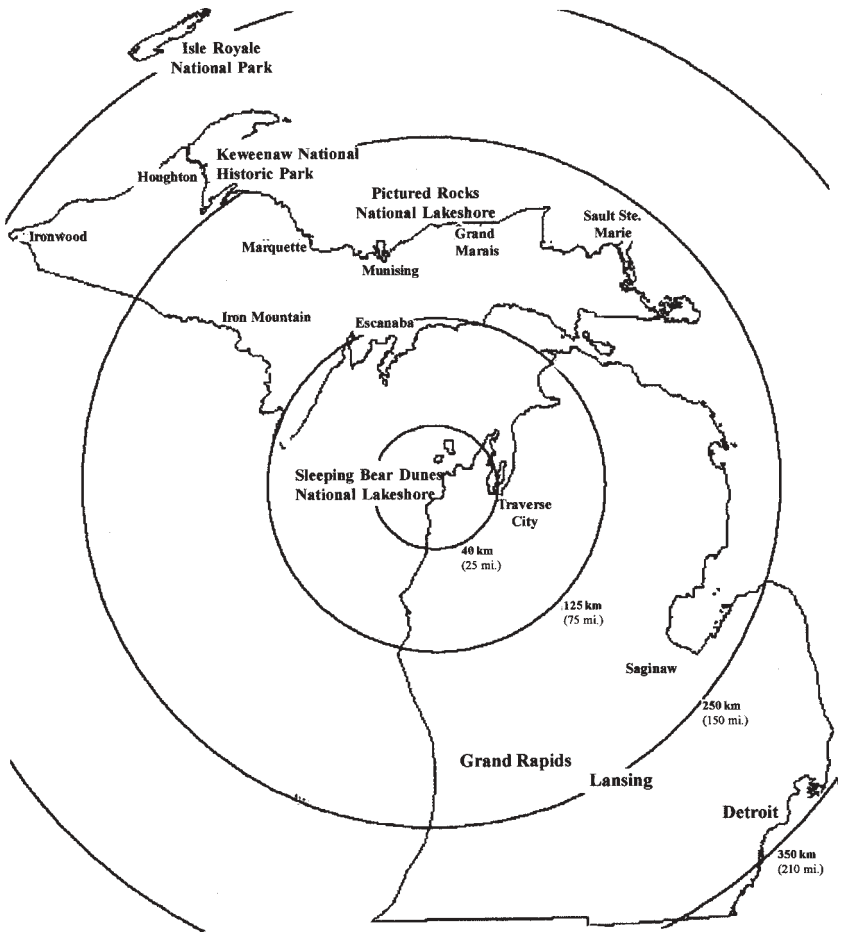
The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

EXPERIENCE YOUR AMERICA



Travel Basics

Sleeping Bear Dunes National Lakeshore is located in Northwestern Lower Michigan along the eastern shoreline of Lake Michigan. Closest town is Traverse City, 25 miles to the east. Travel to the park by car, plane or bus:

Car: **From the south** (Detroit / Chicago area), utilize US-31, US-131, US-27, I-75 and M-72 north to Traverse City, then west on M-72 to the town of Empire. Also from the south via M-22 from Ludington/Manistee/Frankfort area. **From the North** (Upper Peninsula), utilize I-75 or US-31 south to Traverse City, then west on M-72 to the town of Empire.

Plane: The Cherry Capital Airport in Traverse City (30 miles/51 km from the Lakeshore) has connections with Detroit, Chicago and Minneapolis. The Traverse City Airport is serviced by Northwest, United and American Airlines.

Bus: Traverse City has a Greyhound bus station with local bus (BATA) service to Empire.

left: **Phillip A. Hart Visitor Center, Empire MI.**
right: **View from Lake Michigan Overlook on the Pierce Stocking Scenic Drive .**

Park Facilities and Attractions

Phillip A. Hart Visitor Center
Hours: Open All Year, except for Thanksgiving, Christmas and New Years Day
Memorial Day to Labor Day (Summer), 9:00 a.m. to 6:00 p.m..
Labor Day to Memorial Day (Fall, Winter, Spring), 9:00 a.m. to 4:00 p.m.
Phone: 231-326-5134
Location: On Highway M-72, 500' east of M-22 in Empire.
Exhibits: An outstanding slide presentation, "Dreams of the Sleeping Bear", offers a beautiful mix of photography, music and narration, while providing an initial orientation to the park. Video and museum exhibits explore the geological story of the Sleeping Bear Dunes area. Human and natural history exhibits fill the remainder of the Exhibit Room.
Facilities: Eastern National Bookstore/sales area. Public restrooms, water fountain, pay phone (portable TTY available), assistive listening device at the information desk, and closed captioning for the "Dreams of the Sleeping Bear" slide show.

The Dune Center
Hours: May 15 to October 13, 2002, 10:00 a.m. to 4:00 p.m.
Phone: 231-334-2010
Location: At the base of the Dune Climb, off of M-109
Facilities: Eastern National Bookstore. T-shirts, sweatshirts, hats, nature games, postcards, books, videos, and convenience items. Public restrooms and vending machines are available next to the Dune Center.
A sand-accessible wheelchair is available for use - ask at the front desk.

Sleeping Bear Point Maritime Museum
Hours: May 25 to Sept. 3, 2002, 10:00 a.m. to 5:00 p.m.
Sept. 7 to Sept. 29, 2002, Weekends Only
Phone: 231-326-5134 (park info)
Location: At the end of Sleeping Bear Point, off M-109/M-209
Activities: Daily re-enactment of the U.S. Life-Saving Service rescue techniques. A Lyle Gun firing demonstration occurs every Friday afternoon. Check the weekly Ranger Programs listing for times. Impromptu interpretive talks are also given throughout the day by park and volunteer staff.
Exhibits: Exhibits cover the U.S. Life-Saving Service, the U.S. Coast Guard, and Great Lakes shipping history. A room on the second floor is outfitted as a Steamer Wheelhouse with a panoramic view of the Manitou Passage shipping channel.
Facilities: A sand-accessible wheelchair is available for use - contact the staff. Public restrooms are also available.

The Cannery Boathouse
Hours: May 15 to Sept. 3, 2002, 11:00 a.m. to 4:00 p.m.
Location: At the bend in the road in the historic village of Glen Haven, off M-109.
Activities: Volunteer staff available for impromptu interpretive talks.
Exhibits: Historic boat collection including vessels, motors and equipment.
Facilities: Public Restrooms.

The Glen Haven Blacksmith Shop
Hours: Late June to Labor Day, 2002, Thursday through Sunday, 10:00 a.m. to 4:00 p.m.
Location: In the historic village of Glen Haven, off M-109.
Activities: Fully restored 1920's Blacksmith Shop provides Blacksmith demonstrations for all ages.
Facilities: Public restrooms are available next to the D.H. Day Store / Ranger Station.

Pierce Stocking Scenic Drive
Hours: April 20 through November 10, 2002, 9:00 a.m. to one half hour after sunset.
Location: From Empire, take M-22 north for 2 miles to M-109, then left on M-109 for 2 miles.
Facilities: 12 numbered stops are found along this 7.5 mile scenic loop road. Spectacular overlooks of Lake Michigan and the Sleeping Bear Dunes. Public restrooms are available at the entrance parking area, Picnic Mountain and North Bar Overlook. Picnic areas are available at Picnic Mountain and North Bar Overlook.

The Dune Climb
Hours: Open all year, 24 hours a day
Location: From Empire, take M-22 north for 2 miles to M-109, then left on M-109 for 4 miles.
Facilities: Great family fun location to climb the dunes. Public restrooms, pay phone, water fountain, and vending machine snacks and drinks are available.
Sand-accessible wheelchair is available at the Dune Center Bookstore
Duneside Accessible Trail leaves from the north end of the parking lot.

Picnic Areas
Facilities for picnicing are available at the Platte River Picnic Area, Glen Lake Picnic Area, and two locations along the Pierce Stocking Scenic Drive (Picnic Mountain and North Bar Lake Overlook).

Hiking Trails
There are 13 designated trails in the park, varying in length and difficulty. See the park map on page 6 for a list of trails and locations. Trail maps are available at most trailheads, and also at the Phillip A. Hart Visitor Center, D.H. Day Campground and Platte River Campground Ranger Stations.

Park Regulations

- Visitors to the National Lakeshore are required to purchase a Park Pass.
- Please do not drive off established roads.
- Pets must be kept on a six foot (6'/1.8M) leash at all times.
- Pets are not permitted on the Dune Climb, swimming beaches, at North Bar Lake, on North & South Manitou Island, and in backcountry campgrounds. Pets are also not permitted on the designated ski trails from December 1st through March 31st.
- Camp only in designated campgrounds.
- Fires are permitted only in the campgrounds and picnic area fire rings.
- Beach fires are restricted to bare beach sand between the water's edge and the first dune and are not permitted on North and South Manitou Islands.
- Do not collect ghost-forest wood or other wood on the dunes, or disturb any plants or natural objects.
- You may pick mushrooms and fruit for personal use.
- Bicycles are not permitted off established roads.
- All glass containers and products are prohibited on any land or water area used for sunbathing, swimming, or wading.
- Horses are permitted only on the Alligator Hill Hiking Trail.

DESCENDING STEEP SAND DUNE BLUFFS CAUSES EROSION AND IS DANGEROUS. PLEASE STAY ON ESTABLISHED TRAILS.

FOR PROTECTION OF PIPING PLOVER NESTING AREAS, PORTIONS OF NORTH MANITOU ISLAND, TIESMA AND PLATTE POINT BEACHES ARE CLOSED EACH SPRING. VISITORS CAN WALK AROUND THE CLOSED AREAS, WHICH ARE SIGNED AND ROPED. CONTACT ANY RANGER IF YOU HAVE QUESTIONS.

2002 Fees and Passes

Park Pass	**$7.00**	**Valid for up to seven (7) days**
Annual Park Pass	**$15.00**	**Valid for 12 months from purchase**
Golden Age Passport	**$10.00**	**Lifetime, U.S. Citizen, 62 and Over**
Golden Access Passport	**Free**	**Lifetime, Permanent Disability**
National Park Pass	**$50.00**	**Valid for 12 months from purchase**
Golden Eagle Pass	**$65.00**	**Valid for 12 months from purchase**

Commercial Tours

Passenger vehicles (1-6 seats)	$25.00	
Van (7-15 seats)	$40.00	All Commercial Tour Passes are
Mini-Bus (16-25 seats)	$40.00	valid for the date of entry only.
Motorcoach (26+ seats)	$100.00	

School Groups

Fees for bona fide educational groups are waived with prior application to the park. Groups that meet the criteria will be issued an Educational Fee Waiver

Fees Help Sleeping Bear

Welcome! Sleeping Bear Dunes National Lakeshore is being cared for today and preserved for future generations by the American people. This dual objective of use and preservation comes at a price: protecting our natural and cultural heritage while ensuring that everyone has a safe, enjoyable and educational experience costs money.

Even as the number of visitors to National Parks continues to climb due to the increased popularity of these national treasures, government funding available for facilities and services has not kept pace with demand. In 1996, to address these needs, Congress directed the U.S. Department of the Interior to implement the Recreation Fee Demonstration Program. The program will help spread some of the costs for managing these lands among those who use them. As a participant in this program, Sleeping Bear Dunes National Lakeshore has collected user fees since 1997.

2002 National Park Pass

Managing our public lands is a major financial investment. While most of that investment comes from our general tax base, those who use this park for recreation derive a greater benefit from and place a greater burden upon park resources than the public at large. These fees redistribute that burden so that users pay an increased share of the costs.

Eighty percent (80%) of the fees collected will remain in the park where they are collected, with the remainder being distributed to other parks as needed. The money collected at Sleeping Bear Dunes National Lakeshore will be used for:

- Repairs and improvements to roads, buildings, campgrounds and trails.
- Improved signs and exhibits.
- Educational programs, guided walks and hikes and other visitor activities.
- Protection and restoration of natural habitats found within the park.
- Stabilization and restoration of historic structures.
- Visitor safety and protection.

The future of these public lands rests with all American citizens. The action we take today will reflect the price we are willing to pay to pass these lands on to future generations, protected and in better health. We need and welcome your support.

Thank You

USERFee
improves this park

Park Campgrounds

Platte River Campground
Make A Reservation by calling 1-800-365-2267 (CAMP)
Season: Open All Year (Reservation only during the summer months)
Location: Just off of M-22, 12 miles south of Empire, MI.

Platte River Campground offers many different styles of camping. There are regular and pull-through sites with electricity for RV's, beautifully wooded and private tent campsites, walk-in tent sites, and group campsites that can accommodate up to 25 people. Flush bathrooms and hot showers are available in each of the four loops of the campground. Shower Tokens are available at the Ranger Station; 2 tokens for a dollar, with each token providing 3 minutes of hot water. Each site is equipped with a tent pad, picnic table and fire ring. Firewood concession is open during the evenings. A Dump Station for RV's is located at the entrance to the campground. Of the 179 campsites available in the campground, 45 sites and 4 group sites are reservable through the National Park Reservation Service. Individual campsites may be reserved May 24 to September 3, 2002. Group campsites may be reserved May 4 to October 5, 2002.

Campsite Fees:	Walk-in Campsite	$10.00 per night
	Regular Campsite	$14.00 per night
	Group Campsite	$40.00 per night
	Electricity	$5.00 per night

Golden Age and Golden Access Passport holders receive one half off Walk-in and Regular Campsite fees. This discount does not apply for Group Campsites or for the nightly fee for electricity.

D.H. Day Campground
Season: Open April 6 to November 28, 2002
Location: Along M-109, just east of Glen Haven and 6 miles north of Empire, MI.

D.H. Day Campground is Sleeping Bear Dunes National Lakeshore's rustic campground. If your family enjoys a slightly more rugged camping experience, then D.H. Day is worth checking out. With 88 wooded and private campsites, and easy access to Lake Michigan beaches, the campground offers an excellent setting. All campsites at D.H. Day are first-come, first-serve (no reservations). Each site is equipped with a tent pad, picnic table and fire ring. Firewood concession is open during the evenings. Vault toilets and water spigots are found throughout the campground. A Dump Station for RV's is located at the entrance to the campground. Generator use is permitted in sites 1 thru 31 from 9:00 a.m. to 6:00 p.m. only.

Campsite Fees:	Regular Campsite	$10.00 per night

Golden Age and Golden Access Passport holders receive one half off the nightly camping fee.

D.H. Day Group Campground
Make a reservation by calling 1-800-365-2267 (CAMP)
Season: Open All Year
Location: Along M-109, just north of the Dune Climb, then turn west on Harwood Road. Harwood Road is not plowed during the winter.

D.H. Day Group Campground is separate from the regular campground and contains 4 campsites that can accommodate up to 25 people each. These sites are reservable through the National Park Reservation Service from May 24 to October 5, 2002. During the rest of the year the campsites are available first-come, first-serve. Each campsite is equipped with numerous picnic tables and a fire ring. A firewood concession is not available at the campground, so campers should bring their own wood or plan to visit the wood concession at the D.H. Day Campground during the evening.

Campsite Fees:	Group Campsite	$30.00 per night

During the winter when the water is turned off, camping fees are reduced to $15.00 per night.

Evening Campfire Programs

From late June through Labor Day we invite you to join the rangers for nightly campfire programs. **Programs are presented at the amphitheaters located at Platte River Campground and D.H. Day Campground.**

On many nights there will be an "Early Show" and a "Late Show". The early program is generally designed for families with children, who may prefer an earlier bedtime. The later program usually incorporates a slide show and must wait for dusk to begin. A schedule of program titles and times is updated weekly and is available at the campground ranger station or the Phillip A. Hart Visitor Center.

Programs are not just for campers. All visitors to the park are invited to attend.

For programs given at the Platte River Campground, parking is available at the Ranger Station lot. The amphitheater is reached by paved trail or stairway which leaves from the parking lot. For directions to handicap accessible parking located behind the amphitheater, please inquire at the Ranger Station.

For programs given at the D.H. Day Campground, parking is available by the log cabin at the rear of the campground. It is then a short walk along the loop road to access the amphitheater.

General Management Plan Underway

IT HAS BEEN OVER 20 YEARS SINCE THE development of the first general management plan for Sleeping Bear Dunes National Lakeshore. To ensure that the Lakeshore can continue to protect its special resources and provide meaningful visitor experiences in the future, the National Park Service has embarked on the development of a new general management plan. This new plan will provide a 20-year framework for making management decisions about protecting Lakeshore resources while providing for use by visitors. During the course of this process, we will be asking a number of fundamental questions: What should we be doing to ensure that visitors continue to have a quality experience while visiting the Lakeshore? What levels and types of use are appropriate for the Lakeshore? How should we manage the Lakeshore's natural and cultural resources?

The plan follows a logical, systematic process with four key steps:

- Collect data and identify issues (Winter 1999-Spring 2000)
- Develop and evaluate alternatives (Summer 2000-Spring 2002)
- Prepare and publish a draft plan/EIS (Fall 2002)
- Revise and publish the final plan (Spring 2003)

We invite you to help us find answers to the above questions and determine the future of Sleeping Bear Dunes National Lakeshore. Your views are important to us. At various points in this planning process we will be asking for participation and input from the general public (both locally and nationally), the State of Michigan, other federal and local agencies, and special interest groups. The public may participate in this process by reviewing and commenting on newsletters and the draft and final plans, as well as participating in scheduled public meetings.

Newsletters were distributed in Winter 1999, Spring 2000, and Spring 2001 with another planned for Spring 2002. A public meeting was held in December 1999 and a series of three public open houses in June 2001. Additional public meetings are scheduled for July 2002.

Updated general management plan information, including newsletters and the draft plan, will be placed on the Lakeshore's website, www.nps.gov/slbe. during the planning process. Comments may be made at any time in the planning process by writing us at Superintendent, Sleeping Bear Dunes National Lakeshore, 9922 Front Street, Empire, Michigan 49630; calling us at 231-326-5134; or emailing us at slbe_gmp@nps.gov.

Sleeping Bear Dunes National Lakeshore

Sleeping Bear Point & South Manitou Island Life-Saving Stations Celebrate Anniversary

A LIGHT WIND BLEW ACROSS SLEEPING BEAR bay as a steady rain fell from the gray sky. The temperature that August morning was four degrees cooler than it had been at midnight before the rain moved in. Still, at 62 degrees, with light waves and rain, it was an excellent time to be out on the lake. A small crew of men assembled at the boat house to launch their new surfboat. It was the first time any of them had worked together to launch and handle the 26 foot row boat. Captain Walker would have just a few weeks to train his six man boat crew to respond as a single organism to his commands. By mid September, his life, and theirs, would depend on how well they learned their lessons.

And so on August 20, 1902, one hundred years ago this summer, the seven men of the Sleeping Bear Point Life-Saving Station pushed their Bebee – McLellan surfboat out of the boat house and down the ramp. They began their first morning of operation by practicing the launching, rowing, capsizing and righting of their lifesaving craft. Seated in the boat along with Captain Walker was Charles Robinson, who would replace Walker as captain a few years later. Also in the boat was Charles Dwiggans, who unfortunately would later be struck by lighting and killed while on duty in the station's lookout tower.

This morning's boat drill was not the first work performed at the station. The official work began five hours earlier at midnight when Robert Smith and George Mastain set out in opposite directions on beach patrol. Each man would hike two miles along the beach looking for shipwrecks and returning along the same route. Beach patrols would continue all night long, every night during the shipping season, for the next 40 years.

At the same time the crew was launching their surf boat for the first time, another crew on South Manitou Island also began their first day of operations. The South Manitou Station was identical to the one at the Sleeping Bear. It was even built by the same carpenters.

The opening of the stations had been a long time in coming. The Life-Saving Service had been established in 1871 along the Atlantic coast. It was so successful at saving lives from near shore shipwrecks that the American public demanded more stations along their shores, including the Great Lakes. In 1876 the first stations were built on Lake Michigan. Life-Saving stations at Point Betsie and on North Manitou Island opened for duty in the spring of 1877 (125 year ago).

(*continued on page 5*)

Ranger-Led Activities

Ranger-led hikes and talks are conducted throughout the summer beginning in late June and continuing through September. A schedule of ranger guided hikes and activities is updated weekly and available at the Phillip A. Hart Visitor Center and the campground ranger stations.

Traveling to the Manitou Islands

The lure of the Manitou Islands is irresistable for many lakeshore visitors. As guardians of the Manitou Passage, North and South Manitou Islands have beckoned to a wide variety of people throughout history. Today, people are drawn to the islands for many reasons. Some enjoy strolling through the historic Coast Guard village and touring South Manitou Island Lighthouse. Learning the human history and stories of life and survival on the islands can be fascinating. Still others come to day-hike the trails and beaches, or backcountry camp in the wilderness setting of the islands.

Access to North and South Manitou Islands is by private boat or by park authorized passenger ferry service operated by Manitou Island Transit. The ferry service operates from the Fishtown Dock located in Leland, Michigan. The ferry operators have been servicing the islands for many generations and the company is still run as a family business today.

manitou island transit

For Passenger Ferry reservations, contact Manitou Island Transit at: 231-256-9061
For Information: www.leelanau.com/manitou/

Between June and August, one ferry bound for each island leaves daily from the Fishtown Dock in Leland at 10:00 a.m. Reservations are recommended. Plan to arrive at the Fishtown Dock 45 minutes prior to departure (Leland is located 27 miles north of Empire on M-22).

South Manitou Island: The motor vessel *Mishe-Mokwa* sails for South Manitou Island and lays over for five hours before returning to Leland. This gives day-use visitors time to explore some of the 22 miles of trails on the island and take advantage of the motorized island tour, which is also operated by Manitou Island Transit. Ranger-guided tours of the 100 foot tall South Manitou Island Lighthouse are also available. The ferry departs at 4:30 p.m. and arrives back at Leland at 6:00 p.m.

North Manitou Island (overnight backcountry stay required): The motor vessel *Manitou Isle* sails for North Manitou Island. Upon arrival the ferry remains at the dock just long enough to exchange passengers and cargo and then returns to Leland. Visitors to the island can experience the historic Coast Guard village, and backcountry camp in nearly 15,000 acres of pristine wilderness.

Backcountry Camping

Backcountry camping within Sleeping Bear Dunes National Lakeshore is available on the mainland and on North and South Manitou Islands. Purchase of a Backcountry Permit is required. Backcountry campsites are limited to four (4) people and two (2) tents per site. Pets and bicycles are prohibited. Fires are permitted only in established fire rings. gather only dead and down wood. All water obtained from backcountry sources should be treated.

Group camping is permitted on North and South Manitou Islands. Group campsites on South Manitou Island are limited to 20 people. Group camping on North Manitou Island is limited to 10 people. BETWEEN MEMORIAL DAY AND LABOR DAY, GROUP CAMPSITES ON SOUTH MANITOU ISLAND MUST BE RESERVED THROUGH THE NATIONAL PARK RESERVATION SERVICE. CALL 1-800-365-2267, OR MAKE A RESERVATION ON-LINE AT WWW.RESERVATION.NPS.GOV.

Fees	Backcountry Permit	$5.00 per night
	South Manitou Backcountry Group Permit	$20.00 per night
	North Manitou Backcountry Group Permit	$10.00 per night

White Pine Backcountry Campground: Located on the mainland, White Pine is situated in the southern portion of the National Lakeshore, about 2.5 miles north of the Platte River Campground. There are six (6) campsites and one (1) fire ring. Passes and permits may be obtained at the Platte River Campground and at the Phillip A. Hart Visitor Center in Empire.

Valley View Backcountry Campground: Also located on the mainland, Valley View is situated in the northern portion of the National Lakeshore. Access to the trailhead from Highway M-22 is by way of Hyland Road, 2 miles north of Glen Arbor, Michigan. Hiking distance from the trailhead to the campground is 1.5 miles (up hill!). There are five (5) campsites and two (2) fire rings. Passes and permits may be obtained at the D.H. Day Campground (summer only) and at the Phillip A. Hart Visitor Center in Empire. There are no water sources, so all water must be packed in.

South Manitou Island: Designated backcountry campsites are available at:
Bay Campground (22 campsites and 3 group campsites)
Weather Station Campground (17 campsites and 3 group campsites)
Popple Campground (6 campsites and no group sites)
Fires are permitted only in established fire rings. Passes and permits are available at the Fishtown Dock in Leland, Michigan and from the Rangers on the island.

North Manitou Island: There are no designated campsites except for eight (8) sites at the Village. Camping is prohibited on any trail and within 300 feet of the Lake Michigan High water mark, lakes, streams, ponds, springs, buildings or other campers. Passes and permits are available at the Fishtown Dock in Leland, Michigan and from the Rangers on the island.

(*continued from page 4*)

By the 1880's, Chicago had become one of the busiest ports in the world. Most of this traffic passed through the Manitou Passage, especially if the weather was stormy. South Manitou had one of the best harbors on Lake Michigan, and heading north from Chicago, it was the first harbor that could be safely entered in a gale. Shipwrecks were common along the shores of the passage. As early as 1877 a Station was planned for Sleeping Bear Point. Another spot identified as needing a station was South Manitou Island. There were more shipwrecks near the island than at the Sleeping Bear Point, and help was more quickly available on the island with its lighthouse keeper and local residents. However, on the desolate Sleeping Bear Dunes there would be no one to see a wreck and provide help. With limited funds, and many locations needing stations, the Life-Saving Service was puzzled about where to locate another station in the passage, South Manitou or Sleeping Bear Point.

The debate apparently continued for nearly twenty years. From time to time, local businessman David Henry Day wrote to the Life-Saving Service encouraging them to build the station at Sleeping Bear Point as soon as possible as the need was great. Finally, the service decided that a station was needed at each location. Construction began in 1901.

Once open, both stations began the work of saving shipwreck victims. Before the end of their third week the crew at Sleeping Bear Point responded to the wreck of the Alice Beers at Glen Haven. Both stations responded to wrecks, strandings, fires, drowning, and sinking craft on a regular basis throughout their years of operation.

At its peak, the Life-Saving Service operated 271 stations, 61 of which were on the Great Lakes. The Great Lake crews did more than their fair share of the rescues. The Great Lake stations were 22% of the total however they performed 35% of the rescues. From 1871 to 1914 the service responded to 28,000 shipwrecks and saved over 178,000 lives. In 1916 the Life-Saving Service joined with the Revenue Cutter Service to form the Coast Guard. In 1931 the Lighthouse Service became part of the Coast Guard.

Our Lakeshore stations, first built to save shipwreck victims from drowning, now serve to save the history of the Life-Saving Service itself. The world always needs heroes and from the 1870's-1900 the surfmen of the Life-Saving Service were the recognized heroes for America. The stories of their skill, endurance, courage and determination were numerous. They were the pride of the country. Yet this part of America's history slipped through the cracks. It was not mentioned in the textbooks, nor seen on the movie screen. In the 1960, when the National Park Service begin to administer National Seashores and Lakeshores, the abandoned stations were discovered and their stories were told once again.

Many of the old stations have been torn down or vastly altered for new uses. Fortunately the three stations at the Lakeshore are well preserved. Together they are the best adjacent collection of U.S. Life-Saving Stations in the country. The North Manitou Station has been designated a National Historic Landmark because it is the only station in the country associated with the full history of federal aid to shipwreck victims. The Sleeping Bear Point Station is one of the most accurately restored and interpreted. And the South Manitou Station, which is a used as a Ranger Station, is one of the best examples of a station adapted for a new use while still preserving its historic character.

Visitors can see the equipment used by the surfmen on that first day of operations when they visit the boathouse at the Life-Saving Service Museum at Sleeping Bear Point Station. The museum is open daily June through Labor Day and weekends in the fall. Additional Coast Guard boats can be seen at the Cannery Boat Museum in Glen Haven which is open afternoons during the summer. Each day during the summer, young visitors can participate in a reenactment of a shipwreck rescue at the museum. Once each week during the summer visitors can see a Line Throwing Mortar fired just as it was during actual drills and rescues.

2002 Special Events Calendar

Event Date & Time	Discription of Event
June 22-23, 2002 9:00 a.m. to 5:00 p.m. daily	Michigan Barn Preservation Network Workshop Brunson Barn, Port Oneida Rural Historic District
July 9, 2002 7:00 p.m.	Michigan Heritage Parade (Cherry Festival) Downtown Traverse City
July 9 & August 10, 2002 7:00 p.m.	Michigan's Great Outdoor Culture Tour D.H. Day Campground Amphitheater
July 13, 2002 7:00 p.m. to 9:00 p.m.	Annual Dune Climb Concert At the base of the Dune Climb
August 9 - 10, 2002 10:00 a.m. to 10:00 p.m.	Port Oneida Rural Arts and Culture Fair Port Oneida Rural Historic District
August 20, 2002 10:00 a.m. to 5:00 p.m.	Sleeping Bear Point LSS Centennial Open House Sleeping Bear Point Life-Saving Station
September 7, 2002 Times to be announced	Boat Tour - Life-Saving Stations and Lighthouses of the Manitou Passage. Tour leaves from Leland
October 12 and 19, 2002 Times to be announced	Beach Patrol - Learn the job of the "Surfmen" Sleeping Bear Point Life-Saving Station, Glen Haven

Each year Sleeping Bear Dunes National Lakeshore hosts a variety of special events. This year is very special due to the 100th Anniversary of the Life-Saving Stations at Sleeping Bear Point and South Manitou Island. Contact the park at 231-326-5134 if you have questions concerning any of these special events.

South Manitou surfmen pose with their lifesaving equipment around 1902.

Special events are planned for the centennial of the Sleeping Bear and South Manitou Station, and the 125th anniversary of the North Manitou station. A full day of celebration with displays and presentations is planned for the museum on August 20th. On September 7th a boat cruise to the Manitou Islands will provide an opportunity to visit both island stations, the lighthouse and some shipwreck sites. In the fall, evening programs at the museum will give you a chance to snug up your foul weather gear and go on beach patrol with a surfman. Please see the special events section listed above for complete details for each event.

For Your Safety - A Message From The Rangers

As National Park Rangers, we hope all of our visitors have fun while visiting Sleeping Bear National Lakeshore. However, having fun often depends upon being safe. Having a plan and making a few preparations can make the difference. Here are a few simple things you can do to ensure your safety:

Trip Plan
The best trip plans are basic ones. Make sure every member of your group knows where you are going, how to get there (and get back), and how long it should take. Have a "home base" where you can meet members of your group if you get separated or come back early. If you are traveling alone, leave your trip plan with someone responsible, who will check-up on you if you are overdue.

Maps
Pick up trail maps for the area you plan to hike and familiarize yourself and all members of your group with the routes, distances, and key landmarks before setting off on your trip. These maps are available at the Phillip A. Hart Visitor Center in Empire and at all Ranger Stations.

Water
Year round it is important to carry adequate amounts of drinking water for you and your pets. There are many ways to carry water, from canteens to hydration packs, and what you choose depends upon your preference and the length of your trip. Be sure to take frequent drinks to prevent dehydration.

Footgear
The proper footwear for the intended activity is very important. Some injuries and sore feet can be prevented by wearing sturdy hiking boots while hiking trails, as well as sandals or beach shoes in sandy areas.

Extra Clothing
Due to northern Michigan's frequently changing weather, it is important to carry extra clothing during your visit. Depending upon the season, this may include a warm jacket, hat and gloves, rain gear, and long pants. Clothing can also be helpful in protecting you from poison ivy or biting insects.

Sun Protection
During any season, it is important to wear a hat with a brim to protect your eyes, head, and neck. Sunglasses, sunblock, and weather appropriate clothing – including shoes are also very important. In such a beautiful setting it is easy to forget how long you've been exposed to the suns's harmful rays.

Medication
Whether spending a day at the beach, going for a hike or on a trip to the Manitou Islands, be sure to carry any prescription medication or medical related items with you, as well as some extra in case your visit becomes longer than originally planned.

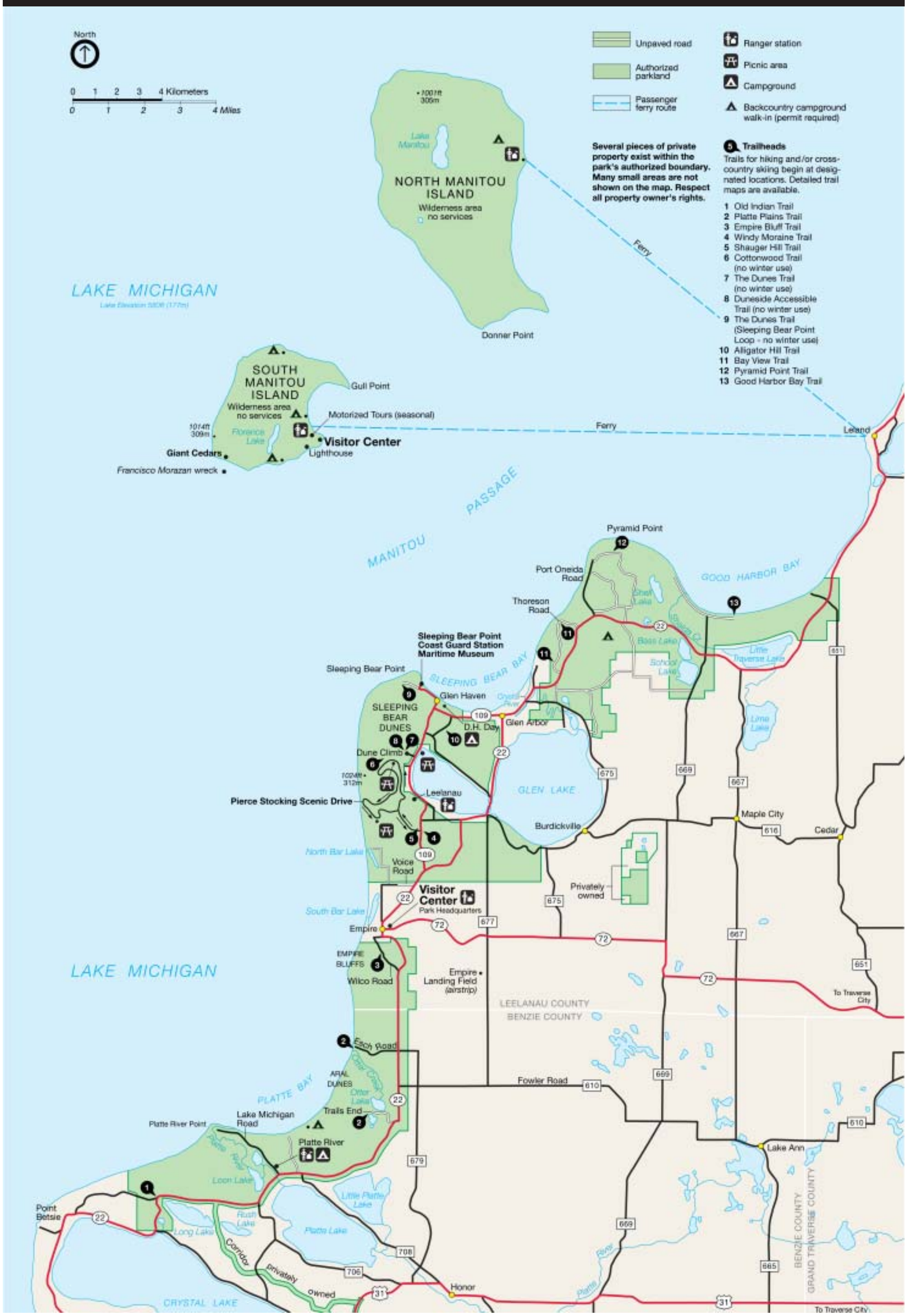
First Aid Kit
A small first aid kit with band-aids of various sizes and first aid cream is important to carry with you. These can cover cuts, scrapes, and sore spots on your feet caused by boots or shoes. Even if you may not require first aid on the trail, you will be prepared if another member of your group or someone you meet on the trail needs assistance.

Flashlight
A small, compact, waterproof yet bright flashlight is best. Before setting out, remember to check the batteries. Often park visitors do not plan on being out past dark. It is not unusual for hikers to underestimate travel distance or a camper to lose track of time on the beach and then attempt to navigate back to their camp or vehicle in the dark.

Compass
Compasses come in many sizes and forms. One that can hang around your neck or strap to your watch band are the most convenient and can be very helpful should you become lost or separated from your group. Be sure to familiarize yourself with its operation before heading out on the trail.

Hopefully these few simple items will make a positive difference in your visit. In case you are faced with an emergency situation while visiting the National Lakeshore, including the Manitou Islands, call 911. For non-emergency situations, call 231-326-5134 to reach Sleeping Bear Dunes National Lakeshore dispatch.

Touring the Park



Pierce Stocking Scenic Drive

Touring the Scenic Drive

Welcome to the Pierce Stocking Scenic Drive. This 12 kilometer (7.4 mile) scenic route will take you to spectacular overlooks of Lake Michigan and the Sleeping Bear Dunes. Two picnic areas are also available for your use.

Please obey the 32 kph (20 mph) speed limit and drive carefully so that motorized vehicles, bicycles and pedestrians can share this roadway safely. Scenic Overlooks found along the way include:

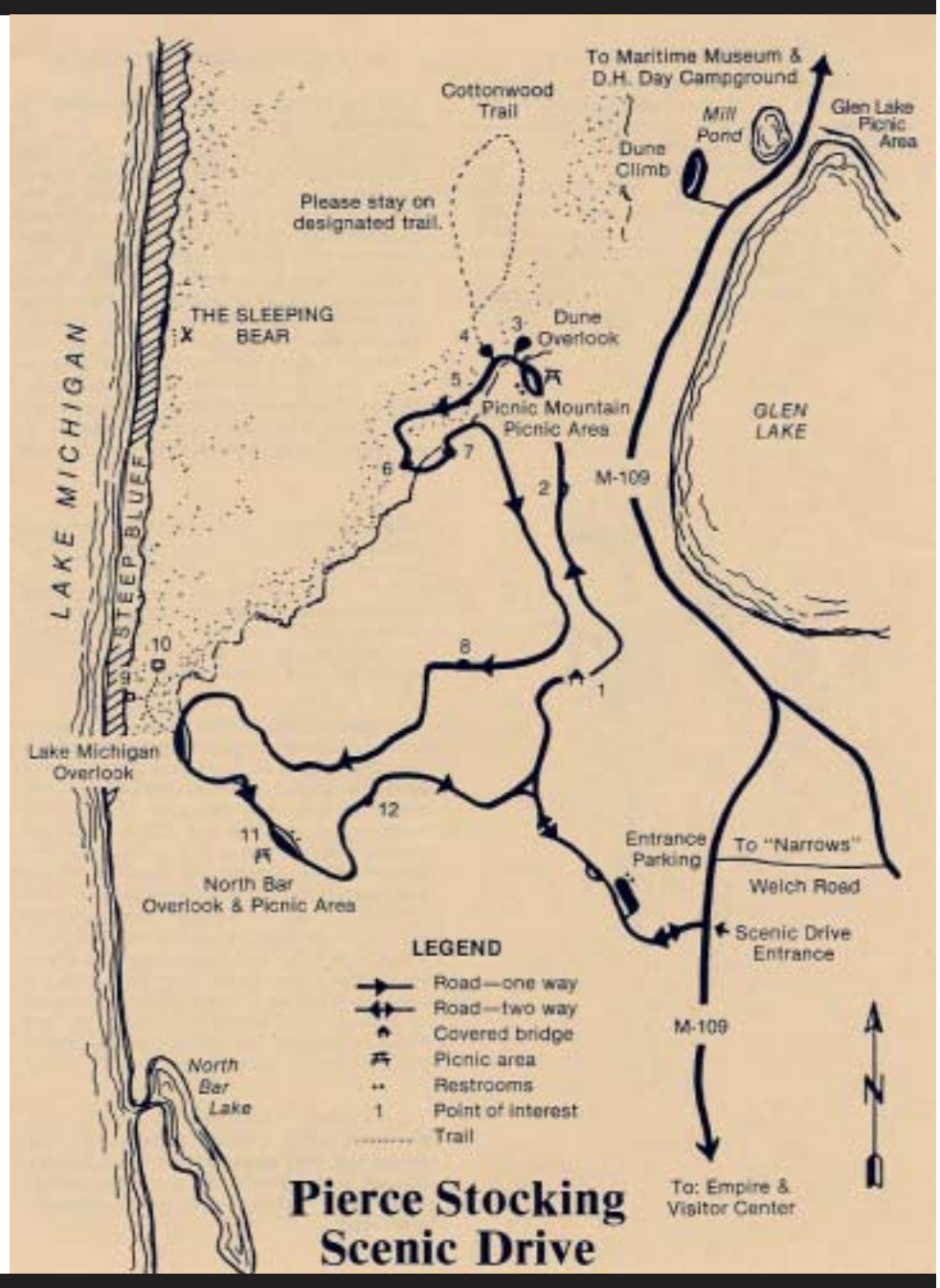
1. The Covered Bridge
2. Glen Lake Overlook
3. Dune Overlook
4. Cottonwood Trail
5. Dune Ecology
6. Leaving the Sand Dunes
7. The Beech-Maple Forest
8. Changes Over Time
9. Lake Michigan Overlook
10. Sleeping Bear Overlook
11. North Bar Lake Overlook
12. Pine Plantation

Bicycling is permitted along the drive. Cyclists should use the right side of the road. This is a challenging bicycle tour with some steep uphill and downhill grades. **Consider your abilities before starting.**

If you arrive carrying your bicycle on your car, you may park at the parking area near the entrance to the drive. Be sure to bring your Park Pass with you or plan to purchase one at the Scenic Drive Entrance Station. Bicycle racks are provided at three overlooks: #3 (Dunes Overlook), #9 & 10 (Lake Michigan Overlook), and #11 (North Bar Lake Overlook).

There are also numerous pulloffs where cars will be entering and exiting from the roadway – please use caution.

Remember to obey the speed limit, ride defensively, and have an enjoyable tour of the Pierce Stocking Scenic Drive.



Rules of the Road

Motorist Warning: Pedestrians have the right of way. Vehicles must stop for pedestrians in crosswalks. It's the LAW.

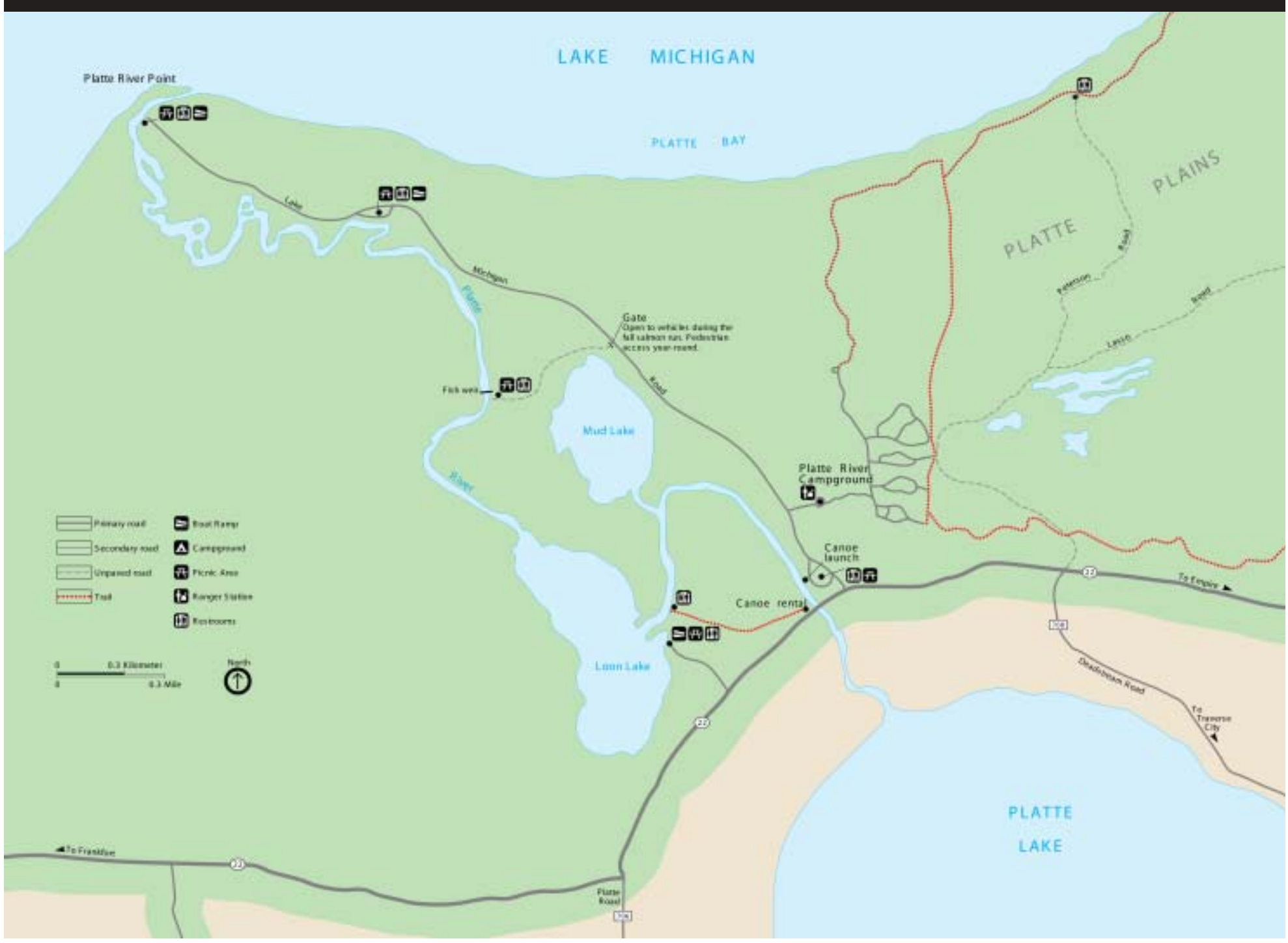
Pedestrian Warning: Avoid walking on narrow park roads. Always face traffic.

Bicyclist Warning: Bicycles are prohibited on park trails. Bicyclists are permitted on all park paved and unpaved roads and must obey all traffic regulations. Always ride with the flow of the traffic. See and be seen: wear bright colors and a helmet.

Accessibility

Most of the public facilities within Sleeping Bear Dunes National Lakeshore are wheelchair accessible, as are the scenic overlooks found along the Pierce Stocking Scenic Drive. Each campground has handicapped accessible campsites and the Duneside Accessible Trail can be found at the Dune Climb. Visitors may sign-out a sand-accessible wheelchair at the Dune Center and Sleeping Bear Point Maritime Museum. If you have questions about accessibility, please call the park at (231) 326-5134.

Platte River Area Map



Winging It's Way Back

HAVE YOU EVER BEEN STROLLING ALONG A beach and swore you saw something skitter across the sand in front of you but could not locate the object or movement again? If you have, you may be one of the lucky few who has seen (or at least imagined seeing) a piping plover. The piping plover is a very rare and extremely well camouflaged shorebird that nests right on the open beach amidst the sand and cobble. The beaches where this robin-sized bird builds its nest and raises its young are typically wide, sandy and open. Often, these are the very same beaches where people like to recreate. Unfortunately, due to increasing development and privatization of land, space has become a precious commodity for both wildlife and recreationists.

The piping plover was once abundant throughout the Great Lakes Region, with an estimated 800 breeding pairs in the mid-1800's. The population drastically declined initially due to hunting and later further declined due to habitat destruction, and nest and chick disturbances. This shorebird became federally listed as an endangered species in 1986. At the time of listing, only 16 pairs were breeding in the entire Great Lakes area. As a result of the plover's dire situation, an intensive recovery effort was launched. Many agencies, including Michigan Department of Natural Resources, Whitefish Point Bird Observatory, and the National Park Service eventually saw an increase in the number of breeding pairs on the land that they manage due to their diligent protection and recovery efforts. These efforts include locating and protecting the nests and chicks, as well as informing beach visitors about the life history of the piping plover and what they can do to help this species survive.

Sleeping Bear Dunes National Lakeshore beaches are very important to the success of the Great Lakes Piping Plover. Between the years of 1993-2001, an average of 20% of the entire Great Lakes plover population nested on the park's beaches. That is 1/5 of the entire breeding population! This may not seem very significant, but it is, especially when you consider the miles of shoreline located in Michigan alone.

Beaches where nesting plovers are found are closed to access until the chicks can fly. Flying is a bird's best defense, so once that occurs, the beaches are re-opened. It takes approximately 30 days for the plover chicks to hatch and another 30 days for the hatchlings to grow their flight feathers and take their first leap into the air.

At Sleeping Bear Dunes, there is an intensive plover monitoring program. The park's number one plover management goal is to protect as many of the hatched chicks as possible until they begin to fly. We accomplish this goal by hiring biology students and Biological Technicians and recruiting plover volunteers who help us discourage any potential predators from dawn to dusk. These same people also observe and document the chicks' use of their territory. As you can imagine, this is a very intensive effort. Our first year of 16 hour per day coverage began in 2001, and we had our highest fledging success rate ever of 86%!

We are also hoping to gain valuable information as to how the chicks use their territory and determine how this correlates to fledging success. For example, one question we are posing is "Are chicks more likely to survive on a beach that contains some vegetation that could be used by the young for food and cover?" If so, this piece of information might tell us that chicks in territories completely devoid of vegetation would need more protection from predators like gulls, crows and foxes.

Like any recovery program, it takes time and a lot of effort to see substantial results. However, the Great Lakes Piping Plover population has increased to 32 breeding pairs and has expanded its range to Wisconsin shorelines, an area where it hasn't been found for over 50 years.

If you would like to learn more about the piping plover, drive down to Platte Point Beach, located at the mouth of the Platte River near the south end of the park, where you can talk to a plover monitor and look through his or her spotting scope. You could also view the 15-minute video in our Visitor Center, located in Empire. You'll be amazed at how interesting such a small creature can really be!

A Sustainable Park

"Sustainability" can be described as, *Doing things in a way that does not compromise the Earth or its capacity to provide for the future.*

Essentially, this is the same ideal upon which the National Park Service was established in 1916: "…to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

It is the policy of Sleeping Bear Dunes National Lakeshore to practice sustainability in all functions and programs at the Park. Some of the ways we are working to practice sustainability include,

- Recycling paper, metals, and other materials at Park offices and maintenance facilities.
- Providing recycling receptacles for visitor use at the campgrounds, the Visitor Center, and the Dune Climb.
- Use of recycled plastic in picnic tables, benches, and landscape timbers.
- Refurbishing historic buildings for needed facilities, rather than building from new materials.
- Use of naturally rot-resistant wood for fence posts and trail timbers, rather than poisonous chemically treated lumber.

Please help us practice sustainability by recycling, minimizing polluting activities, and being careful not to harm Park resources. And, if you see a way in which the National Park Service can improve the sustainability of its operations, please mention it to an employee.

A Home For Songbirds?

SLEEPING BEAR DUNES NATIONAL LAKESHORE is on the migratory route for songbirds that breed in the Northern Hemisphere and spend the winter in the Caribbean Islands, Central America, or South America. Some songbirds weigh only half an ounce, but fly 1,800 miles non-stop without food, water, or rest when they migrate!

These songbirds are declining in numbers as the forests they need for breeding are becoming smaller or are fragmented (broken up) by roads and subdivisions. Sleeping Bear Dunes National Lakeshore tries to provide for you a place of quiet from the noise of vehicles and sounds of civilization, but would also like to provide you with forests filled with the songs of birds. The declining species of songbirds includes wood thrush, ovenbird, indigo bunting, American redstart, scarlet tanager, and many warblers.

Most songbirds make open, cup shaped nests close to the ground, which makes the nests vulnerable to animal and bird predators. The songbirds are too small to fight off bird predators such as grackles, crows, and bluejays, who will eat eggs or the young. Cowbirds lay their eggs in the nests of the songbirds and the young cowbirds quickly grow larger than the young songbirds. The young cowbirds get most of the food and the young songbirds starve. Or the cowbirds hatch first and push the eggs of the host songbirds out of the nest.

Animals that eat the eggs or young songbirds include cats, dogs, opossum, skunks, white-tailed deer, and raccoons.

The size of a forest is important for successful breeding for songbirds. The birds and animals that kill the songbirds are most active 300 meters into a forest, but can be found throughout a 1,000 acre forest. A large forest provides not only a place for songbirds to nest but also protects them from predators. Openings in a forest, such as gravel roads, paved roads, houses, or powerlines, give the predators access to the forest and the songbird nests. A songbird will nest by the edge of a forest, but predators will most likely eat these eggs or kill the young. Most songbirds nest only once a season due to their long migrations, so unlike many other birds, they cannot brood again if the first nesting fails. Some experts say that 5,000 to 10,000 acre forests are needed to protect the songbirds from predators.

The number of different species of songbirds increases as the size and maturity of the unbroken forest increases. Some songbirds need just one acre for breeding territory but that one acre must be part of a large unfragmented forest. Forests that are 100 years old support the greatest number of songbird species and the greatest number of nesting songbirds. The songbirds help to protect the forests by eating insects that could kill the trees.

Sleeping Bear Dunes National Lakeshore is becoming more important every day as habitat for forest dwelling animals and birds. Houses and roads are fragmenting the forests outside of the Lakeshore. Many species of birds are declining, but the forest dwellers are the most threatened. The National Park Service is trying to reduce the forest fragmentation that gives predators access to nesting songbirds. That means that some former farm fields and house sites will be allowed to grow back to provide larger blocks of continuous forest. Some former house site roads will be closed.

What you will experience in the forests is quiet from the sounds of civilization, and the natural sounds of the forest and songbirds. You will see a mature and diverse forest that will be a safe home for the songbirds.

ICE - WATER - WIND - TIME

How The Land Was Formed

AS YOU ENJOY YOUR VISIT AT SLEEPING BEAR Dunes National Lakeshore and northern Michigan, think about ice.

When we say ice, we mean ICE!

Think about ice thousands of feet thick, that is, three thousand feet higher than the morainal hills around Glen Lake and in some places more than a mile thick. This ice sheet covered more than half of the North American Continent including Minnesota, Wisconsin, Michigan down into Iowa, Illinois, Indiana, and Ohio. Can you imagine ice so thick and heavy that it pressed down the Earth's crust? It is moving. It is pushing. It has scooped up huge Precambrian boulders and other rocks and gravel from further north and carried them to destinations here. It is fascinating to imagine the power of the forces and the length of time taken to form these hills and valleys, shorelines, lakes and streams that you see today.

The last advances of the glaciers, the Port Huron and Valders substages of the Wisconsin ice sheet, followed valleys carved out by earlier, larger glaciers and further gouged the valleys. These valleys are now Shell Lake, School Lake, Lime Lake, Little Traverse Lake, Glen Lake, North and South Bar Lakes, Platte Lake, and Crystal Lake.

The last of the glacial ice melted away from this area 10,000 – 14,000 years ago. As glaciers receded, sometimes, huge blocks of ice like icebergs would break off from the receding glaciers and became surrounded and covered by gravel, sand and debris that washed out from the glacier. Later, as these ice blocks melted, a great depression, often conical, would be formed as the material covering the ice block collapsed. These huge depressions are called kettles. There are many of these

throughout Michigan and there are several in the park.

When we say water, we mean WATER!

As glaciers melted, the Great Lakes basins filled with water. As ice rapidly melted from the ice lobe in Sleeping Bear Bay and could not flow north because of the remaining ice, a river carried this water south from where Glen Lake is now, along the M-22 corridor, around Empire and finally into the Lake Michigan Basin by Otter Creek. A look at this glacial drainage channel (now dry of course) where it crossed M-22 at Stormer Road, gives one a concept of the immense volume of melt water it once carried.

Headlands such as Pyramid Point, Sleeping Bear Point, Empire Bluffs are moraines that once stood much farther out into the lake. The moraines are long, high ridges of

gravel, cobble, sand, silt, and clay that were pushed and piled at the ends of and between the lobes of glaciers. Wave action over thousands of years, from Lake Michigan and other earlier, greater lakes that once filled the basin cut off the ends of the headlands so that they now appear as great bluffs of sand and gravel. Thus we see at Empire bluffs, the Sleeping Bear bluffs and Pyramid Point, the steep sand and gravel faces so prominent along the shoreline. This process continues so that, especially during years of high water levels in Lake Michigan, great masses of these bluffs all along the shoreline collapse into Lake Michigan.

North Bar and South Bar Lakes near Empire are embayment lakes and on a grander scale, so are Glen Lake and Crystal Lake. The lakes were formerly bays of the higher Lakes Algonquin and Nipissing, which were there before Lake Michigan. The embayments were formerly open to the larger lake but were cut off by sand moving steadily along the shoreline even as the lake was receding.

This action can be seen today along the Lake Michigan shoreline. The prevailing winds are from the southwest and generate waves that move north along the shoreline. Each wave moves a child's sand shovel-full size of sand to the north and the next wave does the same and the next the same, constantly moving small amounts of sand to the north. Storm waves move big shovels-full of sand to the north; wave after wave.

The Lake Michigan shoreline is constantly changing. Headlands are being cut away; bays are being filled in. The forces are ever in the process of straightening the shoreline. There have been huge landslides at Sleeping Bear Point and Pyramid Point over the years. During periods of high water levels of Lake Michigan, you may see masses of the sand bluffs along Empire Bluffs slumping into Lake Michigan.

As the ancient Lakes Algonquin and Nipissing, which preceded Lake Michigan, fell and Lake Michigan water levels receded, a series of old beach ridges remained. You can easily determine these ridges on topographic maps and aerial photos as arcs that parallel the present shapes of Sleeping Bear Bay, Good Harbor Bay, and Platte Bay. You can experience them if you walk toward the beach as a series of ridges and swales, dry and wet over and over. The Crystal River, as it passes from Glen Lake to Lake Michigan, flows between the ridges until it cuts through one of these old beach ridges and then doubles back until it cuts through another one and so on to the end.

When we say wind, we mean WIND!

Some of the most prominent features in the park are the perched dunes. These are not ordinary beach dunes. They are high dunes perched on top of already high glacial moraines. The moraines are the great ridges of material carried along by the glaciers and pushed before them and then deposited when the glaciers were halted in their advance. As waves and wind along the lakeshore cut away the headlands of the glaciers, the wind blew the lighter sands higher up on top of the moraines. The heavier stones fell down toward the beach. This is a continual sifting process, which you can experience on a windy day from the Lake Michigan overlook on the Stocking Scenic Drive. You will see and feel the sand blowing upward and you may carry some of it away in your eyes, ears and hair.

When you are on the Sleeping Bear Plateau, you can observe hills of sand in great crescent shaped waves that move inland over time covering forests in front of them and exposing forests behind them that were killed hundreds of years earlier by the moving dunes.

When we say time, we mean TIME!

All of these awesome geologic forces happen over thousands of years. The Pleistocene Epoch, considered the Ice Age, may have lasted, according to geologists, 500,000 to 2,000,000 years. The last great glacier that covered all of this land, the Wisconsin Ice Sheet, occurred 50 to 70 thousand years ago. This was preceded by earlier ice sheets, the Illinoian, the Kansan, the Nebraskan, EACH advancing over many thousands of years, EACH retreating over many thousands of years. The last of these, the Wisconsin, influenced the landform of North America north of the Missouri and Ohio Rivers.

Consider the changes in the landforms that have occurred over the great lengths of time and consider that they are continuing to change. Consider the power of ice, of water, of wind, and of the patience of time. Could Lake Michigan dry up? Could the Great Lakes be covered again by a glacier? It is too soon to tell but change happens day by day and year by year. Are we now in a post-glacial period or interglacial period? How is the landform being changed now by human activity?

PHSB

Committed to preserving the historical structures and cultural landscapes within the Sleeping Bear Dunes National Lakeshore

HELP PRESERVE HISTORIC SLEEPING BEAR

Our Mission

IN PARTNERSHIP WITH THE NATIONAL LAKESHORE, PRESERVE HISTORIC SLEEPING Bear (PHSB) is working to preserve the cultural history of the Lakeshore, including its historic farmsteads, meadows, barns, lighthouses, cottages, sawmills, and lifesaving stations. Stories of Great Lakes History—life settled from water, logging, tourism and farming—are told through these historic structures and cultural landscapes.

Volunteers began repairing the Blacksmith Shop roof at the Martin Basch Farmstead last summer in the Port Oneida Rural Historic District.

Over the past two years, the National Lakeshore and PHSB have successfully stabilized many highly significant historic structures. At the same time, due to budget constraints throughout the National Park Service, dozens of historic structures in the Sleeping Bear Dunes National Lakeshore remain endangered. Cottages and a sawmill on North Manitou Island, farm structures on South Manitou and throughout Port Oneida are in critical need of stabilization. The National Lakeshore and PHSB made great strides last year at the Martin Basch farmstead; it will take another $40,000 to complete the stabilization. The South Manitou Island lighthouse and several buildings in Glen Haven are in need of further restoration.

How You Can Help!

Projects - We need your financial support to save our cultural legacy. By supporting Preserve Historic Sleeping Bear, you can help ensure that these endangered resources remain a part of the Sleeping Bear Dunes National Lakeshore. You may also choose to contribute to the stabilization or restoration of a specific historic structure near and dear to your heart.

Park Planning - the Lakeshore is working on a new 20-year management plan. Public comment will be sought on a "preliminary preferred alternative" this summer. You can help by adding your name to our list of supporters and by attending public meetings to support historic preservation and cultural resources in the Park's General Management Plan. Let your voice be heard!

Stabilization and restoration projects have been done on the Charles Olsen House, fondly recognized by many along Highway M-22 near the Port Oneida entrance.

Volunteers - each summer the public gets involved with hands-on stabilization and restoration projects. Many hands make a big impact and volunteers feel a great sense of satisfaction. You can also volunteer to help PHSB at the office, for events, presentations and at our booth for special events. Come Lend a Hand!

Partnerships - Once the new General Management Plan is finalized, some historic structures may be adopted by partners. These partnerships would follow strict criteria that would add to the recreational or educational experience in the Park. Adaptive use partnerships are one strategy to save cultural resources. PHSB will establish a partnership incubator to assist these efforts if rehabilitation with adaptive use is a component of the final General Management Plan.

Call us for Dates of Events, Public Meetings & Volunteer Projects! 231-334-6103

Get on our mailing list!
Become a member with your donation!

I am interested in supporting the preservation of cultural resources in the Sleeping Bear Dunes National Lakeshore.
Please send me information on Preserve Historic Sleeping Bear.

Name_____

Address_____

City_____ State_____ Zip_____

Phone_____ email_____

I would like to make a tax-deductible donation to PHSB.
Enclosed is my check in the amount of $_____.
Send this form to: **Preserve Historic Sleeping Bear**
P.O. Box 453, Empire, MI 49630
(231) 334-6103 email: PHSB@leelanau.com,www.PHSB.org

Partnership Established to Restore Barns

THE MICHIGAN BARN PRESERVATION NETWORK and Sleeping Bear Dunes National Lakeshore have paired up to save and restore the barns in the park. The partnership developed in 1997 to provide free participatory workshops to the public in which techniques would be passed on for the preservation of the timber barns. These workshops occur primarily to promote the art of traditional barn building while saving the historic barns in the park.

The first workshop was sponsored by a donation from the Michigan Barn Preservation Network of Mt. Pleasant, Michigan. The first workshop included 31 participants and 80 spectators who visited throughout the day to observe the activity. Hands-on training is the focus for people who have or maintain an appreciation of old barns. Providing a basis for understanding how and why to maintain barns is the second focus of the workshops. Participants are assisted in inspection, hewing, mixing mortar, demonstrations and analysis, use of specialized tools, as well as the installation and repair of walls, foundations, beams, joists, roofing, flooring, and siding.
The majority of the workshops are held in the Port Oneida Rural Historic District and include teaching techniques on timber hewing, framing, stone mortar tuck-pointing, cord wood foundation construction, and general building and foundation stabilization and repair.
The 2000 workshop has been the only workshop to leave Port Oneida and venture to South Manitou Island over the course of 15 days to repair the cord wood foundation on the August Beck Barn. This workshop included 54 volunteers and scores of day visitors and campers on the island who came to watch and encourage workers. This workshop saw the youngest volunteer at age 5 and the oldest at age 75.

The workshops were initially developed as public training aids by the Michigan Barn Preservation Network. The workshops held since then have been co-sponsored by the park. In 2001, the National Park Service's Albright Training Center awarded a grant to the park to extend this training to park personnel throughout the Midwest Region. Technical expertise has been provided at the workshops by local timber framers and Network members, and subject matter experts within the park maintenance staff. This year's workshop will be held at the Brunson Barn in the Port Oneida Rural Historic District. The work will include training on foundation assessment, trenching safety, and stone masonry repair.

The barn is located on Thoreson Road off of M-22 north of Glen Arbor. The restoration projects are held during the summer months, and due to the increased interest in these workshops, anyone interested in participating should call the Park at 231-326-5134 for more information on when the events will occur and how to sign up to participate. This years public workshop is scheduled for August 22nd and 23rd.

John Burfiend Barn Graces the White House Christmas Tree

Thanks to a request made by the White House Protocol Office and Julie Avery of the Michigan State University Museum, a barn graced the Christmas Tree in the Blue Room of the White House. The White House was originally seeking artists to create unique ornaments of historical homes around the country to fit in with the theme chosen by Laura Bush, "Home for the Holidays."

The local model of the John Burfiend Barn was selected because of the assistance and notoriety the Michigan Barn Preservation Network has provided to the park, and the fact that the John Burfiend barn was the site of the first public hands-on workshop in 1997. These workshops have occurred every year since that time.

The model was executed by retired National Lakeshore Chief of Interpretation Charles Parkinson, a long-term resident of Beulah, Michigan. The specifications for this project were quite specific. The ornament had to be made of lightweight materials, be three dimensional, height 6"-8", weight 6-8 ounces, white as the only color, with a cold cord attached to the top of the ornament.

Friends of the Sleeping Bear Dunes

Dedicated to Assisting in the Preservation, Restoration, and Interpretation of the Natural, Cultural, Historical, and Recreational Resources of Sleeping Bear Dunes National Lakeshore

Notes on the History and Purpose of Friends of the Sleeping Bear Dunes, Inc.

A CORE GROUP OF PEOPLE WITH INTEREST IN FORMING A GROUP called Friends of the Sleeping Bear Dunes met on April 7, 1994. Those in attendance were Dr. G. Franklin Zaring, John Abbett, Paul Benington, and William Merry. The following resolution was passed: "It is hereby resolved that it is the sense of this meeting that the Friends of the Sleeping Bear Dunes, Inc. shall now be formed exclusively for charitable and educational purposes, including the making of fund distributions to assist with historical, educational, scientific, interpretive and recreational activities of the Sleeping Bear Dunes National Lakeshore."

On May 4, 1994, at a public meeting attended by 20 people, Friends of the Sleeping Bear Dunes, Inc. was established.

Projects Completed: 1994-2002

In the first year of the Friends existence, the following projects were completed or started:

Summer, 1994 - Replacement of deck and boardwalk on Lake Michigan Overlook, #9 on Pierce Stocking Scenic Drive.

Spring, 1995 - Replanting maple trees along M-109 and Day Farm Road near D.H. Day Farm.

Fall, 1995 - Begin a 3-year project to restore D.H. Day Campground.

Fall, 1995 - Clearing brush at view sites on the Pierce Stocking Scenic Drive.

Since that first year, Friends volunteers have aided the park in the following projects:

- Rehabilitation of Lake MichiganOverlook #10 on the Scenic Drive.
- Acquisition of grants for renovation of the D.H. Day Log Cabin, the cannery boat display at Glen Haven, restoration of Glen Haven D.H. Day store, and Glen Haven Blacksmith shop and rest rooms.
- Assisting in grant acquisition for a Folk Art Festival in summer 2002.
- Pruning of historic fruit trees in designated historic orchards in the park.
- Renovation of Cottonwood Trail and planting of dune grass to help with the restoration of wild areas as well as collection of seeds for use in replanting of eroded areas.

Friends Volunteer Planting Dune Grass

Uniqueness of the Friends

Sleeping Bear Dunes National Lakeshore is fortunate that more than 700 people annually do volunteer work for the park. Among these are many members of Friends of the Sleeping Bear Dunes. All volunteer activity is appreciated by park personnel because it helps in the achievement of the goals for which the park was established.

People often ask, "What do the Friends do to help the park that differs from general volunteer work?" One of the main differences is that the Friends can obtain and administer grants and memorial funds which individuals, companies, or other organizations wish to provide for the benefit of the park. Sometimes individuals are unable to do this. The tax-exempt status of the Friends makes it possible for individuals to make gifts of cash or property (physical items as well as real estate) and allow the donors of such items to claim legitimate tax deductions. The 501(c)(3) status of the Friends is clearly a benefit to the park which ultimately receives these gifts.

Friends have purchased picnic tables for Platte River Campground and a second sand wheelchair to be housed at the Dune Center. The first sand chair is housed at the Maritime Museum. Both can be checked out for use by anyone who needs this type of assistance.

Nancy Maleady and husband enjoy the beach again with the help of the sand wheelchair.

One of the major Friends projects was the restoration of the campground and facilities at D.H. Day Campground near Glen Haven. The Log Cabin has become a facility used for many purposes.

Volunteers will continue with the Adopt-A-Trail program established in 1999 and also take part in leading natural history walks, bird censuses, leading bus tour groups on the Pierce Stocking Scenic Drive, helping to staff various locations including the Visitor Center Information Desk, Maritime Museum, and the Cannery Boat Museum in Glen Haven. They also have helped Park internal operations by filing documents and helping keep the library materials shelved properly. Other volunteers have assisted in map-making projects, helping maintain the Park's archival photo collection, and in many other ways.

Lakeshore Superintendent Dusty Shultz and Friends Board Member Dick Kishline inspect the new Sand Wheelchair that will be stored at the Dune Center.

The Park Administration of Sleeping Bear Dunes National Lakeshore have expressed their gratitude to the Friends organization and have requested that they continue with their work for the park. For the Friends members, it is a labor of love and they are ready to continue in 2002 and beyond.

FRIENDS Membership Application

Individual Memberships: ( )$20 Additional Contribution $ _____
Family Memberships: ( )$40 Additional Contribution $ _____
Business/Corporate Members: ( )$100 Additional Contribution $ _____

Name(s) _____

Summer Address: _____ Phone: _____

Winter Address: _____ Phone: _____

Please make checks payable to: **Friends of the Sleeping Bear Dunes, Inc.**
P.O. Box 6344, Traverse City, MI 49696

ALL CONTRIBUTIONS ARE TAX-DEDUCTIBLE

National Park Service
U.S. Department of the Interior

Sleeping Bear Dunes National Lakeshore
9922 Front Street
Empire, MI 49630

EXPERIENCE YOUR AMERICA

2002 View From The Dunes

Park Information

Park Headquarters	(231) 326-5134
Phillip A. Hart Visitor Center	(231) 326-5134, ext 328
Platte River Campground	(231) 325-5881
D.H. Day Campground	(231) 334-4634
Sleeping Bear Dunes Website	www.nps.gov/slbe
Sleeping Bear Dunes Email Address	slbe_interpretation@nps.gov

Local Tourism Information

Benzie County Chamber of Commerce	(231) 882-5801
	www.benzie.org
Leelanau County Chamber of Commerce	(231) 256-9895
	www.leelanauchamber.com
Traverse City Chamber of Commerce	(231) 947-5075
	www.tcchamber.org
Traverse City Convention	(231) 947-1120
& Visitors Bureau	www.tcvisitor.com

IN CASE OF EMERGENCY - DIAL 911

Sleeping Bear Dunes National Lakeshore is one of 385 National Park Service units that helps protect the nation's natural and cultural heritage for this and future generations

VOLUNTEERS MAKE A DIFFERENCE!

Americans have enjoyed a love affair with their National Parks since Yellowstone, the first National Park in the world, was created in 1872. Now you can help care for your parks by joining the 145,000 people nationwide who volunteer their time and talents each year.

At Sleeping Bear Dunes in 2001, 710 VIP's (Volunteers-In-Parks) donated 22,113 hours of work, with an estimated value of over $340,000. VIP's have assisted in many facets of park operation. Whether acting as campground hosts, operating visitor centers and museums, or performing structural or trail maintenance, volunteers have provided invaluable and necessary support.

To apply for a VIP position, fill out the application form found in the "Volunteers" brochure that is available at park visitor facilities, and mail it or drop it off at park headquarters in Empire. The Volunteer Coordinator will review your application and pass it along to the park supervisor who has work that best fits your skills and interests.

BE A JUNIOR RANGER!

Stop at the Phillip A. Hart Visitor Center in Empire to obtain your Junior Ranger Workbook. The cost is only $1.50. Complete the fun challenges throughout your visit and bring it back to the Visitor Center for your free Junior Ranger Patch!

VISIT OUR BOOKSTORES!

During your visit to Sleeping Bear Dunes National Lakeshore, be sure to visit one of our Eastern National Sales Outlets. Theme items relating to the resources of the park are available for sale, including books, postcards, games, CD's, etc. Sales Outlets are located at:

Phillip A. Hart Visitor Center - near the junction of M-72 and M-22 in Empire.
Dune Center - at the Dune Climb on M-109 north of Empire.

Watch for our new sales outlet at the D.H. Day General Store in Glen Haven scheduled to open within the next year!

Eastern National

Serving America's National Parks and Other Public Trusts