Superior Wildlands A FREE GUIDE







To Your Central and Eastern Upper Peninsula Federal Lands







ARE YOU READY TO KAYAK LAKE SUPERIOR?

Preparation checklistAt a minimum, you should

Sea kayak

PFD (personal flotation device)

Wet suit

Spray skirt (and know how to use it)

Whistle and foghorn

Bilge pump, paddle float and tow rope

Weather radio

Float plan

A partner (kayaking alone is not advised)

Spare clothes, food and water

Additional Safety Information Available at

www.nps.gov/piro/planyourvisit/kayaking.htm Kayaking at Pictured Rocks National Lake Shore, Grand Island National Recreation Area, and other Hiawatha Great Lakes shoreline areas can be a fun adventure. However, it is not recommended for the novice kayaker (unless accompanied by a professional tour guide). Both Pictured Rocks and Grand Island feature many miles of sheer cliffs which offer no way off the water if wind and waves increase.

Lake Superior can become hazardous for any size vessel even in moderate weather. The weather can suddenly change, exposing you to cold temperatures, wind, fog, lightning and rough seas.

Except for shallow areas, Lake Superior's temperatures rarely reach above 55 degrees. Hypothermia can happen in as little as 15 minutes. **Before you go, check the marine forecast!**

Personal flotation devices (PFD's) and wet suits should be worn at all times on Lake Superior.



Recreational kayakers being rescued along the cliffs of Pictured Rocks N.L. Don't let this be you!

Sea Kayaks vs. Recreational Kayaks

Sea kayaks with a spray skirt are recommended, because they are safer on Lake Superior. Recreational kayaks are designed for inland waters and are not suited for high winds and big waves. Recreational kayaks can fill with water and sink due to their large open cockpit. Sea kayaks are generally 16 to 19 feet long; with hatches and bulkheads providing flotation in the front and back.

Sea Kayak

Recreational Kayak



Recommended Skills

- Know how to properly use a spray skirt and be able to get back in your boat if you tip over.
- Know how to paddle around the wake from large boats. Be aware of wave bounce near cliffs
- Know how to paddle within your skills and abilities. If there is any doubt, don't go out!

Summer Interpretive Programs Are Popular



All three agencies present a variety of tours and programs from April through October. For a schedule, consult area bulletin boards, stop at a visitor center, or view our websites - then join us!

Natural History Associations - Partners in Interpretation and Education

There are several non-profit associations which support interpretation, education, and research on these federal lands. Money generated from gift store sales, donations, and memberships goes to support the places you are visiting. Each association is guided by a volunteer Board of Directors, which votes on how revenue and donations should be spent based on budget and projects suggested by agency staff and volunteers. Here are some improvements paid for in whole or part by these associations:

- Campground programs
- Informational leaflets
- Exhibits and interpretive signs
- Observation scopes and decks
- Summer internships
- Teacher workshop materials and support
- · Special events
- This newspaper!

Hiawatha Interpretive Association PO Box 913 Munising, MI 49862 www.hiawathainterpretive.com



Hiawatha Interpretive Association

National Parks of Lake Superior Foundation



The National Parks of Lake Superior Foundation (NPLSF) is a non-profit "friends" organization which provides financial support to the five U.S. National Park areas on Lake Superior. These include Pictured Rocks National Lakeshore (MI), Keweenaw National Historical Park

(MI), Grand Portage National Monument (MN), Apostle Islands National Lakeshore (WI), and Isle Royale National Park (MI).

Your donation to NPLSF will assist parks with worthy projects over and above funding for basic park operations. Projects include the preservation of historic structures, improved visitor services, enhanced environmental education programs, and MORE! We invite individuals and major donors to contact the Foundation to learn more about how they can become involved in these efforts. Your donation is tax deductible. For additional information or to make a donation, contact: www.nplsf.org

Seney Natural History Association 1606 Refuge Entrance Rd. Seney, MI 49883 friendsofseney.org facebook.com/friendsofseney facebook.com/marshlandbookstore

Eastern National 470 Maryland Drive, Suite 1 Ft. Washington, PA 19034 www.easternnational.org

ENFIA 307-1/2 N. State Street Oscoda, MI 48750 www.enfiamich.org



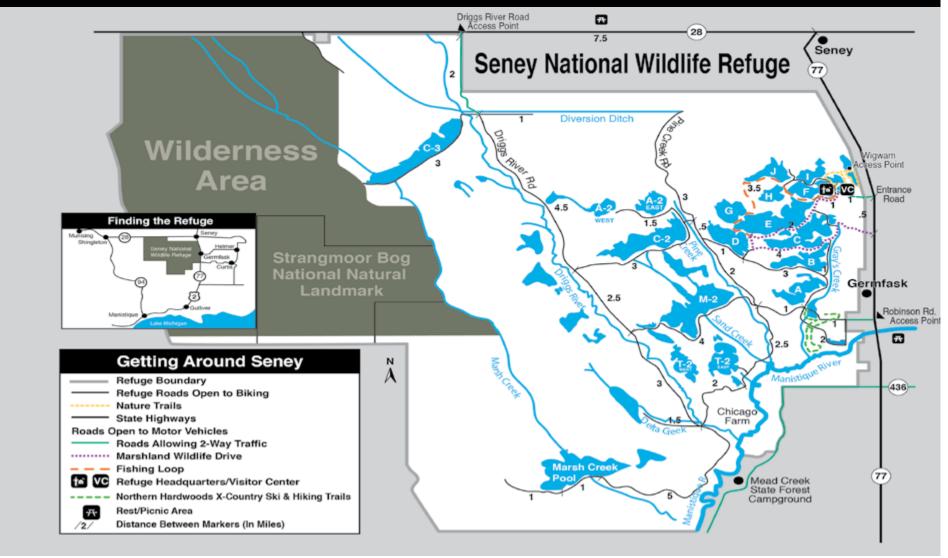




Seney National Wildlife Refuge







Discovering Seney

The Refuge is a great place for visitors of all ages and abilities to watch and learn about the local flora and fauna. Established in 1935 as a sanctuary and breeding ground for migratory birds and other wildlife, today the 95,238 acre Refuge supports a variety of wildlife including rare and reintroduced species by providing a rich mosaic of habitats: scrub-shrub, wetlands, forest, meadow, and lakes/ponds.

Visitor Center

Open May 15 – October 20 from 9 a.m. – 5 p.m., seven days a week, including holidays. Highlights include exhibits, a children's touch table, "The Wonder of Nature" orientation film, and the Marshland Bookstore. Binoculars, field guides, fishing poles, tackle boxes, geocaching supplies, and kid's packs can be checked out free of charge courtesy of the Seney Natural History Association.



Marshland Wildlife Drive (7 miles) & Fishing Loop (+1.5 miles)

These one-way auto tour routes meander through wetlands, meadows and forests. Four wheelchair accessible observation decks make these drives great for wildlife watching. Borrow a pair of binoculars from the Visitor Center to add to your viewing pleasure.



Canoeing

Enjoy a day of paddling on the Manistique River, which flows

through the south-eastern part of the Refuge. Use is limited to daylight hours with no overnight camping allowed. Canoes and kayak rentals are available from local outfitters. The float through the Refuge takes approximatly 4 to 5 hours. The Manistique River offers a slow but meandering float. Watch for bald eagles, muskrat, and wood turtles. No boats or other flotation devices are allowed on Refuge pools.

Nature Trails

The **Pine Ridge Nature Trail** starts at the Visitor Center. This 1.4 mile loop trail takes visitors through a variety of landscapes. Songbirds, swans, muskrat and beaver are commonly sighted along the trail. The **Wigwam Connector Trail** ties into the Pine Ridge Nature Trail and offers hikers a one mile extension (round trip) leading them to the Wigwams Access Area and the show pools. From there you can enjoy the **South Show Pool Loop** (one mile). The **Northern Hardwoods Trails** are a nice backdrop for a hike. In the spring, woodland wildflowers delight the senses and, in the summer and fall, ferns and mosses carpet



the forest floor.

Bicycling

Many miles of backcountry roads are available for biking throughout the Refuge. For those who seek wildlife and solitude, these trails are for you. The roads are open during daylight hours only, so you need to plan your trip carefully. These roads are used to conduct a variety of Refuge work, so please be aware of the possibility of equipment or vehicles on the roads. To help you plan your visit, mileage is marked on the Refuge map above. Roads/areas may be closed due to biological or management (fire, logging, maintenance) reasons; please obey the closure signs. All hiking and ski trails are closed to bicycles.



Winter Activities

The **Northern Hardwoods Trails** offer ten miles of groomed trails.

Trails are groomed weekly on Thursday or Friday as needed. Turn west off M-77 onto Robinson Road 1/3 mile south of the blinking light in Germfask. The trailhead is at the end of the road. Watch for otter trails in the snow and resident winter birds. Brochures and maps are available at the trailhead or may be downloaded from our website. Snowshoeing is allowed almost anywhere on the Refuge except on the groomed tracks. Snowmobiles are not permitted.

Hunting

Ruffed grouse, American wood-cock, Wilson's snipe, snowshoe hare, white-tailed deer and black bear may be hunted during some state seasons in designated areas with the proper licenses. Only approved non-toxic shotgun shot is allowed on the Refuge for migratory bird and upland game hunting. Check the hunting brochure for current regulations.



Fishing

Anglers may fish in the pools along the 3.5 mile Fishing Loop including the accessible fishing pier, in the Show Pools or in C-3 Pool from May 15 to September 30. The Manistique, Creighton and Driggs Rivers, as well as the Walsh Creek and Ditch are open for fishing during regular state seasons. The Refuge is open to ice fishing from January 1 to February 28 on any pool.

Species found on the Refuge include northern pike, yellow perch, brown bullhead, brook trout, and sunfish. To protect the trumpeter swan and common loon, lead sinkers cannot be used on the Refuge. Check the fishing brochure for current regulations.

Mushroom & Berry Picking

Foragers may enjoy picking mushrooms or berries at the Refuge. Raspberries, blueberries and other wild fruits help satisfy your sweet tooth. Morels, chanterelles, boletes and other edible mushrooms offer savory flavors. Some mushrooms and berries are poisonous!



Painted Turtle, © Allie Fox



www.facebook.com/seneyrefuge www.fws.gov/refuge/seney

Seney National Wildlife Refuge







River Otters - © John Hyse

What are National Wildlife Refuges?

The National Wildlife Refuge System is a network of lands that benefit wildlife, provides unparalleled outdoor experiences for all Americans, and protects a healthy environment. The Refuge System includes 150 million acres of land and water from the Caribbean to the Pacific and Texas to Alaska. There is at least one National Wildlife Refuge in every state.

Mission

The Mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Upper Peninsula National Wildlife Refuges

There are four National Wildlife Refuges located in the Upper Peninsula of Michigan: Seney, Harbor Island, Huron and Michigan Islands. Michigan Islands National Wildlife Refuge is closed to the public to protect nesting colonial waterbirds. Lighthouse Island is the only island open to public visitation at Huron National Wildlife Refuge.

Calendar of Events

Visit our website – www.fws.gov/refuge/seney for more events and additional information about the Refuge.

Twilight Tours Last Thursday in May, First Thursday in June 9:00 p.m. to Midnight

Use your ears, not just your eyes, on these special nighttime tours of Seney National Wildlife Refuge. The Refuge is closed from dusk to dawn, so this tour is a rare opportunity to experience the Refuge in the twilight and early evening hours when many animals are active. We will be listening for secretive marshbirds like the yellow rail, Virginia rail and sora, as well as frogs and other animals.

Wildlife WednesdaysWednesday Nights 7:00 – 9:30 p.m. June, July, August

Join us for a guided auto tour. Tours take you onto part of the Marshland Wildlife Drive and into the backcountry. This is a great chance to view wildlife, enjoy the scenery, and ask questions. Some seating is available in Refuge vehicles; once those seats are full, participants drive their own vehicles (caravan style) and use a radio to communicate with the guides.

Children's Fishing Day Last Saturday of June

Catch the excitement! Open to youth up to age 16. Registration begins at 9:00 a.m. All fish being entered in the contest must be registered at the Visitor Center by 2:00 p.m. Fish dinner and prizes offered to all participants.

Amateur Photo Contest - Photos Due August 31

Did you get some great shots while enjoying the Refuge? Enter them in the Amateur Photo Contest! In September we will display all the entries in the auditorium and online, where visitors may vote for their favorites. When on display for voting, the entries depict an incredible array of Refuge experiences. Details can be found in the Visitor Center or on our website.

Youth in the Outdoors Second Saturday in October

This fun filled day is open to youth ages 7 to 17 and is designed to get youth out into the Refuge to explore and learn. A variety of activities are available for kids to choose from. There is sure to be an activity that will pique anyone's interest. Pre-registration and a \$5 registration fee are required. Some activities may have an additional charge.

Fall Color FloatFirst Saturday of October

Take a float down the Manistique River and see the beautiful fall colors. The tour takes approximately 4-5 hours. Early October is a beautiful time to visit the Refuge as the leaves will be changing color. Pack a lunch, dress for the weather (it could be warm or cool), and remember to pre-register so we know that you're coming. Boat rentals are available locally.



Acorn Time Bear (Black Bear), © John Hysell.

Special Rules

- Drones are prohibited.
- Please do not feed wildlife.
- Daylight use only.
- Dogs are allowed on a leash.
- Camping or overnight parking is prohibited.
- Off-road vehicles are prohibited.
- Open fires are prohibited.
- No boats or flotation devices are allowed on Refuge pools.
- For specific details on hunting and fishing regulations see the respective brochures or the website.

Whitefish Point Unit

The Whitefish Point Unit of Seney National Wildlife Refuge is a birdwatchers delight. It is located 11 miles north of Paradise, Michigan and is a stop-over for birds migrating to and from Canada. The Whitefish Point region is renowned for its concentrations of birds during migration. Each year thousands of raptors, passerines (perching birds) and water birds funnel through the point to cross Lake Superior. Visit and enjoy its trails, gravel beaches, sandy beach dunes and stunted jack pine-dominated forests.

Regulations:

- Dogs allowed on leash only.
 Unleashed dogs are a danger to piping plover chicks.
- Open during daylight hours only.
- Hiking, cross-country skiing, snowshoeing, wildlife observation, photography, and mushroom and fruit picking are permitted.
- Fires, camping, rock and driftwood collecting, removal of natural items, drones, hunting, and off road vehicles are not permitted.



Federally Endangered Great Lakes Piping Plover Chick, © Sierra Utych

Portions of the Whitefish Point Unit are closed during the summer months to provide nesting habitat for the endangered Great Lakes piping plover.

Pictured Rocks National Lakeshore

Welcome to Your National Lakeshore

If you have been here before, you know how incredible this park is. From day to day and season to season, the Lakeshore provides a wide array of outdoor experiences.

So, why is this place special and why was it designated in 1966 as our nation's first National Lakeshore? Could it be that the park borders Lake Superior - the world's largest freshwater lake? From Miners Castle you can look out over 1/10th of the world's fresh water!

Could it be the five square miles of Grand Sable Dunes, the largest collection of perched sand dunes on Lake Superior? Our sand dunes contain some of the rarest plants in the Great Lakes region.

How about over a dozen miles of spectacular sandstone cliffs that rise over 200 feet above the lake? Cliffs where peregrine falcons nest, and rare arctic plants eke out a living in breathtaking microclimates.

What about the sparkling inland lakes and gurgling streams that meander through the park? Don't forget our many waterfalls too!

There is so much natural history here, a person could spend a lifetime exploring, hiking, skiing, kayaking, snowshoeing, bird watching, beachcombing, camping, sailing, walking, swimming,



fishing, canoeing - whew, what an amazing list of things to do!

And if history is your thing - just wait! Would you like to climb the 85' Au Sable Lighthouse tower and view a storm-tossed Lake Superior?

How about looking over a 36' Coast Guard self-righting lifeboat on Sand Point? Imagine going out in that little shell when there are 10' waves on the big lake!

Or you might picture yourself as a collier at the Schoolcraft blast furnace at Munising Falls, where pig iron was made in the 1800s.

If you travel to the Log Slide, you can

imagine hitching up your draft horse to a set of logging wheels, used in summer logging in the U.P.

While enjoying the Lakeshore, please remember to take good care of yourself and the park. Take a few minutes to stop by the Interagency Visitor Center in Munising or the other information centers in the park.

Feel free to chat with a park ranger. Ask them questions about the park and share your views on how we are doing at protecting your national lakeshore.

Park information can also be found on the web: www.nps.gov/piro. Have a great visit!

Where Can I...?



Where can I see the Pictured Rocks?

The Pictured Rocks Cliffs extend from Sand Point, northeast along Lake Superior for about 15 miles toward the eastern gateway community of Grand Marais.

Tell me about the Pictured Rocks Cruises?

One of the best ways to see the cliffs is from the Pictured Rocks Cruises. Cruise boats traverse about 13 miles of the cliffs during a 2.5 hour trip. Boats leave from the City Dock at Bayshore Park. The cruise schedule is available at 906-387-2379.

Do I have to take the cruise to see the Pictured Rocks?

No. A portion of the cliffs can be seen by driving to Miners Castle and walking a short distance to the viewing platforms. Other vistas can be accessed by longer day hikes on the North Country Trail.

Where can I walk with my dog?

Pets are permitted in specific locations but are not allowed in the backcountry. Obtain a Pets at the Lakeshore site bulletin at one of the visitor centers for detailed information.

Where are the waterfalls?

The Lakeshore publishes a site bulletin on waterfalls. Pick up a copy at one of the visitor centers.

Where can I get information?

The main Lakeshore visitor center is the Interagency Visitor Center in Munising at the corner of M-28 and H-58. There are small visitor centers at Munising Falls, Miners Castle, and Grand Sable Visitor Center outside of Grand Marais.

Where can I camp?

The park has three rustic drive-in campgrounds - Little Beaver Lake (8 sites), Twelvemile Beach (36 sites) and Hurricane River (22 sites). All are first come first served. A fee of \$14-\$16 per night is charged. There are no electrical, water, or sewer hookups at Lakeshore campgrounds.

Being Aware for Your Safety

Falling rock, cascading dunes, rip currents, and encounters with black bears due to improper storage of food...as a Lakeshore visitor, these are things you should be thinking about. As you visit the park, be aware your surroundings and ask yourself "what if?"

Many cliff areas along the North Country Trail are actually overhangs with free space below. As you are hiking in the park - stay back from the edge.

Rip currents are possible at several beaches along the Lakeshore depending on weather and water conditions. Check the bulletin boards to learn how to get out if you're caught in one.

If you need to talk on your cell phone, pull over at a safe location out of traffic. Talking on your cell phone may cause you to miss seeing wildlife - or worse!

While the Grand Sable Dunes are a unique and beautiful part of the park, they too can hold hazards. Be aware that



sand banks can collapse - sending you downslope or perhaps covering you.

People often remark they would love to see a bear during their visit to the park, but at a safe distance. Remember that a fed bear is a dead bear. Please follow food storage guidelines posted on bulletin boards and in backcountry regulations by

hanging your food on the food pole provided or securing food in the food locker provided or in a vehicle.

If you encounter a bear while on foot in the park, make noise and wave your arms. Do not drop your day pack or other items with food in them. Please report all incidents to a park ranger or visitor center.

History Highlights

Don't forget to visit the Lakeshore's cultural treasures, including the historic Coast Guard Station and Boathouse at the end of Sand Point Road, the Au Sable Light Station, the logging exhibits at Log Slide, and the shipwrecks along the beach near Hurricane River. Ask for directions and information at any visitor center.

Follow the Lakeshore on





Pictured Rocks National Lakeshore



Let's Go For A Walk!

Your visit to Pictured Rocks National Lakeshore may be only an hour or two, or you may spend a week or more. If you only have a day or two to spend at the Lakeshore, consider visiting these popular attractions in developed areas of the park. Please note that <u>bicycles</u> are not permitted on Lakeshore trails. Pets are allowed along all park roads, in picnic areas, on paved walkways, and some other areas noted below. Pets must always be on a 6-foot leash.

Munising Falls

Nestled in a cool, shady valley, the 50 foot falls are at the end of a short 800 foot walk on an improved trail. The trail is a good place to look for wildflowers in spring and early summer. Water from the creek was once used in the production of iron at the Schoolcraft blast furnace, a story told on wayside exhibits and in the Munising Falls Interpretive Center. Pets are allowed on the trail to Munising Falls.

Sand Point

The Sand Point beach is a popular spot for walking in the evening to watch the sun go down over Munising Bay. The Sand Point Marsh Trail, a half-mile disabled accessible interpretive trail, features a large print brochure for visually impaired visitors. Sand Point is a good place to look for warblers in spring and fall. Park Headquarters is also located on Sand Point in a former U.S. Coast Guard building. Pets are allowed on Sand Point Beach.

Miners Castle

Beginning at the picnic area, a paved foot trail leads you past interpretive exhibits to breath-taking overlooks of Lake Superior and Grand Island. Erosion over long periods of time has created the interesting rock formations that give this place its name. Pets are permitted in picnic area, and on paved walkways and overlooks.

Miners Falls

A 1.2 mile round trip gravel path through a deep woods environment leads to the falls overlook. Miners River plunging some 60 feet over a cliff is home to brook and steelhead trout. A free, self-guiding interpretive trail guide is available at the trailhead.

Miners Beach

A picnicker and beach walker's delight, Miners Beach extends for one mile on Lake Superior where waves roll in to polish beach cobbles. A 1.0 mile trail connects Miners Castle developed area and the picnic area at Miners Beach. Pets are allowed in picnic area and on Miners Beach.

White Pine Trail

Located at the Little Beaver Lake

Campground, this 1.0 mile self-guided interpretive trail loop explores the plant and animal communities of a cool, shady valley. Free trail guides are located at the trailhead.

Chapel Rock

Circumnavigating Chapel Lake takes you to the beautiful Chapel Beach and Chapel Rock. The 6.6 mile trip makes a great day hike. Longer and shorter hikes are also available in this area.

White Birch Trail

Located at the Twelvemile Beach Campground, this 2.0 mile self-guided interpretive trail explores a variety of ancient Lake Nipissing beach and upland plant communities. Free trail guides are located at the trailhead.

Log Slide Overlook

The 1000 foot trail to the viewing platform from the picnic area is worth the walk. Newspaper accounts tell of logs sent down the dry log chute generating enough friction to cause the chute to catch fire. Today the chute is gone, but the lumberjack stories still linger as you gaze out over the Grand Sable Banks and Dunes. This is a good place to glimpse the Au Sable Light Station to the west and Grand Marais to the east.

Au Sable Light Station

Strolling about the grounds on a stormy day, one can feel the sense of duty and history for which this station is preserved. Access to the station is by a 1.5 mile hiking trail beginning at the east end of the lower Hurricane River Campground. Check at visitor centers and park bulletin boards for summer interpretive tours scheduled at the light station. Tour fee \$3 adults.

Sable Falls

A picnic lunch at Sable Falls can begin a great afternoon of exploring. A 0.5 mile hike from the parking lot leads you an extensive staircase to the falls and Sable Creek and on to Lake Superior. A 0.5 round-trip hike to the Grand Sable Dunes also begins at the parking lot.

Regulations to Know

To help ensure a pleasant visit, please take a couple minutes to become familiar with the following regulations at the National Lakeshore:

Camping - permitted only within designated Lakeshore campsites. Camping permits are required. Beach or roadside camping is prohibited. Note: <u>Little Beaver Lake Campground</u> - Single unit vehicles in excess of 36 feet and vehicle/trailer combined units in excess of 42 feet are prohibited at Little Beaver because of the small campsites and the narrow, twisting, hilly access road.

Backcountry campers - must purchase a \$5 per night/person backcountry permit prior to entering the backcountry. Permits are available by reservation and in-person at visitor centers in Munising and Grand Marais.

Pets - where permitted, must be on a 6-foot leash. Check the pet map on bulletin boards for specific locations of pet walking areas.

Bicycles - permitted on roads where automobiles are permitted. Not permitted on hiking trails or roads closed to vehicular traffic.

Hunting - prohibited park-wide during the high visitor use period of April 1 through Labor Day. Hunting is allowed the remainder of the year as established by state and federal laws. Target shooting and trapping are prohibited year-round.

Campfires - allowed only in fire rings. Fires on beaches are prohibited except in fire rings provided.

ORVs - are prohibited in the park.

Wildlife feeding is prohibited - birds and small mammals rely on natural food to get them through the winter. Please do not make them dependent on human food.

No littering - Each of us enjoys a clean Lakeshore. Please pick up after yourself and others.

Fireworks - are best left to the experts. Use or possession of fireworks within the Lakeshore is prohibited.

Removing rocks or other natural features is prohibited.

Please do not injure or remove plants or harass wildlife.

Pictured Rocks National Lakeshore



Dunes

Did you know that Pictured Rocks has one of the best examples of perched dune systems in the world? Although the Lakeshore is primarily known for its colorful sandstone cliffs, the towering Grand Sable Dunes just west of Grand Marais contain some of the most significant, pristine, and unique resources in the park.

Perched dunes are those that form on top of an existing coastal bluff. Michigan has two outstanding examples of these dune systems: here at Pictured Rocks and also at Sleeping Bear Dunes National Lakeshore.

The Grand Sable Dunes (and the Grand Sable Banks that support them) is comprised of five square miles on the eastern side of the park. Rising 300 feet above the lake, they are the highest formations at Pictured Rocks.

Dune Formation

When the last glacial age ended about 10,000 years ago, piles of stone rubble left behind in terraces and moraines created the rocky bluffs of the Grand Sable Banks. Water levels of still-forming Lake Superior rose and fell in response to the turbulent geologic changes occurring in the region.

During the last high water period (between 4,000 and 6,000 years ago), wave action eroded the rocky cliff face and the sand-size eroded material was then blown by onshore winds on top of the bluff to create the present-day dunes.

Recent studies hypothesize that when lake levels are low, sand supply to the dunes is decreased and vegetation communities are able to expand and stabilize the soil. During high levels, sand supply increases and plants are buried. During the last 5000 years there have been about 10 separate fluctuations between lower and higher lake levels.

Soil studies have revealed remnants of ancient forests that are buried on top of one another. Sometimes these "ghost



forests" emerge from the shifting sands for a limited amount of time before being buried again.

A Pristine Research Area

The Grand Sable Dunes contain uncommon plant species and communities, including the richest orchid flora in the Great Lakes and the federally endangered Pitcher's thistle. The dunes support other rare species, including Lake Huron tansy and moonwort ferns.

Scattered grasses and many kinds of desert-loving plants grow throughout, while patches of jack pine forest can be found in sheltered dune valleys.

White-tailed deer and black bear are the largest mammals seen in the dunes, and a few deer usually winter in sheltered jack pine areas. Bald eagles and harriers might be seen soaring over the open stretches.

Due to its exceptional features, a portion of the Grand Sable Dunes was designated a Research Natural Area in 1994. Research Natural Areas are part of a national network of field ecological areas in ecosystems with very limited public use or disturbance. They are designated for research and education, and to maintain biological diversity.

The Grand Sable Dunes RNA offers a pristine environment for scientific study of climate change, lake level history, coastal landforms, soil development, rare plant communities, and vegetation succession.

Sand dunes are dynamic, yet vulnerable environments. Please tread lightly while visiting this fragile area and take care not to step on vegetation. There are no trails within the dunes themselves; access is available via a ¼ mile walk from the Sable Falls parking lot, and also across the road from the small Grand Sable Lake parking lot on H-58.

For Your Safety

Dunes can be unstable. Stay out of any

designated closure areas. Do not dig tunnels or caves in sand dunes as they can collapse and bury you.



Unwelcome Hitchhikers

Like other federal lands, the Lakeshore, Forest, and Refuge have their fair share of invasive species. Invasive species are non-native plants and animals that do not belong in this environment. They come from other continents and were introduced to North America through human activity, either accidentally or intentionally.

Some of the worst culprits in our area include plants like garlic mustard, spotted knapweed, and garden forget-menots. Aquatic creatures like spiny waterflea threaten our pristine inland lakes. The tiny beech bark scale insect has killed hundreds of mature beech trees throughout the region. Sea lamprey invade our rivers to spawn, requiring yearly control efforts.



These unwelcome creatures can cause significant damage to natural ecosystems, impact food chains, degrade habitats, and alter natural communities.

Some invasive species, like wild parsnip, can be harmful to human health. Agency staff remove thousands of pounds

of invasive plants each year – an ongoing battle that never ends.

STOP THE SPREAD!

What can you do to help? It's very important to stop the spread of invasive species to new environments. Once invasive species become established, it is almost impossible to get rid of them.

Many of these species "hitchhike" on visitors while they are recreating, attaching to clothes, pets, and equipment like boats and tents. Don't let them hitchhike on you!

No matter where you are having fun outdoors, here are a few simple steps you and your family can take to help protect these precious resources from the harmful impacts of invasive plants and animals.

When Hiking and Camping...

- Check for and remove all seeds, soils, insects, and eggs from clothes and recreational equipment.
- Remove soil from tents, tent pegs, and walking sticks.
- Use boot brush stations if provided.
- Stay on marked trails.
- When making a campfire, burn wood where you buy it don't bring wood in from other area.



Don't spread Forget-Me Nots!

When Fishing and Boating...

- Use artificial lures or purchase approved live bait.
- Don't throw out unused worms or other bait at the site; dispose of in the trash.
- Clean and dry boats and all fishing equipment before visiting other lakes and water bodies.



Don't spread Spiny Water Fleas!

Hiawatha National Forest - West Unit



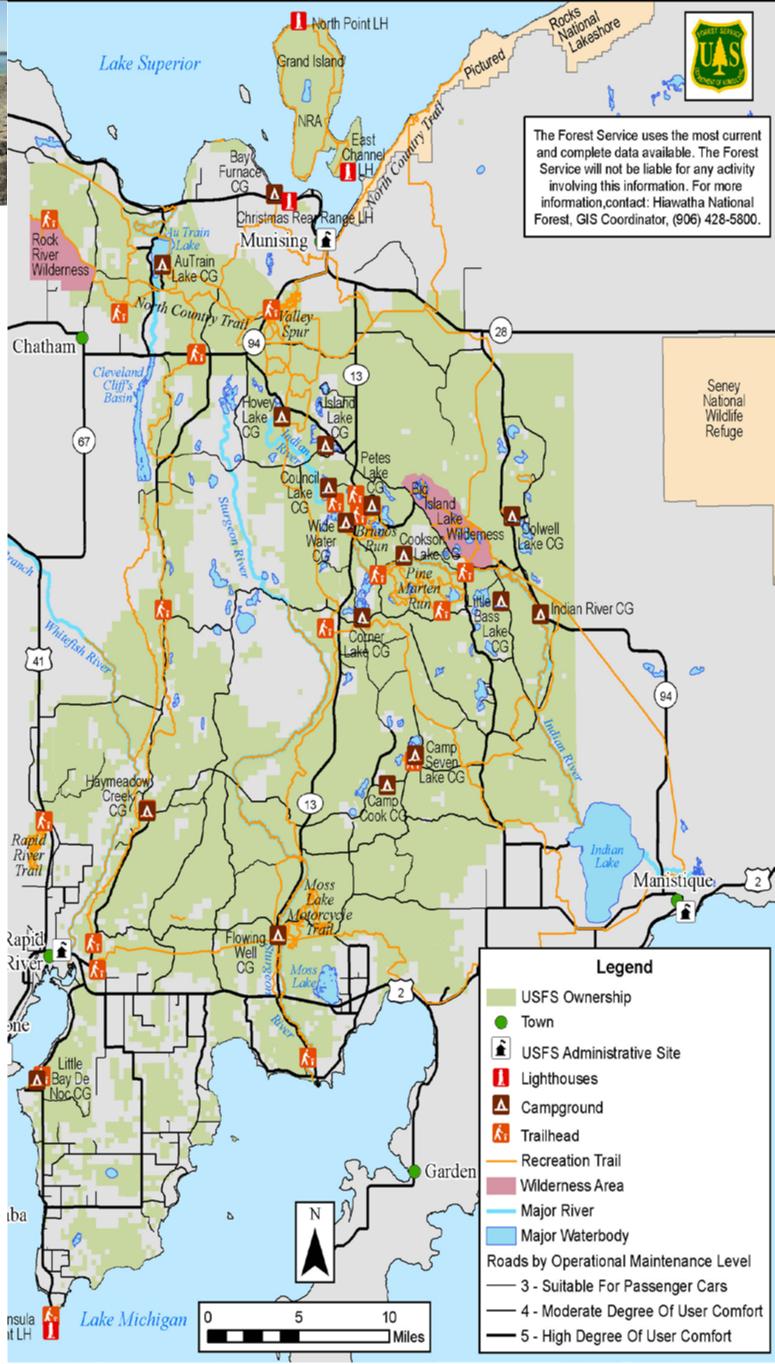
When you first enter the Hiawatha National Forest, look around. At first glance, you'll see a forest with abundant wildlife, miles of rivers and streams, and dozens of waterfalls. You'll see a forest that touches the scenic shorelines and beaches of three Great Lakes, and is home to six historic lighthouses. You'll see historical structures, archaeological sites, and prehistoric Native American artifacts that are a window to our past, which are being preserved for our future.

With one hundred miles of shoreline on three Great Lakes, the Hiawatha National Forest is uniquely positioned to provide visitors with a range of nationally distinct forest recreation opportunities. From lighthouses to Great Lakes islands, and spectacular shorelines to the Midwest's finest winter playground; the Hiawatha brings to life a fascinating natural and cultural history while providing unique recreation opportunities to

the visiting public. Then, look closer and you may catch sight of rare birds like Kirtland's warblers and piping plovers, or hear the distinctive calls of sandhill cranes. You may hear the howl of a gray wolf or perhaps the cry of a bobcat. You'll see a landscape that is home to rare plants like the Houghton's goldenrod, dwarf lake iris, Pitcher's thistle and lba lakeside daisy.

For info about Hiawatha's West Unit:

Hiawatha National Forest 400 E. Munising Ave. Munising, MI 49862 906-387-2512 www.fs.usda.gov/ hiawatha



Purchase a More Detailed Map at the Visitor Center or any Hiawatha National Forest District Office

Hiawatha National Forest - East Unit





The Hiawatha National Forest consists of about one million acres in two large units. The map on the previous page shows the Forest's West Unit located between Munising, Manistique and Rapid River. Shown on this page, the Forest's East Unit is located between St. Ignace and Sault Ste. Marie. The Forest touches Lake Superior, Lake Michigan, and Lake Huron. It boasts six lighthouses and a 26 mile scenic byway along Lake Superior's south shore.

The Hiawatha National Forest was created in 1931 from abandoned farms, razed logging tracts, and lands devastated by forest fires. Replanted originally by the Civilian Conservation Corps and cared for since by the US Forest Service; today's Hiawatha provides quality habitat for a variety of fish, wildlife, and rare plants. The Forest is dotted with about 420 inland lakes and eight hundred miles of streams and rivers flow through the Hiawatha; emptying into the Great Lakes. Five of those rivers are National Wild and Scenic Rivers.

This is today's Hiawatha National Forest. We hope you'll plan to visit us while you're in the Upper Peninsula. Whether you enjoy historic sites, scenic drives, wildlife viewing, or wide range of recreation opportunities, there is truly something for everyone. Check us out!

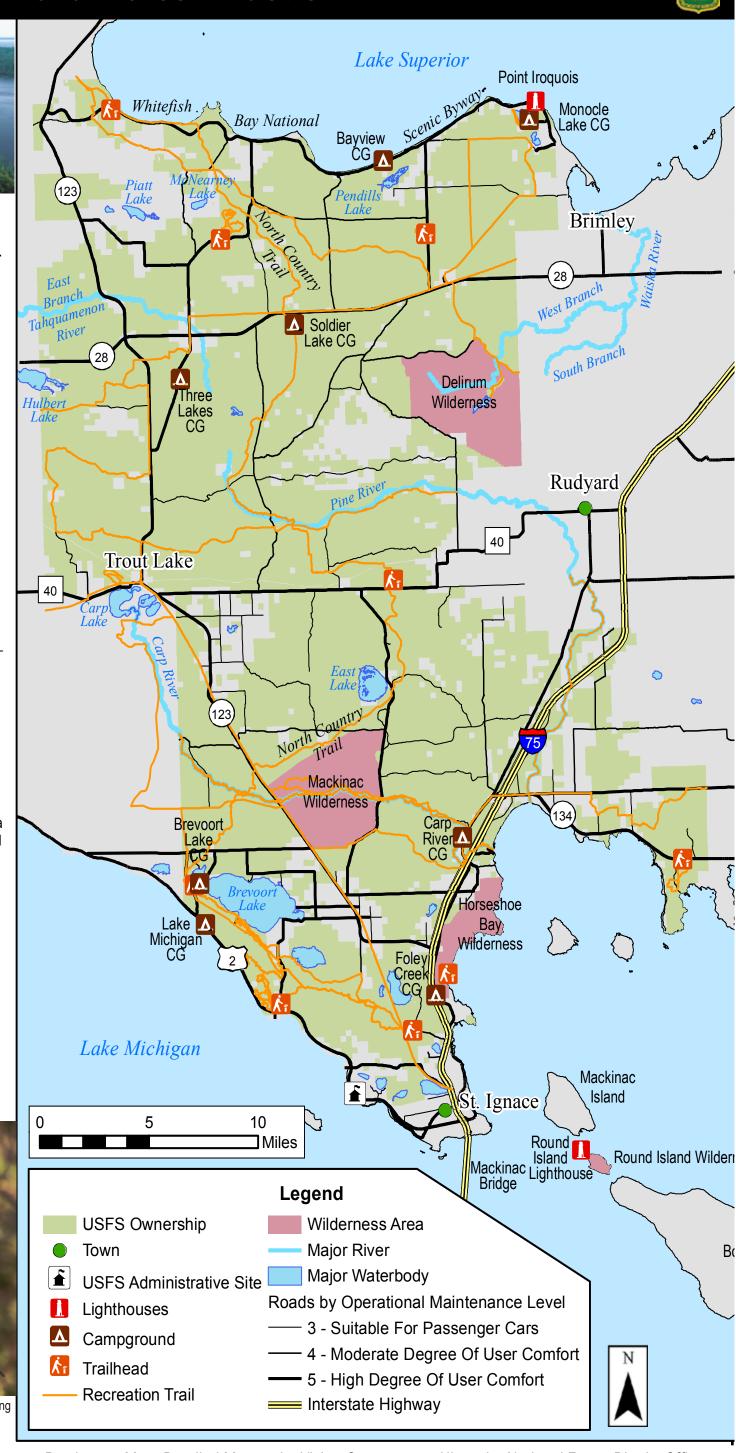
For info about Hiawatha's East Unit:

Hiawatha National Forest W1900 US 2 St. Ignace, MI 49781 906-643-7900



Spiny-baskettail Dragonflies, © Laura Wong





Hiawatha National Forest



Lighthouses of the Hiawatha

Point Iroquois Light Station

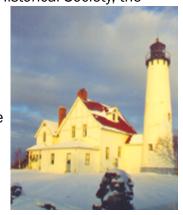


Point Iroquois Light Station marks the mouth of the St. Mary's River between the shoals off Point Iroquois and the rocky reefs of Gros Cap, Ontario.

In 1620, the first white men to the area were French explorers Brule and Grenoble. From that time, Point Iroquois became a familiar landmark for the French explorers, fur traders and the missionaries who were to follow. The discovery of copper and iron ore in 1844 necessitated a passage for ore-carrying vessels through the rapids of St. Mary's River to the steel plants of the lower Great Lakes. In 1865, the St. Mary's Falls Canal (commonly known as the Soo Locks) was opened. The light was exhibited for the first time on September 20, 1857. With the growth of traffic through the locks, the importance of the light station increased. In 1870 the wooden tower and residence were replaced with the brick buildings that stand today. After onehundred seven years of service, the light at Point Iroquois was replaced in 1962 with an automated light in the channel off Gros Cap. The light station became the property of Hiawatha National Forest in 1965. Through the efforts of the US Forest Service and Bay Mills/Brimley Historical Society, the

light station was restored for all to enjoy. Visit the museum to learn more about life as it once was in a lighthouse on Lake Superior.

Summer Hours May 15 - October 15; Open 9 am to 5 pm 7 days a week.



Round Island Lighthouse



Located in the Straits of Mackinac, Round Island Lighthouse was built in 1895-1896, at the same time that resort development was booming on Mackinac Island. Because of its prominent location, Round Island Light immediately became a scenic attraction as well as an aid to navigation. The light was decommissioned in 1947, following construction of a light and radio beacon near the Mackinac Island breakwall. and in 1958 ownership of the island and structure were transferred to the Forest Service.

have long been key to maintenance of the aging structure. In 2010, the Forest Service signed a Memorandum of Understanding with the Round Island Lighthouse Preservation Society in order to recognize cooperative efforts by the organization to maintain the light and associated structures. The group works cooperatively with Boy Scout Troop 323 of Freeland, Michigan, to host an annual Open House at the lighthouse. Visible from Mackinac Bridge, today the light is most frequently viewed from the passenger ferries traveling to Mackinac Island.

Peninsula Point Light

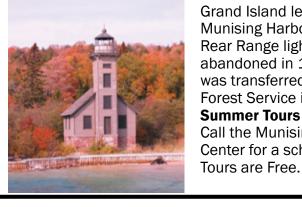


Peninsula Point is a special place to visit on Lake Michigan. When iron ore loading docks were built in Escanaba by Chicago Northwestern Railroad in 1864, Congress appropriated the funds to build a light house at Peninsula Point. Construction was completed in 1865 and a hand-operated oil lamp burned in the lighthouse until 1922, when an automated acetylene light replaced it. In 1936, when the Minneapolis shoal lighthouse was put in operation, Peninsula Point light was decommissioned by the Coast Guard and the Forest Service was granted custodianship. Although the lighthouse keepers quarters burned down in 1959. the brick tower survived and is now listed on the National Register of Historic Places. Today, visitors can climb the 40 foot circular staircase to find a panoramic view of Lake Michigan. In addition to the Lighthouse, the limestone shoreline is a great place to find fossils 400 to 500 million years old, and Peninsula Point is a popular spot to enjoy the Monarch butterfly migration in the late summer.

East Channel Lighthouse

The small wooden frame lighthouse on the southeast shore of Grand Island was constructed during the period 1869 - 1870 for the purpose of guiding vessels into Munising Harbor from the east. The location, opposite the dangerous shoal at Sand Point, was critical for safe navigation. When the Range Lights were constructed in 1908, this lighthouse was no longer needed and

by 1913, the light was abandoned. The land and lighthouse were privately purchased and divided into lots. Today, the lighthouse is community property and a private group



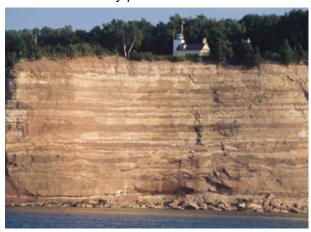
Private donations and volunteer effort has made efforts to stabilize the shoreline and renovate the lighthouse to preserve it in its current condition. Since the lighthouse is private, it cannot be accessed by land and can only be viewed by water. Several commercial boat tours pass close by and allow for great photo opportunities.

North Lighthouse



Situated atop a 175 foot cliff on Grand Island's north end, this lighthouse has been identified as the highest light-

house above sea level in the United States. Originally built of wood in 1856, this remote lighthouse was a key navigational marker. In 1867, the lighthouse was replaced with the current brick keepers house and a 40 foot tower. The lighthouse is privately owned and not accessible by land, but can be viewed from the water by private watercraft.



Grand Island Harbor Range Lights



Tucked away among the tag alders and swamp conifers along M-28, the Grand Island Harbor Rear Range Light (a.k.a. Christmas Range Light) is easy to drive by without noticing. Range lights are different from traditional lighthouses, because they were not used to warn away ships but to provide them with a line of travel through dangerous waters. As shown above, the Grand Island Harbor Range Lights can be clearly seen from the water and have been a very valuable navigation tool. The 62-foot rear and the smaller 23-foot front range lights were designed to work as a pair. By keeping the rear range light aligned with the front range light, mariners were able to stay on the proper heading through the

narrow channel west of Grand Island leading to Munising Harbor. The Rear Range light was abandoned in 1969 and was transferred to the Forest Service in 1977.

Summer Tours Call the Munising Visitor Center for a schedule.



Hiawatha National Forest



Whitefish Bay Scenic Byway

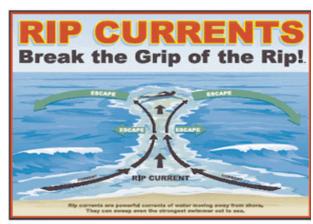
A Journey to the Past Along Lake **Superior's Shoreline**



Whitefish Bay Scenic Byway provides an outstanding opportunity to escape to the shores of Lake Superior for a relaxing drive, to explore scenic sand beaches, and to journey back in time at Point Iroquois Light Station.

The Byway begins just north of Brimley on Curly Lewis Memorial Highway, also known as Lake Shore Drive. Beginning on the Byway's east end, Point Iroquois Light Station is a highlight of the Whitefish Bay Scenic Byway experience. The historic light station is open during the busy summer season. Visitors can tour the grounds, and during the visitor center's open hours, can also see exhibits inside the historic structure.

Heading west along the byway, beautiful landscapes abound. The two lane road passes through hardwood forest and provides access to picnic areas, quiet beaches, and hiking on the North Country National Scenic Trail. Plan to watch huge freighters passing or the sunset from benches overlooking the waterfront. For more information about the Whitefish Bay Scenic Byway, call the Forest Service at 906-643-7900 or stop by the Light Station for information.



IF CAUGHT IN A RIP CURRENT

- Don't fight the current
- . Swim out of the current, then to shore
- If you can't escape, float or tread water If you need help, call or wave for assistance
 - SAFETY
- Know how to swim
- Never swim alone
- If in doubt, don't go out



Rip Currents

Before you (or your children) swim in the Great Lakes, you should learn about "rip currents." Rip currents are dangerous currents or undertows may develop without warning from any increase in wind speed. Personal flotation devices are recommended in areas where such currents may develop.

Lake Michigan Beach and Dunes



Hiawatha National Forest touches the shores of three Great Lakes, including Lake Michigan. On the Forest's east unit, visitors will find National Forest lands beside the beaches and dunes of Lake Michigan, approximately 5 miles west of the St. Ignace Ranger Station on U.S. Hwy-2.

The accumulation of windblown sand marks the beginning of one of nature's most interesting and beautiful phenomena: sand dunes. Stand before the enormous, gleaming white sand dunes and consider that all of this was once an ancient lake bed or coastal plain. Gradually, the piles of sand are colonized by unique communities of plants and animals, known by scientists as "Beachgrass Dune Communities". This specialized landscape hosts a variety of Federal and State of Michigan endangered and threatened species including piping plover, prairie warbler, common tern, Caspian tern, Pitcher's thistle, Houghton's goldenrod, and more. Hiawatha National Forest biologists work to protect these astonishing resources.

If you have a moment on a hot sunny summer days, stop along these expansive sand beaches and enjoy sun bathing and relaxation along Lake Michigan's blue waters. While you're there, help preserve the beauty and habitats of the dunes. To avoid trampling sensitive plants and minimize the spread of non-native invasive plants, use only the designated trails to access the beach.

GRAND ISLAND IN LAKE SUPERIOR

Grand Island National Recreation Area, managed by the Hiawatha National Forest, is located about one-half mile from the mainland community of Munising, Michigan. With approximately 27 miles of shoreline, boaters can experience the island from a unique perspective. Discover private coves, beautiful beaches, and spectacular rock formations from the water.

Most of Grand Islands's shoreline consists of 200-300 foot cliffs, so it is important to know your destination and plan your trip accordingly. Paddling around Grand Island's northern half may be hazardous as it sits 8 miles out into Lake Superior. Two-hundred-foot sandstone cliffs line the island's north shoreline and descend directly into the water with no place to beach a kayak. Most storms come from the northwest so you are fully exposed to the winds of Lake Superior. Allow ample time to travel.

Underestimating distance is easy to do. Notify a friend or relative of your intended route and your times of expected arrival.

If you don't have your own boat or kayak, you can access Grand Island National Recreation Area via the passenger ferry and spend a day or even just a few hours biking and exploring. The island's breathtaking overlooks, pristine sandy beaches, fascinating cultural sites, deep hard woods, and inland lakes make it an exciting and secluded mountain biking destination. The island provides a combination of rugged dirt/sand trails and easier gravel roads that will accommodate any level of biker. If you don't have a bike with you, no problem! The Grand Island Ferry Service rents mountain bikes right at William's Landing.

Spend the day beachcombing. picnicking or swimming on one of Grand Island's fabulous beaches. Accessible by private boat, biking or hiking, these beautiful sand and rock beaches will captivate you.

Take advantage of a motorized bus tour on Grand Island that takes you on a tour of the some of the island's scenic vistas and historic sites. Each stop on the 2.5 hour tour is designed to give you a glimpse into Grand Island's past and familiarize you with the recreation opportunities that are avail-

If you are interested in planning a day or overnight trip to Grand Island, we recommend that you contact the Visitor Center at 906-387-3700 for more information. We offer updated day use and camping brochures that can assist in planning a trip to suit you. Topographic maps are also available for a fee. For bus tour and ferry schedule and pricing information, please call 906-387-3503 from Memorial Day Friday until early October.

