Official Newspaper of Indiana Dunes National Lakeshore

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Mission of the National Park Service

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

Mission of Indiana Dunes National Lakeshore

The mission of Indiana Dunes National Lakeshore is to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana Dunes and other areas of scenic, scientific, and historic interest and recreational value in the state of Indiana.

Contact Information

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1100 N. Mineral Springs Rd.
Porter, IN 46304

PHONE
219-926-7561 visitor information

E-MAIL
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WEBSITE
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1-800-PARKTIP (727-5847)
emergencies, criminal activities, or suspicious activity

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The Paul H. Douglas Center Reopens

Join the employees of Indiana Dunes National Lakeshore on June 27 from 1 p.m. - 4 p.m. for the grand re-opening of the Paul H. Douglas Center for Environmental Education in Miller. While the Douglas Center was not really closed, it has received a new look and new staff to warrant this special day.

Over the spring, contractors have been developing new exhibits, flooring, and furnishings for the entire lobby area. Murals, educational panels, and sound tubes are just a few of the new components in the lobby area to entice and educate visitors.

Along with the new look, the Douglas Center will be home to three of the national lakeshore educators. These rangers will be on hand for the grand re-opening. The goal of moving staff and investing in this center is to make this area a portal to the national lakeshore.

During July and August, rangers will offer family programs on weekends at the Douglas Center. On Saturdays, between 10 a.m. and 2 p.m., bring your picnic and join a park ranger for lunch and a hike through Miller Woods. On Sundays, between 1 p.m. and 4 p.m., visit during an Open House to learn more about your neighborhood national park.

You can also stop by the Douglas Center Monday through Friday and knock on the door to see if we are home. We are looking for volunteers to assist with staffing the front desk, answering phones, and helping to care for the live reptiles and amphibians.

The Douglas Center has always been a hub for teachers and school groups, and that will not change with the new staffing situation. A week long institute entitled, "Field Techniques for Science Exploration" will be offered June 15-19 in partnership with the Dunes Learning Center. Each day's institute will have a different focus: Great Lakes issues, language arts, visual arts, restoration of prairies and savannahs, and restoration of wetlands. Join us for one day or all five. To register for the field course, contact the Dunes Learning Center at 219-395-9555.

The Douglas Center staff members are excited about moving back into the community and look forward to your visits. Feel free to contact them at 219-938-8221 for more information on programs and possible collaborations.

Have a Safe Visit

by Costa Dillon, Superintendent

National parks are among the safest places you can visit. The vast majority of the 300 million visitors to national parks every year go home with wonderful memories of their visits. We want you and every visitor to Indiana Dunes National Lakeshore to also return home safe.

Most injuries in national parks are from automobile accidents, with falls and drowning as the next most common cause of injuries. Indiana Dunes National Lakeshore is no exception to these statistics. Roads in and around the lakeshore are public roads and often filled with commuter traffic, delivery trucks, and industrial vehicles. Multiple railroad crossings also dot the park. Be alert when driving and never, ever, go around a railroad guard.

On the beach, your safety is up to you, and you should make your choices for swimming based upon your own abilities, the weather, and the condition of the water. Indiana Dunes National Lakeshore has 15 miles of shoreline, and lifeguards are only available in daylight hours in the summer at a small portion of West Beach and at Indiana Dunes State Park. The National Park Service does not close or open beaches for weather or water quality reasons; they are always available for public use during park hours. The majority of the shore is not regularly patrolled or under the observation of rangers or lifeguards.

Sandbars, rip currents, and other water conditions can challenge any swimmer and can be particularly hazardous for children. Water quality often suffers after heavy rains when sewage is washed into the lake from shoreline communities. You should watch local news, check websites, and talk to park personnel before entering the water if you are at all unsure of conditions. Because water quality testing for E.coli and other contaminants takes more than 24-hours, it is impossible to report up-to-the minute water quality conditions.

Since 1995 more than 7.5 million visitors safely used the shoreline at Indiana Dunes National Lakeshore. Unfortunately, 12 persons drowned in that time. This may not seem like much over 14 years, but any drowning is too many. Seek information, heed advice, take care, and follow safety instructions, and you too will have a safe day in the park.

Ask the Superintendent

Indiana Dunes National Lakeshore stretches across 3 counties and is located within 15 cities and towns. Almost 2 million visits are made to the park each year. If you would like to know more about this national park, how it operates, or what is in store for the future, you are invited to attend one of the "Ask the Superintendent" sessions that will be held each month this summer. The first session will be at the Portage Lakefront and Riverwalk pavilion at 2:00-3:00 PM, Saturday, June 13, 2009. For future dates and sites, please see the park website www.nps.gov/indu.

Park Information

Protect Your Park

Walk only on designated trails to prevent damage to park resources and minimize erosion.

Dispose of your litter and recycle items in marked containers.

Leave all natural and cultural items as you find them to preserve the present and past. Collecting items such as shells, fossils, rocks, and wildflowers is prohibited.

Respect all wildlife from a safe distance. Never feed wild animals. Feeding wild animals is dangerous, harms their health, and alters their natural behaviors.

Avoid introducing or transporting non-native species. For example, don't bring firewood to the park. Exotic insect pests that live in firewood can kill native trees. Burn all firewood; take no firewood home.

Park Hours

Unless otherwise posted, the public areas of the park are open from sunrise to sunset. Most parking areas are open from 7:00 a.m. until dusk. Lake View parking area remains open until 11:00 p.m.

Visitor Center

Located on SR 49, between U.S. Hwy. 20 and Interstate 94 near Chesterton, Indiana, it is open daily 8:00 a.m. - 6:00 p.m. An introductory park movie is available upon request.

Top Visitor Questions

1 Where is the beach?

The 15-mile beach can be accessed from many different locations. There are access points located near the intersection of Porter County Line Road and Michigan Street (Mt. Baldy), north end of Central Avenue, Lake Front Drive at Lake View, intersection of West Lake Front Avenue and Dunbar Avenue, north end of East State Park Road, north end of Waverly Road, Portage Lakefront and Riverwalk (from Hwy. 12 take Hwy. 249 south and follow park signs), and West Beach (north on North County Line Road). West Beach has 600 parking spaces; other parking lots have limited parking. Please reference map located on page 8.

2 Where may I climb a dune?

Mount Baldy is the only dune where climbing is allowed in the national lakeshore. You may scale the dune from the lakeside (windward side) to the summit. Climbing is prohibited on the side adjacent to the parking lot because it accelerates the movement of the dune. Please follow the trail from the parking lot, which leads around the side of the dune to a juncture that offers a choice between the summit or beach trails.

West Beach offers a spectacular overlook on the one-mile West Beach Succession Trail. Please stay on designated trails to protect sensitive dune species.

3 Do you close the beach when high waves are present or e-coli levels are high?

No. The national lakeshore does not close its beach regardless of water conditions. Risks are inherent in all natural areas. During summer months lifeguards are stationed at West Beach. Lifeguards are not present at other locations of the beach.

Call 219-926-7561 followed by prompt #2 for information regarding e-coli levels.

4 How do I find out about beach regulations?

Just look for this sign on the beach.

5 Do you have a campground?

Yes. The Dunewood Campground is open April 1 through October 31 and is located at the intersection of U.S. 12 and Broadway. Its 79 campsites are available on a first-come, first-served basis. The restrooms are centrally located and have showers. Electrical hookups are not available; however, the campground has a dump station. Please self-register by depositing the exact camping fee of $15.00 per night. Use firewood from local suppliers to help prevent the spread of invasive insects. **Alcohol is strictly prohibited.**

6 May I take my pet with me for a stroll or hike?

Yes. The national lakeshore has over 40 miles of hiking trails. Pets restrained by a leash are permitted on beaches east of the Kemil access point and on most park trails. However, pets are not permitted on the beach west of the state park. The Ly-co-ki-we trail (intersection of Hwy. 20 and School House Road) is open for horseback riding March 16 through December 14.

Please hike with others and stay on designated trails for your protection and that of park resources. Trail maps are available at the Indiana Dunes Visitor Center, which is located at the intersection of U.S. Hwy. 20 and Indiana Hwy. 49 in Porter, IN.

7 May I launch my boat and fish?

The park does not have a boat launch. Personal motorized watercraft (Jet Skis and WaveRunners) are prohibited. However, you may launch your kayak (or other non-motorized watercraft) at locations other than at West Beach. An Indiana state fishing license is required to fish.

8 How do I reserve an environmental education program?

Teachers and youth group leaders should call Christy Gerlach at 219-938-8221 to arrange for a free ranger-led program. These programs are conducted at the park's Paul H. Douglas Center for Environmental Education located in Garry/Miller, Indiana, and focus on the park's resource issues.

9 Do you have a Junior Ranger Program?

Yes! Stop by the park's visitor center and ask a ranger to help you select the junior ranger program that best fits your visit. A Beachcombers program is popular with families spending just a few hours on the beach. A more comprehensive program is a favorite among those camping in the park. Other junior ranger programs are offered during special events. All programs are free. Children completing the junior ranger program earn a Junior Ranger patch. Program materials are available at the visitor center and are downloadable at www.nps.gov/indu/forkids. If you encounter a roving ranger on the beach, ask him or her about the program. Rangers often carry junior ranger booklets and patches with them for your convenience.

10 What is Portage Lakefront and Riverwalk, and how do I get there?

This site is part of Indiana Dunes National Lakeshore and has a riverwalk, a fishing pier, parking lots, and an environmentally-friendly pavilion. The City of Portage operates and maintains this site through a partnership with the National Park Service. Portage Lakefront and Riverwalk can be accessed by following Hwy. 249 north from Hwy. 20. Follow the park signs.

11 How can I volunteer at the national lakeshore?

Start by contacting Lynda Lancaster, the Volunteers-In-Park program manager at lynda_lancaster@nps.gov or 219-395-1682. We are looking for volunteers on Mondays in July or August to help maintain trails, clean foredunes, and do some landscaping around buildings. We also have volunteer openings at the visitor center in Porter and at the Paul H. Douglas Center for Environmental Education in Gary/Miller.

Ranger-Guided Programs

DATE & TIME	PROGRAM	DESCRIPTION	LOCATION
Daily			
(Ongoing) **8:00 a.m.— 6:00 p.m.**	*Child of the Northwest Wind*	Watch this 11-minute park orientation video to learn about the places to see and activities to do at the national lakeshore.	Indiana Dunes National Lakeshore Visitor Center
Starting June 1 **10:00 a.m. — 3:00 p.m.**	*Junior Rangers by the Lake*	Explore the lakefront while enjoying the beach. Children can complete resource related activities and earn a Junior Ranger patch. Just look for a roving ranger on the beach for an activity guide.	West Beach and Mt. Baldy
Fridays			
June 19, July 17, and August 21 **7:30 p.m. — 9:00 p.m.**	*Music Heritage Series*	Local musicians help sustain the culture of the Duneland region by sharing historic tunes.	Indiana Dunes National Lakeshore Visitor Center
Saturdays			
June — Aug. **1:00 p.m. — 4:00 p.m.**	*Fun at the Visitor Center*	Join a ranger in the Visitor Center's activity room for an afternoon of kid's nature activities and stories.	Indiana Dunes National Lakeshore Visitor Center
June 13, July 11, Aug. 8 only **9:00 a.m.— 12:00 p.m.**	*Summer Stewardship Days*	Join a ranger and lend a hand to help improve "Your Neighborhood National Park" during this unique opportunity at Indiana Dunes National Lakeshore.	Meet at the Indiana Dunes National Lakeshore Visitor Center and carpool to the site.
June 18 **7:00 p.m. — 8:30 p.m.**	*Evening Hike in the Savannah*	Join a ranger for an easy hike through the oak savannah in Miller Woods. Use your senses as the nocturnal animals do.	Paul H. Douglas Center for Environmental Education
June 27, July 25, Aug. 29 **12:00 p.m. — 3:00 p.m.** **Must arrive by 2:00 p.m.**	*Pinhook Bog Open House*	Take a self-guided hike into Indiana's only "true" quaking bog. Rangers along the trail will point out other features and carnivorous plants.	Pinhook Bog Parking Lot
June | 8:30 p.m. — 9:30 p.m. **July | 8:00 p.m. — 9:00 p.m.** **(no program on July 4th)** **August | 7:30 p.m. — 8:30 p.m.**	*Discover your Neighborhood National Park*	Join a ranger around the campfire and learn about the diversity of resources and activities that can be found at the national lakeshore.	Dunewood Campground Amphitheater
July 4 — Sept. 5 **10:00 a.m. — 3:00 p.m.**	*Picnic at Miller Woods*	Bring your own picnic and join a ranger for lunch and a hike through Miller Woods.	Paul H. Douglas Center for Environmental Education
July 11, July 25, Aug. 15 only **10:00 a.m. — 11:00 a.m.**	*Junior Wildland Firefighter Program*	Meet the park's fire crew and learn about their jobs and equipment. After this hands-on program, children will receive their very own Junior Wildland firefighter activity book and a Junior Wildland firefighter patch.	Dunewood Campground Amphitheater
Aug. 15 only **1:00 p.m. — 3:00 p.m.**	*Fire in the Oaks*	Come on a two hour hike to learn about the history of savannahs, the role of fire, and how they differ from other habitats.	Paul H. Douglas Center for Environmental Education
Sundays			
June — Aug. **1:00 p.m. — 4:00 p.m.**	*Fun at the Visitor Center*	Join a ranger in the Visitor Center's activity room for an afternoon of kid's nature activities and stories.	Indiana Dunes National Lakeshore Visitor Center
June 28, July 26, Aug. 30 Only **12:00 p.m. — 3:00 p.m.**	*An Afternoon at Chellberg Farm (Open House)*	During this open house, rangers will share the history of the site as you tour the historic buildings.	Chellberg Farm
June 28 — Sept. 6 **1:00p.m. — 4:00 p.m.**	*Open House at the Douglas Center*	During this open house, rangers will offer a variety of activities for the whole family.	Paul H. Douglas Center for Environmental Education
Special Events			
Saturday **June 6 only** **9:00 a.m. — 12:00 p.m.**	*Help Restore Mnoke Prairie*	Join in and help by either planting prairie plants or cutting and removing woody species. Gloves, tools, and eye protection (if cutting) will be provided. Wear long pants, close toe shoes, and be prepared to walk through thorny brush. Bring sunscreen, water, and a hat - it may be sunny! Limited to 30 people; you must call (219) 395-8914 to reserve a spot.	Meet at the south end of Howe Road (Little Calumet River Trailhead)
Saturday **June 27** **1:00 p.m. — 4:00 p.m.**	*Grand re-opening of Paul H. Douglas Center for Environmental Education*	Join the national lakeshore staff for a festive open house with presentations, hikes, and family-friendly activities throughout the afternoon.	Paul H. Douglas Center for Environmental Education
Sunday **June 28** **12:00 p.m. — 4:00 p.m.**	*Midsummer Celebration*	Celebrate the summer solstice with Scandinavian music and dance and learn how you can help preserve the cultural landscape at Chellberg Farm.	Chellberg Farm
Tuesday **August 11** **8:30 p.m. — 11:00 p.m.**	*Night Sky Conservation*	Watch the annual Perseids Meteor Shower while a ranger explains how everyone can help in the conservation of the night sky.	West Beach Parking Lot

Invasive Plant Species Threaten Indiana Dunes National Lakeshore

The control of invasive species at Indiana Dunes National Lakeshore is rooted in federal law. Congress designated Indiana Dunes National Lakeshore as a unit of the National Park System on November 5, 1966 (Public Law 89-761).

> *...to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana Dunes and other areas of scenic, scientific, and historic interest and recreational value in the State of Indiana.... In order that the lakeshore shall be permanently preserved in its present state, no development or plan for the convenience of visitors shall be undertaken therein which would be incompatible with the preservation of the unique flora and fauna or the physiographic conditions now prevailing...*

Indiana Dunes National Lakeshore, although relatively small and flat, ranks seventh for diversity amongst the National Park System's 394 units. In order to maintain the park's incredible diversity of healthy native plant species, invasive species must be controlled.

What is an invasive plant?

Here, the term invasive plant refers to a plant that is not native to Indiana Dunes National Lakeshore, and has negative effects on the economy, environment, and/or human health. However, not all plants introduced from other places are harmful. The term invasive is reserved for the most aggressive plant species that grow and reproduce rapidly, causing major changes to the areas where they become established.

When invasive plants win, native plants and wildlife lose, and so does the people who enjoy them.

What is the problem?

Invasive plants are a major threat on a national scale. Across the United States invasive plants are estimated to occur on 7 million acres of national park lands. At least 1.5 million acres are severely infested.

Within its mere 10,900 acres, Indiana Dunes National Lakeshore has 1,494 species of vascular plants. Of these, 20% (304) of the park's vascular plants are not native to the lakeshore. Thirty-two (32) are well established and pose real threats.

Noel Pavlovic, an ecologist with the U.S. Geological Survey, has been investigating the distribution and abundance of non-native plant species, using 900 plots within the national lakeshore's boundaries. They determined that the probability of finding invasive species in park is greatest in old field habitats, followed by edge habitats, then pine plantations, and finally forests. In essence, the more people have affected a habitat, the more likely it is that invasive species will move in.

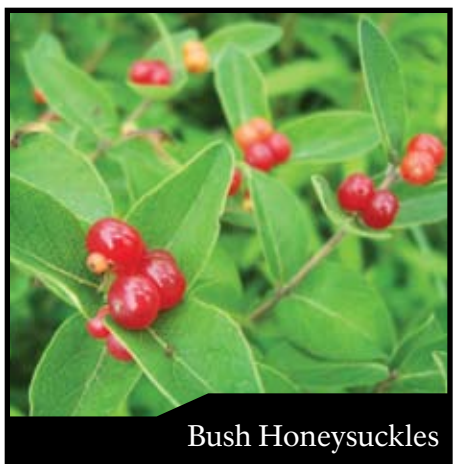
Nationally, this problem of invasive species is an expensive one. The economic cost of invasive plants is estimated at more than $34 billion per year. Management costs escalate when invasive populations are allowed to spread.

Why Should You Care?

Invasive plants can affect your ability to enjoy Indiana Dunes National Lakeshore and other public places. Hikers, cyclists, and horseback riders all enjoy well-maintained trails. Invasive plants can grow over trails to the point that the path cannot be followed or can be difficult to navigate. Dried and dying knapweed plants can catch in bicycle chains. Invasive plants can also degrade the natural scenic beauty of the park by displacing attractive native flowers with single-species stands. Spiny or dense invasive shrubs can overtake camping spots, making it difficult to find a good spot for a tent. Some invasive plants can effect on your health. The sap from leafy spurge causes eye irritation, and the plant is toxic to horses. Spines on invasive thistles can become lodged in skin and cause irritation. Invasive plants with spiny seed balls, hitchhike on fur, which increases the need to groom the horse or family dog after a hike.

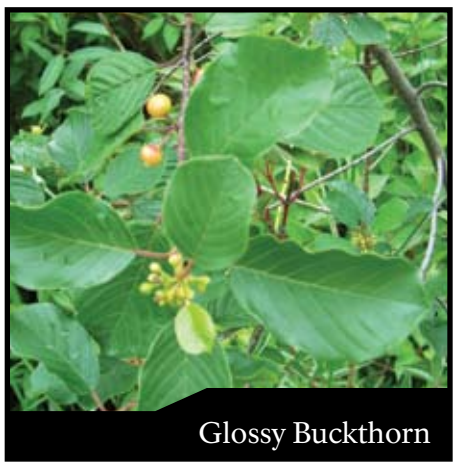
Purple Loosestrife

The purple loosestrife can affect wildlife viewing. This plant is capable of replacing diverse native plant communities with just a single species, which in turns reduces the qualities of wildlife habitat.



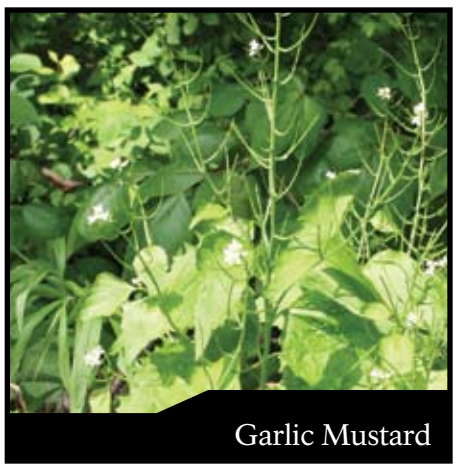
Bush Honeysuckles

Bush honeysuckles, such as the amur honeysuckle, prevent regeneration of forest trees and herbs, and are a poor habitat for nesting birds. They are difficult to control once they have reached high densities, so it is important to control new infestations as quickly as possible.



Glossy Buckthorn

The glossy buckthorn is an invader of forested areas. Their fruits are consumed by a variety of birds and mammals, which aid in their dispersal. These shrubs form dense thickets that prevent woody seedling regeneration.



Garlic Mustard

The seeds of garlic mustard (numbering up to 3,000 per plant) can survive for up to 10 years in the soil, creating a lasting problem at invaded sites. This plant is the most common invasive plant in the dune, and it alters the chemistry of the soils where it grows by adding chemicals that prevent the growth of other plant species.

Asian Bittersweet

The vine of the Asian bittersweet which closely resembles our native bittersweet, can damage or kill trees and shrubs. The vine constricts sap flow, weakening limbs and trunks and making them more susceptible to wind and ice damage.

Crown Vetch

Crown vetch is an emerging threat to the national lakeshore. Infestations of this plant reduce the abundance of native plants and the wildlife species that depend on them. This plant alters soil chemistry by adding nitrogen to the soil, which might affect invaded areas even after the species is removed.

Japanese Knotweed

Japanese knotweed is remarkably resilient, tolerating floods, drought, shade, high temperatures, and high salinity. Floods can further the spread of this species by carrying plant fragments downstream, which can root and sprout, forming new infestations.

Spotted Knapweed

Spotted knapweed is especially troublesome because of its ability to release toxic chemicals from its roots. These chemicals reduce growth and germination of neighboring plants.

Common Reed

Common reed reduces the quality of the habitat for aquatic insects that fish and migratory waterfowl rely on for food. Although common reed is actually native to the Midwest, the aggressive, invasive varieties are non-native in origin.

Canada Thistle

Canada thistle is an aggressive invader in prairies, savannas, and dunes. This species competes with other plants for water and nutrients, causing reductions in plant diversity.

Anglers and boaters should also care about invaders. Invasive plants can harm fish, and thick stands of submerged and floating aquatic invasive plants can impede navigation. Finally, everyone should care when invasive plants lead to flooding and soil erosion, causing poorer water quality and silted spawning beds.

What is the Park Doing?

The park's resource managers and volunteers are treating 32 non-native species that are well established and are posing threats in areas where high quality native species exist. They have found an additional 22 invasive species in small numbers and are treating these species using an early detection/rapid response process. They are also monitoring 29 other invasive species.

Since 2004, 1,000 acres have been canvassed and treated. Volunteers have contributed more than 7,000 hours towards the control of invasive species just in the past two years. In 2008, for the first time, resource managers treated these invasive species—cypress spurge, baby's breath, houndstongue, mugwort, and Japanese hop. Park staff and surrounding landowners are forming a Cooperative Weed Management Area to control invasive plants on properties adjacent to the park.

How Can You Help?

- Avoid using invasive species in your garden.
- Learn to recognize invasive plant infestations and avoid passing through them.
- Drive on established roads and ride or hike on designated trails.
- Check for seeds or plant parts and clean vehicles, boats, equipment, boots, animals, and gear between trips. Dispose of seeds in a plastic bag in a trash can.
- Always use weed-free hay and feed for your animals.
- Dispose of unwanted bait in the trash, and never release plants and animals into a body of water unless they came from that body of water.
- Participate in one of the park stewardship days

Call Laura Thompson at 219-395-1531 to volunteer to help inventory or control invasive plants at Indiana Dunes National Lakeshore. Early detection and eradication of small infestations and prevention of new infestations are the most cost-effective ways to manage invasive plants!

The primary source of information contained in this article came from the Midwest Invasive Plant Network publication, *Why Should I Care About Invasive Plants*.

Indiana Dunes National Lakeshore Non-native Plants of Concern

Established within INDU (Current Threats to Natural Resources)		Present within INDU (Emerging Threats to Natural Resources or Extent Unknown)		Not Currently Recorded within INDU (Potential Threats to Natural Resources)	
Acer platanoides	*Norway maple*	*Alnus glutinosa*	*European alder*	*Butomus umbellatus*	*Flowering rush*
Ailanthus altissima	*Tree of heaven*	*Carduus nutans*	*Musk thistle*	*Callitriche stagnalis*	*Pond water-starwort*
Alliaria petiolata	*Garlic mustard*	*Coronilla varia*	*Crown vetch*	*Crassula helmsii*	*Swamp stone crop*
Artemisia vulgaris	*Mugwort*	*Cynoglossum officinale*	*Houndstongue*	*Cynanchum louiseae*	*Black swallow-wort*
Berberis thunbergii	*Japanese barberry*	*Dipsacus sylvestris*	*Common teasel*	*Cynanchum rossicum*	*Pale swallow-wort*
Celastrus orbiculatus	*Oriental bittersweet*	*Euphorbia cyparissias*	*Cypress spurge*	*Dioscorea oppositifolia*	*Chinese yam*
Centaurea maculosa	*Spotted knapweed*	*Euphorbia esula*	*Leafy spurge*	*Dipsacus laciniatus*	*Cut-leaved teasel*
Cirsium arvense	*Canada thistle*	*Gypsophila paniculata*	*Common baby's breath*	*Egeria densa*	*Brazilian waterweed*
Cirsium vulgar	*Bull thistle*	*Humulus japonicus*	*Japanese hops*	*Eichhornia crassipes*	*Water hyacinth*
Eleagnus angustifolia	*Russian olive*	*Iris pseudacorus*	*Yellow iris*	*Glyceria maxima*	*Reed manna grass*
Eleagnus umbellata	*Autumn olive*	*Leonurus cardiaca*	*Motherwort*	*Heracleum mantegazzianum*	*Giant hogweed*
Euonymus alatus	*Burning bush*	*Ligustrum vulgare*	*Common privet*	*Hydrilla verticillata*	*Hydrilla*
Helianthus petiolaris	*Petioled sunflower*	*Morus alba*	*White mulberry*	*Hydrocharis morsus-ranae*	*European frogbit*
Hesperis matronalis	*Dame's rocket*	*Myriophyllum spicatum*	*Eurasian watermilfoil*	*Hygrophila polysperma*	*Indian swampweed*
Holcus lanatus	*Velvet grass*	*Pinus sylvestris*	*Scotch pine*	*Lespedeza cuneata*	*Silky bush clover*
Leymus arenarius	*Lyme grass*	*Populus alba*	*White poplar*	*Marsilea quadrifolia*	*European waterclover*
Lonicera tatarica	*Tartarian honeysuckle*	*Populus nigra*	*Lombardi poplar*	*Microstegium vimineum*	*Japanese stilt grass*
L. tatarica hybrids	*Hybrid honeysuckles*	*Robinia hispida*	*Bristly locust*	*Miscanthus sinensus*	*Chinese silver grass*
Lonicera japonica	*Japanese honeysuckle*	*Saponaria officinalis*	*Bouncing bet*	*Myriophyllum aquaticum*	*Parrot feather*
Lonicera maackii	*Amur honeysuckle*	*Ulmus pumila*	*Siberian elm*	*Najas minor*	*Brittle waternymph*
Lysimachia nummularia	*Moneywort*	*Vinca minor*	*Periwinkle*	*Nymphoides peltata*	*Yellow floating heart*
Lythrum salicaria	*Purple loosestrife*	*Viburnum opulus*	*European cranberry bush*	*Pistia stratiotes*	*Water lettuce*
Melilotus officinalis	*Yellow sweet clover*			*Polygonum perfoliatum*	*Mile-a-minute weed*
Phalaris arundinacea	*Reed canary grass*			*Pueraria montana*	*Kudzu*
Phragmites australis	*Common reed*			*Pyrus calleryana*	*Bradford pear*
Polygonum cuspidatum	*Japanese knotweed*			*Torilis japonica*	*Japanese hedge parsley*
Rhamnus cathartica	*Common buckthorn*			*Trapa natans*	*Water chestnut*
Rhamnus frangula	*Glossy buckthorn*			*Quercus acutissima*	*Sawtooth oak*
Robinia pseudoacacia	*Black locust*			*Solidago sempervirens*	*Seaside goldenrod*
Rosa multiflora	*Multiflora rose*				
Typha angustifolia	*Narrow-leaved cattail*				
Typha x glauca	*Hybrid cattail*				

Brown = Upland
Green = Wet or Wetland
Blue = Aquatic

Park Safety Tips

Things to Keep You Safe in Lake Michigan

Entering Lake Michigan is a lot different than splashing in your local pool: it's serious business! Wind driven waves can quickly create dangerous conditions that pose a severe threat to even the most expert of swimmers. People drown in the lake every year. Don't let your visit end in tragedy.

If there are whitecaps on the lake, the water conditions are too dangerous for swimming or wading anywhere along the 15-mile shoreline. Steep, uneven waves can knock you off your feet and tire you out before rescuers can help. Rip currents can sweep you away, even from shallow water.

Lake Michigan is a natural environment. Sandbars, steep drop-offs, uneven bottom and debris all combine to make footing uneven and sometimes dangerous. Sandbars entice poor or non-swimmers to venture far from shore. Waves sometimes knock the unwary off the sandbar into much deeper water, occasionally leading to tragedy. Children and poor swimmers are particularly vulnerable to the sandbars.

Lake Michigan, like all bodies of water, is susceptible to contamination by natural and human created bacteria. When concentrations are high, these bacteria can pose a threat to your health. When "No Swimming" advisories are posted, heed this warning and enjoy the lake from the beach. Even on clear days, you should rinse off with fresh water after swimming.

Things to Keep You Safe in the Park

Insect repellants work great to keep biting bugs away from you. Staying out of the woods during the very early morning or around dusk will also limit your exposure to pesky mosquitoes. When you go exploring in the woods, you can keep ticks at bay by wearing long sleeve shirts and pants, with cuffs closed and legs tucked into your socks.

Bees, yellow jackets, spiders, snakes, and other critters are happy to leave you alone if you do the same. No amount of repellent will keep creatures from fighting back when you stick your hand into their home. When exploring the park, don't put your hand anywhere you can't see.

Danger

People drown here each year. Be careful!

If there are whitecaps on the lake, the water conditions are too dangerous for swimming or wading.

Sandbars, steep drop-offs, uneven bottom, and debris all combine to make footing uneven and sometimes dangerous.

In case of an emergency or to report a crime, call the national lakeshore emergency line at:
1-800-PARKTIP (727-5847)

Summer Beach Parking

Parking Lots	Capacity	Directions from Indiana Dunes National Lakeshore Visitor Center
West Beach	596 vehicles	Follow Indiana Hwy. 49 north to Hwy. 12 and proceed west to County Line Road. Turn north on County Line Road and follow signs. Lifeguards are on duty. Fees are charged from Memorial Day through Labor Day - $6.00/car and $30.00/bus.
Portage Lakefront and Riverwalk Pavilion	100 vehicles	Follow Indiana Hwy. 49 north to Hwy. 12 west. Travel west to JCT 249 south, which is the first left after the the overpass. Turn left on Hwy. 249 south and stay in the right-hand lane to traffic light. Turn right at traffic light and follow the park signs.
Waverly Road Access Point (Porter)	66 vehicles	Follow Indiana Hwy. 49 north to Hwy. 12 west to Waverly Road, and turn north.
Kemil Avenue	81 vehicles	Follow Indiana Hwy. 49 north to Hwy. 12 east to Kemil Road (East State Park Road), and turn north.
Dunbar Avenue	26 vehicles	Follow Indiana Hwy. 49 north to Hwy. 12 east to Kemil Road (East State Park Road), and turn north. At the dead end, turn east to Dunbar
Lake View	40 vehicles	Follow Indiana Hwy. 49 north to Hwy. 12 east to Kemil Road (East State Park Road), and turn north. At the dead end, turn east to Lakeview along this road.
Central Avenue	70 vehicles	Follow Indiana Hwy. 49 north to Hwy. 20 east to Hwy. 520 north. Follow to Indiana Hwy. 12 east to Central Avenue and turn north.
Mt Baldy	120 vehicles	Follow Indiana Hwy. 49 north to Hwy. 20 east to Hwy. 520 north. Follow to Indiana Hwy. 12 east to the Mt. Baldy access point.

What to do if the parking lots are full

Smaller parking lots fill quickly during the summer months, especially on weekends. The large parking lot at West Beach, with 600 spaces, rarely fills. You will be ticketed if you do not use a designated parking space. Parking along the roads is not authorized. Always lock your vehicle, and leave valuables in your trunk or at home.

Park Partners

Friends of Indiana Dunes

FRIENDS OF
Indiana Dunes

Our mission is to enhance and foster understanding, appreciation and enjoyment of the Indiana Dunes through financial and volunteer support of the state and national parks.

Friends of Indiana Dunes are just that, individuals who care about the Indiana Dunes. The national lakeshore and the State Park are priceless natural resources in the midst of the heartland's largest metropolitan area. The Friends help sponsor various events during the year to benefit these parks.

They also:
- -Purchase books and magazines for the state park's Bergendahl Memorial Library.
- -Sponsor outreach programs for children, so that they might develop greater appreciation of and respect for nature.
- -Host speakers on a variety of topics related to natural and cultural history.
- -Purchase interpretive items for the parks.
- -Fund underpriviledged children to attend the Dunes Learning Center.

Friends of Indiana Dunes
P.O. Box 166
Beverly Shores, IN 46301-0166
219-395-1824
www.friendsofindianadunes.org

Historic Landmarks Foundation of Indiana

HISTORIC LANDMARKS FOUNDATION OF INDIANA

Our mission is to lead and assist individuals, organizations and communities in preserving and revitalizing endangered landmarks through education, advocacy, and financial support to enrich contemporary life and leave a legacy of landmarks.

The Historic Landmarks Foundation of Indiana (HLFI), a not-for-profit preservation organization, placed the national lakeshore's Century of Progress houses on the "Ten Most Endangered Sites in Indiana" list in 1993. The national lakeshore and HLFI entered into an agreement in 1996 to protect and maintain the houses through a residential leasing program. The leasing program, that has grown to include two Lustron houses and two sites within the proposed Swedish Heritage District, is the primary catalyst for the long-term preservation of these resources.

HLFI has always respected and upheld the mission of the national lakeshore and National Park Service. Their staff works closely with the national lakeshore's cultural resource staff on planning, coordinating, and overseeing the rehabilitation of the park's cultural resources that are in the residential leasing program. For more information contact:

Historic Landmarks Foundation of Indiana
340 West Michigan Street
Indianapolis, IN 46202
1-800-450-4534
www.historiclandmarks.org

Other Partners

Chesterton Art Center
Field Station Cooperative
Friends of Indiana Dunes
Indiana Department of Natural Resources-
Nature Preserves and Coastal Program
Dunes Learning Center
Porter County Convention, Recreation, and Visitor Commission
Purdue University Field Station
Save the Dunes Conservation Fund
Shirley Heinze Land Trust
U.S.G.S. Lake Michigan Ecological Research Station
Indiana Nature Conservancy

Indiana Dunes State Park

DNR
Indiana Department of Natural Resources
Division of State Parks and Reservoirs

Our mission is to manage and interpret Indiana Dunes State Park's wildlife and natural and cultural resources, provide for compatible recreational opportunities, and sustain the integrity of these resources for future generations.

Established in 1925, Indiana Dunes State Park is one of 24 Indiana state parks administered by the Department of Natural Resources and Indiana Division of State Parks and Reservoirs. The state park contains some of the most diverse flora and fauna of the Midwest. It is also renowned throughout the Midwest for its birding.

The state park offers:
- a new park entrance,
- a year-round campground,
- swimming beach with lifeguards,
- nature center,
- more than 16 miles of hiking/skiing trails, and
- picnic shelters and areas.

During the summer, a beach pavilion provides:
- a shelter,
- snack bar,
- gift shop, and
- restrooms with outside showers.

The nature center has a library, bird observation room, children's activity corner, information desk, and exhibits about natural and cultural history. Private, public, and school programs are held year-round. Camping reservations can be made by calling 1-866-622-6746. There is a park entrance fee. For more information, contact:

Indiana Dunes State Park
1600 North 25 East Chesterton IN 46304
219-926-1952 www.IN.gov/dnr

INDIANA DUNES STATE PARK
Park Hours: 7 a.m. - 11 p.m.
Office Hours: 8:30 a.m. - 4 p.m.

Entrance Fees

Daily: $10.00 with out-of-state plates
$4.00 with IN plates, Mon.–Thurs.
$5.00 with IN plates, Fri.–Sun., holidays
$2.00 per day for walk-ins and bicyclists
Annual entrance permits are available.
$36.00 resident, $46.00 non-resident

Support the Park with Your Purchases

Eastern National

Eastern National provides quality educational products and services to the visitors to America's national parks.

Eastern National promotes understanding and support of the National Park Service by providing visitors with the information, materials, and experiences they need to fully understand and appreciate the importance of preserving and protecting America's national parks for future generations.

Eastern National, a non profit organization, donates a portion of its proceeds to Indiana Dunes National Lakeshore to support interpretive and educational activities and publications such as this edition of *The Singing Sands*.

Eastern National Bookstore

A variety of educational items are available for purchase at Eastern National bookstore. The online store is at www.easternnational.org or www.eparks.com.

1 West Beach

There is much to do at West Beach, even when the weather is too cold for swimming. Grill a meal at the picnic shelter, walk a marked trail traversing the dunes and forest, learn how plant and animal communities are replacing one another through time, or watch migrating waterfowl at Long Lake in autumn and spring.

2 Portage Lakefront

October 2008 marked the opening of the national lakeshore's newest location, Portage Lakefront and Riverwalk. The new facility has parking for 125 cars, an accessible fishing pier, a riverwalk along Burns Waterway, a rehabilitated breakwater, various hike/bike trails, access to the beach, and a 3,500 square foot pavilion that will contain a food service area.

3 Cowles Bog Trail

The national lakeshore's most rugged hike takes you on a five-mile journey through wetlands and over both wooded and moving dunes to an isolated beach.

4 Bailly/Chellberg

Explore an 1820s fur trading outpost and a 1900-era Swedish farmstead. Enjoy the Duneland Harvest Festival during the third full weekend of September and Maple Sugar Time in March. Follow the trail that starts here and winds through a wide diversity of landscapes, including the Mnoké Prairie, the Little Calumet River, and a mature beech/maple woodland.

5 Ly-co-ki-we Trail

Depending on the season, hike, ski, or ride the four-mile trail through wooded dunes and wetlands. Bring your own skis or horse.

6 Lake View

As the national lakeshore's only picnic area overlooking Lake Michigan, this site offers covered picnic shelters. Beautiful sunset views make this one of the more popular parking spots.

7 Dunewood Campground

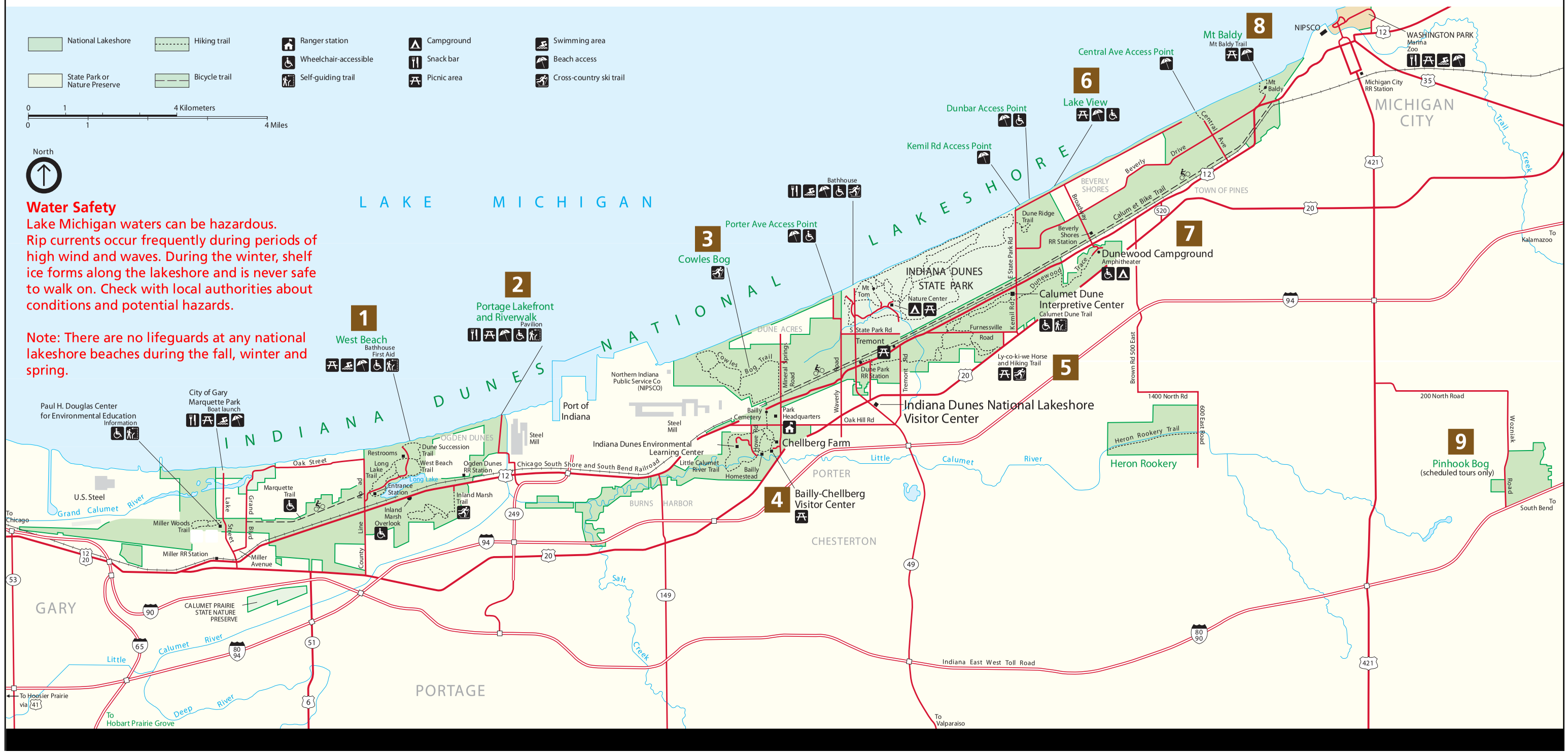
Dunewood is just over one-mile south of Lake Michigan and features 79 wooded campsites. Enjoy camping with the convenience of modern restrooms and showers. Fees are charged, and registration is on a first-come, first-served basis. The campgrounds are open the months of April through October.

8 Mount Baldy

Hike the trail to the top of the national lakeshore's largest moving dune. Mount Baldy, at 126 feet tall, provides stunning views of Lake Michigan and its shoreline.

9 Pinhook Bog

A mat of sphagnum moss keeps everything from trees to insect-eating plants floating above an ancient, and now-hidden, lake. This extremely rare and fragile habitat can only be entered during a ranger-led tour.



Water Safety

Lake Michigan waters can be hazardous. Rip currents occur frequently during periods of high wind and waves. During the winter, shelf ice forms along the lakeshore and is never safe to walk on. Check with local authorities about conditions and potential hazards.

Note: There are no lifeguards at any national lakeshore beaches during the fall, winter and spring.