

2007-2008

A Teachers' Planning Guide to Environmental Education Programs in the Indiana Dunes



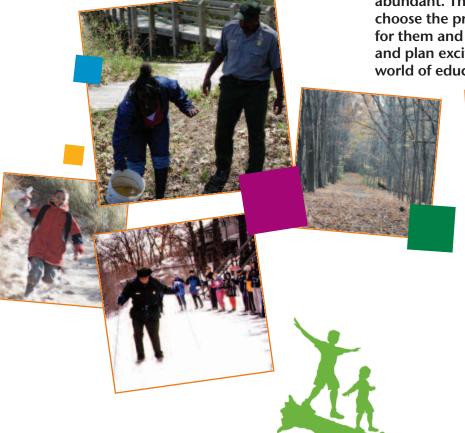
Indiana Dunes Environmental Education

Indiana Dunes has a long, fascinating history of attracting scientists and students alike to study and explore globally rare ecosystems. The process of unlocking the mysteries of the Indiana dunes began in the late 1800s with Dr. Henry Cowles and continues today. In the spirit of further utilizing the Indiana dunes as an educational tool, organizations throughout the area offer a wide variety of environmental education programs. This Teachers' Planning Guide, "Educational Adventures in the Dunes," provides a comprehensive list of the many programs available. It is designed to assist educators and youth group leaders in understanding and using the resources available to them.

Each participating organization has its own section that explains its unique facilities and programs. Each program listed has:

- ♦ A brief description
- **♦** Information about program availability
- **♦** Appropriate age range
- **♦** Minimum and maximum group sizes
- Program cost (if applicable)
- **♦** The location and length of the program

Various teachers' workshops are listed in the first pages to showcase professional development opportunities available from the partner organizations. The uses of the Indiana dunes as a valuable teaching tool are abundant. This guide will enable educators to choose the programs that are most appropriate for them and their particular group of learners and plan exciting excursions into a whole new world of educational opportunities.





Center, and other Chicago
Wilderness members are experts
in connecting children and
adults to nature. With Leave
No Child Inside, our goal is to
promote children's health
through outdoor play and
exploration and foster caring
for nature in today's children

and future generations.

The Indiana Dunes National Lakeshore, Dunes Learning

a chicago wilderness initiative

leave no child inside

Participating Organizations



Indiana Dunes National Lakeshore

1100 North Mineral Springs Road Porter, Indiana 46304 219-926-7561, ext. 243 800.959.9174 toll free Explore all areas of the National Lakeshore with free ranger-led programs.



Indiana Dunes State Park

1600 North 25 East Chesterton, IN 46304 219-926-1390 phone 219-926-9113 fax Low-cost, ranger-led programs for preschool through college level students.



Lake County Solid Waste Management District

7820 Broadway, Merrillville, IN 46410 219-938-8221 phone 219-769-3890 fax Day programs for students of all ages at no cost.



Dunes Learning Center

700 Howe Road Chesterton, Indiana 46304 219.395.9555 phone 219.395.8160 fax Offering residential environmental education for a minimal cost.



Recycling & Waste Reduction District of Porter County

155 Indiana Avenue, Suite 314
Valparaiso, Indiana 46383
219-465-3694 phone 219-465-3696 fax Taking free, interactive, environmental education programs to schools throughout Porter County.



Great Lakes Research & Education Center

1100 North Mineral Springs Road Porter, IN 46304 219-926-7561, ext. 290 phone Integrating research and education through public-private partnerships.

Topics & Select Programs

Note: The following index gives a sampling of programs available in key topics. Many other programs are included in each partner section.

Educator Workshops
Olden Days in Indiana The Chellbergs had a Farm
Dunes Discovery: Nature, Impact, AwarenessDiscover5Mount Baldy/West Beach6A Grain of Truth7Sense-ational Journey9Changing Sands Hike10
Life in the Dunes: Animals, Insects,
Amphibians, Plants Talk with the Animals
Winter Survival in the Dunes
Preserving an Environment Caretakers of the Dunes
Educational Resources Ranger Visits to Schools



Workshops for Educators and Group Leaders



Throughout the year, the Lake County Solid Waste Management District, the Great Lakes Research and Education Center, and the Friends of Indiana Dunes partner to produce and facilitate high-quality workshops for both formal and non-formal educators.

Illinois teachers can receive continuing education units (CEUs). Indiana teachers can receive Continuing Recertification Units (CRUs) or professional growth development points. Graduate credit is also available for an additional fee through Ball State University, Indiana State University, Indiana University, and Purdue University. Each workshop is approximately six hours unless otherwise noted.

Project W.E.T.

This teacher workshop promotes awareness, appreciation, knowledge, and stewardship of water resources. The Project W.E.T. guide contains more than 90 K-12 broad-based, hands-on, easy-to-use (and fun) water resource activities.

Cost: \$15

Date/time: Friday, February 1, 9:30 a.m. - 3:30 p.m.

Location: Paul H. Douglas Center for

Environmental Education

Credit Available: Yes

Project Learning Tree

This award-winning, interdisciplinary environmental education program is designed for educators working with students pre-K through 12. It uses the forest as a "window" into natural environments, helping students gain an awareness and knowledge of the world around them as well as their place in it. Curriculum guides with more than 100 hands-on activities are provided upon completion of the workshop.

Cost: \$15

Date/time: Friday, March 28, 9:30 a.m. - 3:30 p.m.

Location: Paul H. Douglas Center for

Environmental Education

Credit Available: Yes

Project Wild

Project Wild helps educators develop awareness, knowledge, skills, and commitment so students can make informed decisions and act responsibly concerning wildlife and the environment. Guides containing 122 activities for use with K-12 classes and groups are provided, free of charge, by the Indiana Non-game and Endangered Wildlife Funds.

Cost: Free

Date/time: Friday, September 14, 9:30 a.m. - 3:30 p.m.

Location: Paul H. Douglas Center for

Environmental Education

Credit Available: Yes

Flying Wild

This workshop, conducted in partnership with the Field Museum of Natural History, shows educators who work with middle school students how they can bring students, teachers, and communities together to advance bird conservation.

Participants will meet a Field Museum ornithologist, take a behind-the-scenes tour of the museum, and try a wide variety of hands-on activities they can use in the classroom. Participants will receive Flying Wild: An Educators Guide to Celebrating Birds, a book designed to provide activities that teach about birds, their migration, and actions people can take to help birds and their habitats.

The guide features 45 activities that focus on learning about birds through contests, quizzes, and hands-on projects. Twenty of those activities are designed to be led by the students themselves.

Cost: \$20

Date/time: Friday, November 9, 9:00 a.m. - 4:00 p.m.

Location: Field Museum of Natural History

Credit Available: Yes

GEMS – Great Explorations in Math and Science

Great Explorations in Math and Science (GEMS) is a resource for teaching inquiry-based science and mathematics education. Teacher workshops can be scheduled at the Douglas Center. Teachers receive teaching guides and other resources. Lunch is also provided.

Cost: Free

Date/time: Please call 219-938-8221 Location: Paul H. Douglas Center for

Environmental Education

Credit Available: Yes

Dunes Educator Institutes

Throughout the academic year, the Indiana Dunes National Lakeshore and the Dunes Learning Center provide high-quality, professional development opportunities for K-12 classroom teachers and non-formal educators. Workshops feature experts in various fields of study, hands-on activities, and adventures within the National Lakeshore. Visit www.teachertraininghub.org for more information.

Classes listed below will be held at Dunes Learning Center unless otherwise noted.

November 16-17 Integrating Nature Education into Preschool

Nature speaks to all ages, especially young children. This overnight workshop will focus on activities, themes, and projects for preschool educators to use in their classrooms or with visiting groups. Developed for educators who work with 2-6-year-olds in a variety of capacities, this workshop will stress the importance of integrating nature into early childhood learning.

Date/time: Begins Friday at 4 p.m.;

ends Saturday at 5 p.m.

Cost: \$85; includes materials, food and lodging

Register by: November 6

Credit Available: one graduate credit hour

January 11-12 Skywatching

Look at the sky and learn about weather, stars, and stories. In this workshop, we will focus on clouds, weather patterns, and storms; basic astronomy, planets, and constellations; and weather lore, constellation myths, and cultural stories about the sky. Included will be a variety of classroom and outdoor activities designed to teach students the importance that watching, understanding, and learning from the sky has in their everyday lives.

Date/time: Begins Friday at 4 p.m.;

ends Saturday at 5 p.m.

Cost: \$85; includes materials, food, and lodging

Register by: December 19

Credit Available: one graduate credit hour

Fees listed are for the registration, materials, meals, and lodging associated with the workshop and can be paid to:

Dunes Learning Center

Phone: 219-395-9555 ♦ Fax: 219-395-8160 Email: info@duneslearningcenter.org

March 28-30 American Indians in this Region: A Fresh Look at the Past, Present, and Future

Most educators cover American Indians in their classrooms and programs in some form or fashion. This workshop will provide a fresh look at this culture's history in this region through a trip to the Field Museum in Chicago. Then working alongside tribal groups in this region, participants will gain a valuable insight into American Indian roles today and into the future. This workshop runs two days with an optional third day for an additional credit hour.

Date/time: Begins Friday at 4 p.m.;

ends Sunday at 4 p.m. Cost: \$125 for full three days Register by: March 18

Credit Available: one or two graduate credit hours depending on length of workshop attended

June 18-20 Nurturing Young Scientists: Critical Thinking Along the Lakeshore

Accompanied by researchers, participants in this workshop will explore the lakeshore and engage in activities designed to help their students enhance critical thinking and research skills used in the scientific process.

Educators completing the three-day workshop will receive valuable instructional materials and activities including Great Lakes in My World, Project Wild, and Project Learning Tree Supplemental Curriculum Guides, and more.

Date/time: Begins Wednesday at 9:00 a.m.; ends Friday at 5:00 p.m.

Cost: \$150

Register by: June 2

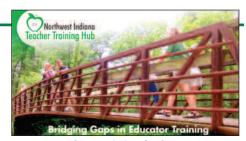
Credit Available: two graduate credit hours

Illinois teachers can receive continuing education units (CEUs), and Indiana teachers can receive continuing recertification units (CRUs) for participating in these workshops. Indiana and Illinois teachers may apply for graduate credit through Indiana University Northwest and Chicago State University for an extra fee. For university credit, register with IUN through its web site: www.iun.edu or call Dr. Ken Schoon at 219-980-7766 and register with CSU by phoning Mike Siola at 773-995-2964.

Northwest Indiana Teacher Training Hub

Additional training opportunities may be found at www.teachertraininghub.org, the web site for the Northwest Indiana Teacher Training Hub. The purpose of the Northwest Indiana Teacher Training Hub is to connect teachers with quality professional development opportunities here in northwest Indiana.

Universities, non-formal educators, state, local, and federal agencies and other providers have listed information about their upcoming workshops and teacher professional development opportunities. Search our workshops to see what's available and how it might enhance your classroom.



www.teachertraininghub.org

Indiana Dunes National Lakeshore



The Indiana Dunes National Lakeshore was established in 1966 "to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana dunes." Today, the park is comprised of over 15,000 acres of dunes, oak savannas, swamps, bogs, marshes, prairies, rivers, and wetlands. The amazing variety of natural communities located within such a small geographic area makes the Indiana Dunes National Lakeshore a truly unique educational and recreational resource.

Thousands of students participate in education programs at the National Lakeshore every year. The park offers programs at various locations throughout Lake, Porter, and LaPorte Counties, such as the Paul H. Douglas Center for Environmental Education, the Dorothy Buell Memorial Visitor Center, the historic areas of Bailly Homestead and Chellberg Farm, and the natural areas and trails throughout the park. It is a wonderful place to bring students for ranger-led programs or for self-guided programs. Teacher activity guides are available upon request for West Beach and Miller Woods or can be downloaded from the National Lakeshore's web site.

Discover

Goal: Explore nature's diversity using the senses.

Discover the wonders of nature along a wooded trail by using your senses.

Program availability: Year-round except

during Autumn Harvest and Maple Sugar Time

Age group: Preschool-3rd grade

Max. group size: 90

Location & Length: Douglas Center or Calumet Dune Interpretive Center, 1 hr.

The Chellbergs had a Farm

Goal: Experience and learn about Indiana's early farming traditions.

Step back in time and discover farm life in the early 1900s. Feed pigs, horses, chickens, and a cow. Play farm games and visit an old time farm house.

Program availability: Year-round Age group: Preschool-3rd grade

Max. group size: 90

Location & length: Chellberg Farm, 1 hr.

Talk With the Animals

Goal: Become familiar with the wonders of animals of the dunes through the year.

Puppet characters tell a story of life in the dunes. If weather permits, students are invited to hike the trail after the show.

Program availability: Year-round Age group: Preschool-1st grade

Max. group size: 70

Location & length: Douglas Center or Calumet Dune Interpretive Center, 1 hr.

Autumn Harvest

Goal: Experience old-time life on a farm in the fall.

Sample harvest time at a turn-of-the-century farm. Gather sorghum, press cider, help with chores or play farm games. Enjoy the sights and smells of an old-time farmhouse and barn.

Program availability: September 26-October 12

Age group: All grades Max. group size: 60

Location & length: Chellberg Farm, 1.75 hrs.

New National Lakeshore Visitor Center Opens!

Visit the new Dorothy Buell Memorial Visitor Center located on Hwy. 49, north of the interstate, with your students when you visit Indiana Dunes National Lakeshore. Students can watch two short videos on the park, engage in a hands-on Junior Ranger Activity Room, and learn about upcoming events at the new visitor center, which is jointly operated with Porter County Convention, Recreation and Visitors Commission, and the National Park Service.



Indiana Dunes National Lakeshore

www.nps.gov/indu/forteachers/

The National Lakeshore's web site has a wealth of information for teachers and students. Students can play interactive games. Teachers can download activity guides, learn about professional development opportunities, and view a copy of this brochure.

Mount Baldy Moves or West Beach Walk

Goal: Explore the dunes and experience the forces of nature that created them.

Observe water, wind, and waves in action and learn how they work together to form mountains of sand.

Program availability: Spring/summer/fall

Age group: Preschool-3rd grade

Max. group size: 90

Location & length: Mount Baldy or West Beach, 1 hr.

Caretakers of the Dunes

Goal: Students participate in service learning activities that assist in preserving and protecting resources of the park in an educational context.

Become a park steward and learn about the amazing biodiversity found in the dunes by participating in one of four program themes below:

- Aliens in the Forest Students remove invasive plant species such as garlic mustard and help save habitat for native flora.
- <u>Prairie Pathways</u> Students participate in a variety of activities, such as transplanting native species or collecting seeds, to restore Mnoké Prairie.
- Wetland Wanderings Students learn about the value of wetlands and focus on wetland restoration activities such as transplanting native species.
- ◆ <u>Adopt-a-Beach</u> Students learn lakeshore ecology while contributing to its monitoring and clean-up.

Program availability: Spring/summer/fall

Age group: 4th-12th grade

Max. group size: 60

Location & length: Throughout park, 1.5 to 3 hrs.

No charge for any National Lakeshore program.



Year-Round Scheduling at National Lakeshore

Beginning Monday, August 20, educators can reserve ranger-led programs for the entire 2007-2008 school year. Educators can continue to contact the National Lakeshore Scheduling Office throughout the year to reserve their field trips. Call 219-926-7561, ext. 243 or toll-free at 1-800-959-9174, ext. 243.

Seasonal program dates are as follows:

- ◆ Fall Education Programs: September 26-December 14
- ◆ Autumn Harvest Programs: September 26-October 12
- Winter Education Programs within the park: January 9-February 15
- ♦ Maple Sugar Time Programs: February 28-March 12
- ◆ Spring Education Programs within the park: March 31-May 30
- ◆ Summer Education Programs within the park: June 16-August 15

NOTES			

All National Lakeshore programs assist educators in meeting state curriculum standards.

Maple Sugar Time

Goal: Learn and experience the making of this purely American product.

Learn about "horse-power," examine maple trees, and see the Native American, pioneer, and sugar shack methods of making maple sugar and syrup. Tour the Chellbergs' 19th-century farmhouse and visit the animals in the barn.

Program availability: February 28-March 12

Age group: All grades Max. group size: 60

Location & length: Chellberg Farm, 1.75 hrs.

Maple Sugar Time-Advanced

Goal: Investigate the science behind maple sugaring. Learn how farmers tend their "sugar bush."

Assist the park in monitoring the health of the maple trees at Chellberg Farm through hands-on research and management techniques.

Program availability: February 28-March 12

(limited availability)
Age group: 6th-12th grade

Max. group size: 30

Location & length: Chellberg Farm, 2 hrs.

Fall Fanfare

Goal: Experience and learn about the changing of the seasons.

Cool weather and shorter days bring beautiful changes. Discover the flurry of activity as plants and animals prepare for winter.

Program availability: October and November

Age group: 1st-6th grade Max. group size: 90

Location & length: Kemil Beach or Douglas Center, 2 hrs.

Winter Exploration

Goal: Experience and learn about the beauty and ecology of winter.

Explore the beauty of the winter woods during a nature hike after viewing an indoor slide show focusing on animal adaptations. Learn how plants and animals adapt to winter. Snowshoes are provided. If there is insufficient snow, a hike will be led.

Program availability: January 9-February 15

Age group: 3rd-6th grades Max. group size: 36

Location & length: Calumet Dune Interpretive Center,

1.5 hrs.

Potawatomis and Fur Traders

Goal: Experience local history focusing on American Indian lifestyles and the fur trade.

Journey back in time to learn about the lifestyles of the American Indians, fur traders, and voyageurs during this period of change in Northwest Indiana.

Program availability: Year-round Age group: 3rd-8th grade Max. group size: 90

Location & length: Bailly Homestead, 2 hrs.

A Grain of Truth

Goal: Explore the dunes and gain a personal experience of how they came to be.

Observe how winds and powerful waves work to create and erode moving sand dunes. Hike the foredunes and beach to learn about the processes of dune building, glaciation, and erosion.

Program availability: Spring/summer/fall

Age group: 4th-12th grade

Max. group size: 90

Location & length: West Beach or Mount Baldy, 1.5 hrs.

Lake Michigan Alive

Goal: Appreciate the diversity of life within this region's most important natural resource and learn about some of the issues affecting Lake Michigan.

Dress a student as a fish. Play a food chain game. View preserved sea lamprey and trout. Students are encouraged to help care for the Great Lakes. This program is primarily indoors but does include a 30-minute trip to the lake.

Program availability: Year-round Age group: 4th-12th grade

Max. group size: 60

Location & length: Douglas Center, 1.5 hrs.

including beach hike

