



North Lakeland
Discovery Center

Exploring the Region's Natural, Cultural and Historic Resources

SCHOOL PROGRAM PLANNER 2018 – 2019



North Lakeland Discovery Center

PO Box 237

Manitowish Waters, WI 54557

(715) 543-2085

1-866-543-2085

FAX: (715) 543-8982

Email: schools@discoverycenter.net

Web site: www.discoverycenter.net

The North Lakeland Discovery Center is a non-profit, member supported, 501 (c)(3) organization. The mission of the Discovery Center is to promote stewardship of natural and cultural resources in the Lakeland area.

MISSION

To Enrich Lives and Inspire an Ethic of Care of Wisconsin's Northwoods, Through the Facilitation of Connections Among Nature, People and Community.

HISTORY

The North Lakeland Discovery Center, located on a 66-acre site in the heart of northern Wisconsin's Lakeland region, came into existence in 1996. We are a community-based environmental learning center providing year-round programs for visitors of all ages.

Since the beginning, The North Lakeland Discovery Center has garnered widespread community support. The Center proudly boasts a current membership in excess of 800 families, all of whom make regular financial contributions to support ongoing operating expenses.

Our school-based Environmental Education (EE) program represents an exciting, natural extension of an already successful community education center. Our programs are matched to Wisconsin model academic state standards. Programs are presented within the context that the better we understand our natural environment, the more likely we are to accept our shared responsibility to look after it.

Environmental Education at the Discovery Center

Here at the Discovery Center we strongly believe in the importance of preparing today's youth to face tomorrow's challenges. They will develop the policies and make the decisions that impact our future world. To help them become well-versed and engaged citizens, the Discovery Center has created educational, hands-on programs that stimulate young minds, and assist them to develop critical thinking skills and cooperative attitudes. Participating students practice problem solving skills and make significant research and data contributions, while at the same time increasing self-esteem and confidence.

The Discovery Center provides environmental education field trips for regional elementary and middle school students. Our programs instill an appreciation for our unique Northwoods' environment, as well as an understanding of the relationships and interdependence between people and the environment. Discovery Center programs and classes facilitate life-long learning and healthy attitudes toward self and the natural world.

ENVIRONMENTAL EDUCATION PROGRAM GOALS

GOAL 1: Foster awareness, understanding, and appreciation of the Northwoods cultural and natural resources.

GOAL 2: Provide an extension of science skills for middle school students through Citizen Science Monitoring experiences.

GOAL 3: Facilitate the development of the knowledge and skills necessary to be a productive member of society, encouraging personal growth, communication, respect and cooperation.

GOAL 4: Teach students how personal and community choices and actions can affect the environment both locally and globally, while showing them how they can apply their personal decision-making skills to become good stewards of their own local environment.

Scheduling Your Trip

SCHEDULING A DATE

Schools that regularly return to the Discovery Center usually schedule a return during the corresponding time period each school year. Please contact the Discovery Center to find out about dates and times.

STEP ONE:

Read this program planner. Reflect on what your goals are for your students and consider possible class offerings to help them meet those goals. Pick three (3) tentative dates your class could visit the Center.

STEP TWO:

Fill out the reservation form which is the last page of this planner and return it to the Center, or call the Center directly. Center staff will review your requested dates and classes and contact you to discuss the best program options to meet your goals and create a high quality educational experience.

STEP THREE:

The Center will mail you a contract with a detailed schedule, date confirmation and invoice. We request that you pay on or before the day of your field trip.

STEP FOUR:

Enjoy your learning experience at the Discovery Center !



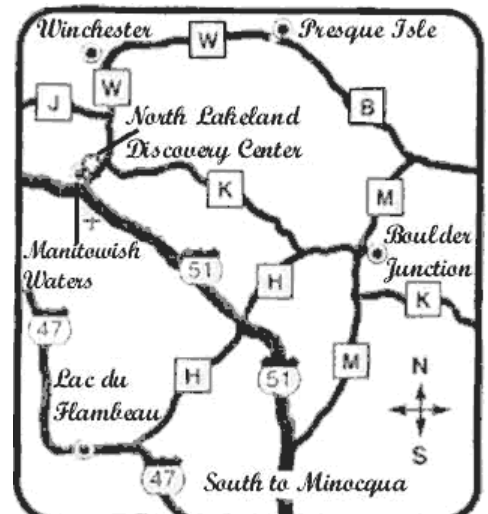
CHANGES AND CANCELLATIONS

Students' safety is always our top priority. We have implemented a severe weather postponement policy in order to ensure the safety of the students. Programs will only be cancelled if the Discovery Center staff, in consultation with the participating teacher, deems the weather to be too severe for outdoor programs. In this case, the Discovery Center will attempt to find an alternative date, or will refund the entire program fee. In the event of rain the program will continue as planned. To ensure the safety and comfort of your students, please be sure that they are well prepared for all types of weather. The Discovery Center has a cancellation fee of 25% of your total fee if the program is cancelled less than 30 days before your visit.

Getting to the Discovery Center

The North Lakeland Discovery Center is located in the town of Manitowish Waters, Wisconsin on Highway W, 1.2 miles north of Highway 51 and County W intersection.

We are approximately 21 miles north of Minocqua and 26 miles south of Hurley, Wisconsin. On Highway W veer right at the gas station, go 1/4 mile and look for our sign on the left side of the road.



Costs and Payment

Discovery Center Outdoor Experience

ENVIRONMENTAL EDUCATION DAY PROGRAMS

To provide quality programs for your students, we prefer to have a 12:1 student teacher ratio in all of our classes. Full day programming is approximately 5 hours of instruction. There is no cost for teacher and chaperones.

Number of Students	Full Day Programming
1-12	\$250
1-40	\$15/student
41+	\$12/student
65	Max number of students

**Please note that prices do not reflect food costs. All students, teachers, and chaperones are responsible for providing their own lunches.

Naturalist in the Classroom

ENVIRONMENTAL EDUCATION OUTREACH PROGRAMS

The Discovery Center will come to your school to provide programming. We'd be more than happy to visit just one classroom, or several classrooms in one day. Please keep classroom numbers under 30, if possible. Please review the class offerings list to see which programs apply. If there is a program that you would like delivered in your classroom but isn't marked, we are more than happy to work with you to develop that program to fit your class's needs. Mileage included for the first 20 miles (round trip). Each additional mile add 58 cents/mile. For more information on this program, please refer to the included flyer.

1 one hour program	\$95
2-3 one hour programs	\$175
4-5 one hour programs	\$225

PAYMENT

An invoice for your field trip will be mailed with your confirmation letter prior to your visit. We request that you please fill out the appropriate paper work and return it with a check by mail, or bring it with you on the day of your visit. If you are unable to have payment on the day of your field trip, we ask that you please bring an official purchase order from your school with you.

SCHOLARSHIPS

Scholarships are now available for schools that qualify. Please inquire as to which scholarship opportunities might work for your school.

Class Offerings

CLASS THEME

ECOLOGY & ENVIRONMENTAL SCIENCE CLASSES

Wildlife	K	1st	2nd	3rd	4th	5th	6th	7th	8th	F.	W.	Sp.
All About Owls* \$					X	X	X	X	X	X	X	X
Animal Survival Strategies		X	X	X	X	X	X				X	
Antlers, Furs, Skulls & Scat*	X	X	X	X	X	X	X	X	X	X	X	X
Bats*	X	X	X	X	X	X	X			X	X	X
Beaks, Wings & Other Bird Things*C				X	X	X				X		X
Beaverology*	X	X	X	X	X	X	X	X	X	X	X	X
Frog Chorus!	X	X	X	X								X
Legends of the Loon*	X	X	X	X	X	X	X	X	X	X	X	X
Reptiles and Amphibians	X	X	X	X	X	X	X	X	X	X	X	X
Wolves of WI*	X	X	X	X	X	X	X	X	X	X	X	X
Water												
Statehouse Lake: Water Chemistry C							X	X	X	X		X
Statehouse Lake: Aquatic Critters C	X	X	X	X	X	X	X	X	X	X		X
Bog Ecology					X	X	X	X	X	X		X
Plants & Trees												
Tree-rific Trees	X	X	X	X	X					X	X	X
Tree ID						X	X	X	X	X	X	X
The Thicket Game				X	X	X	X			X	X	X
Plant Hike C	X	X	X	X	X	X	X			X		X

CLASS THEME

CULTURAL & HISTORICAL CLASSES

Cultural History	K	1st	2nd	3rd	4th	5th	6th	7th	8th	F.	W.	Sp.
Dream Catchers* \$				X	X	X	X	X	X	X	X	X
Environmental Easel*	X	X	X	X	X	X	X	X	X	X	X	X
Nature Journaling* \$					X	X	X	X	X	X	X	X
Environmental Awareness												
Predator/Prey*				X	X	X	X			X		X
Seasonal Scavenger Hunt	X	X	X	X						X	X	X
Sensory Walk				X	X	X				X		X
Serendipity Hike C	X	X	X	X	X	X	X	X	X	X	X	X
The Underworld C				X	X	X	X			X		X
Winter Ecology Hike C	X	X	X	X	X	X	X	X	X		X	
Outdoor Adventure												
Canoeing						X	X	X	X	X		X
Compass 101						X	X	X	X	X	X	X
Outdoor Living Skills						X	X	X	X	X	X	X
Team Challenge					X	X	X	X	X	X		X

* Available for delivery at your school

\$ Indicates an additional class fee

C Program has Citizen Science Monitoring Project

F. - Fall W. - Winter Sp. - Spring

Class Descriptions

Class descriptions are arranged alphabetically according to theme. Located in parenthesis behind each class description are the relevant Wisconsin Model Academic Standards for Environmental Education. Most of the programs last 1.5 hours, but some programs have flexibility with the time allotted and material covered. Please note any programs that have an additional fee attached to them, shown by a (\$) symbol.

ECOLOGY AND ENVIRONMENTAL SCIENCE CLASSES

WILDLIFE

All About Owls \$

These seldom seen, silent winged hunters do their jobs when the sun goes down. Learning about their special night hunting adaptations and some basic owl behaviors will give students a better understanding of the benefit of these hunters of the night. This class also offers students the opportunity to dissect sterilized Barn Owl pellets. Each pellet contains small mammal skeleton parts which the students reconstruct, glue on cards and bring home (to delighted parents).

(A.4.1, 2, 3, 4; A.8.4, 5; B.4.6; B.8.8)

**\$2 charge per pellet (1-2 students per pellet)*

Animal Survival Strategies

Brrr...it's cold outside! We turn on the heat and put on warm clothes, but what do animals do? Through a series of fun indoor and outdoor activities, students will learn about the concept of adaptation, especially as it applies to how animals in Wisconsin survive our cold winters. (A.4.1, 2, 3, 4; A.8.4,5,6; B.4.1, 4, 6)

Antlers, Furs, Skulls & Scat

Discover the many unique adaptations that make vertebrates so special! With this program you and your students will be able to identify animals by signs that they leave behind. An interactive challenge and animals signs hike are included in this class.

(A.4.1, 2, 3, 4; A.8.4; B.8.3, 8)

Bats

Meet live bats! Through audio-visual materials, lecture and animal artifacts, misconceptions will be addressed and students will learn about the natural science of the world's only flying mammal. An activity highlighting a bat's hunting techniques is also a part of this class. (A.4.1, 2, 3, 4; B.4.4, 5, 6)

Beaks, Wings & Other Bird Things

It's a bird...it's a plane...no, it's a bird! Students will learn about bird adaptations, identifications, behavior and niches through the use of games and activities.

(A.4.1, 2, 3; B.4.6)

Beaver-cology

Students will discover the adaptations and lifestyle of the largest rodent in North America through a fun dress-up activity and discussion involving real beaver artifacts. Behavioral and physical adaptations will be examined. (A.4.1, 2, 3, 4; A.8.1, 4,5; B.4.1, 4, 5, 6; C.4.1, 3, 4, 5; D.4.2; D.8.1, 5, 7)

Frog Chorus!

CROOAAKK! Discover the amphibians that make this sound by learning about frog and toad adaptations, participating in a frog discovery hike along the shores of Statehouse Lake and using every day items to become a real frog chorus! (B.4.4, 6, 12; B.8.5, 8, 10)

Legends of the Loon

This mostly indoor lesson will explore the life history and behaviors of this mysterious bird of the north with a slide show presentation. A fun and interactive loon adaptation activity will leave one participant feeling "loony." The calls of the loon and body language will also be explored. (A.4.1, 2, 3, 4; A.8.1, 4, 5; B.4.1, 4, 5, 6)

Reptiles and Amphibians

Meet the Discovery Center education animals as we learn about reptiles and amphibians. Amazing adaptations will be discussed in this fun and interactive program.

The Wonder of Wolves

With a hands-on look at wolf specimens such as skulls, pelts, scat, plaster tracks, and radio telemetry equipment, students will explore the role of wolves in Wisconsin and how the wolf compares with other wild members of the dog family that are found in Wisconsin. Students will learn the history and ecology of the wolf and how to track one in the wild. Wolf related games and activities are also available upon request. (A.4.1, 2, 3, 4; A.8.5; B.4.1; B.8.5)

PLANTS AND TREES

Tree-rific Trees

Students learn the basic parts of a tree by becoming a “living tree” and will discuss why they are important to life on earth. An exploration of the forest community will increase their awareness and appreciation of trees. They choose a tree to get to know and then draw, do a bark rubbing or create a history of their tree.

(A.4.1, 3, 4; B.4.8, 9, 10;)

Tree ID

Trees are a very important part of our lives. Students learn the importance of trees and through the use of a dichotomous key, learn how to identify common trees of the northwoods. They will team up and only armed with a tree key, will travel between numbered trees and attempt to identify them correctly.

(A.4.2, 3, 4; A.8.4;

B.4.8, 9, 10; B.8.22; B.12.2, 10)

The Thicket Game

Students become predator and prey in this animal version of hide and seek. Animal adaptations and how these adaptations help animals survive, forest uses and different types of habitat will all be discussed and explored.

(A.4.1, 2, 3, 4; A.8.4, 5, 6; B.4.1, 2, 4, 6; B.8.1, 2, 3, 5, 6, 8, 10, 15; C.4.1; C.8.1)

Tree & Plant Hike

A forest ecology hike that explores tree species, parts, and their amazing survivability and adaptability.

Students will learn basic plant and ID skills along with other interesting facts about these amazing dwellers of the forest.

(A.4.1, 4, B.4.6,10, B.8.2)



WATER

Studying Statehouse Lake: Water Chemistry

While working in small groups, students become water chemists as they perform a variety of tests on Statehouse Lake. Using chemistry test kits, students determine the level of dissolved oxygen, presence of nitrates and phosphates, pH reading and temperature of a body of water. Based on this information, they determine the health and water quality of the lake.

(A.4.1, 2, 3, 4; A.8.1, 2, 4, 5; B.4.1, 4, 6, 8, 10, 12; B.8.3, 5, 8, 10, 15, 17, 18, 19; C.4.1; C.8.1; D.4.2, 5; D.8.2, 5, 7)

Studying Statehouse Lake: Aquatic Critters

This class provides students the opportunity to explore how form reflects function in macro invertebrate populations. Students will catch and identify examples of a variety of aquatic organisms while learning how their adaptations allow them to live this amazing aquatic lifestyle. The different types of organisms that are found can help students diagnose the water quality.

(A.4.1, 2, 3, 4; A.8.1, 2, 4, 5; B.4.1, 4, 6, 8,12; B.8.3, 5, 8, 10, 15, 17, 18, 19; C.4.1; C.8.1; D.8.2, 5, 7)



Bog Ecology

An interpretive hike to a bog will give students a better understanding of this most-misunderstood wetland.

Discussions on how bogs are formed and the amazing plant life and their adaptations are the focus of this bog hike.

(A.4.1, 2, 3, 4; A.8.1, 2, 4, 5, 6; B.4.4, 6; B.8. 3, 5, 6, 15; C.4.1; C.8.1)

CULTURAL AND HISTORICAL CLASSES

CULTURAL HISTORY

Life of the Lumberjack

This program introduces students to the work and daily lives of lumberjacks from the 19th century. Food, jobs, tools and how they lived will be discussed. We then head outside to participate in a few lumberjack games!

Dream Catchers^{\$}

This is a fun and hands-on native Ojibwe craft. Students will discuss how people have always used our natural resources and learn the legend of the asabikeshiinh (dream catcher). (B.4.8; B.8.9,12)



Bison Maneuvers

Learn about the characteristics and the history of one of the largest mammals on the continent, the bison. A fun tag game teaches about predator-prey relationships and survival strategies.

Environmental Easel

Who needs paints and a paint brush to create works of art when we have the forest in our backyards?? Using various items they collect from the environment, students will create their own projects to take home. Importance and historical uses of our natural resources will also be discussed. (2hours) (B.4.10; B.8.12)

Nature Journaling^{\$}

Nature journaling refines future drawing and observational skills, creates a connection to natural places, and fosters an appreciation of the outside world. Students will create their own nature journals and spend time along our trails drawing and writing about the observations they make. Their journals can be brought back to the school and a classroom extension activity can also be a part of this lesson. (E.4.1, E.8.1)

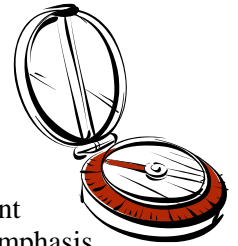
OUTDOOR ADVENTURE

Canoeing

In addition to learning history, equipment, safety and basic paddling strokes, students will spend time on Statehouse Lake becoming comfortable in the canoe and maneuvering their craft. This is an excellent ‘teamwork’ activity for your students. (A.4.1; B.4.1, 4, 6; B.8.3.8)

Compass 101

Feeling lost? Once you learn the Basic knowledge and skills of the compass, you will feel more confident in your outdoor-navigation skills. Emphasis is placed on investigating historical navigational techniques and learning the parts and proper use of a compass. Working cooperatively and applying this knowledge to complete a compass course here at the Center will be the highlight of this class.



Outdoor Living Skills

In these hands-on activities, students will discuss what it takes to survive, what are the most important things to concentrate on when in a survival situation and what they should always have with them when they go out into the wild. Activities include a “10 essentials” game and shelter building. (A.4.1, A.8.5, B.8.12, D.8.2)

Team Challenge

As a member of a team, students learn about trust, communication, cooperation and logical thinking while participating in fun activities and tackling a variety of tasks, culminating with a possible visit to our low-ropes course. This class is great for building group cohesiveness and giving students the opportunity to solve problems as a team.

ENVIRONMENTAL AWARENESS

Predator/Prey

The relationship between a predator and its prey is one of the most fascinating in the natural world. Through this fun “tag” game, students will learn about unique adaptations, hunting and survival strategies and the roles of predators and their prey in the food chain. A predator/prey population graph is constructed using the results of the activity. (A.4.1, 2, 3, 4; A.8.5; B.4.1; B.8.5)

Seasonal Scavenger Hunt

Students use sensory exploration to get up close and personal with different aspects of nature. With each season comes new and fascinating natural processes and objects to discover! (A.4.1, 2, 3, 4)

Serendipity Hike

Let curiosity take over as we venture out on our nature trails. During this interpretive hike, students will discover flowers, trees, water, and whatever happens to pique our interest along the way! A few fun activities accompany this hike. This experience takes advantage of seasonal events here at the Discovery Center. (A.4.1, 2, 3, 4)



Sensory Walk

Follow your senses on this self-led walk along our interpretive trail. Students will follow the trail and participate in sensory driven activities along the way. A discussion on the importance of our senses will follow this amazing experience. (A.4.1, 2, 3, 4)

The Underworld

Come and explore what lives beneath...beneath our feet that is! Students will learn about the importance of soil and about the living critters that call this “underworld” home. Live collection and identification are a key component of this class. (4.1, 4; B.4.8; B.8.8)

Winter Ecology Hike

Come wander through a winter wonderland. This interpretive hike focuses on animal tracks, adaptations and other winter ecology topics. (A.4.2, 2, 3, 4; A.8.4, 5, 6, 8; B.8.3, 5, 6, 8, 10, 15, 17)



What to Bring and Sample Schedules

Even though your students are only at the Center for a day, it is still important to be prepared! All of our classes have an outdoor component to them, so dressing for the weather is a must!! Here is a suggested list:

CLOTHING (Check Weather!!)

Hiking boots or sturdy shoes
Rain gear and boots
Warm jacket

ADD FOR WINTER

Hat (ear muffs are not enough!)
Mittens
Snowmobile suit, snow pants and
Winter coat
Good snow boots

OPTIONAL PERSONAL GEAR

Camera and film
Sunglasses
Sunscreen
Insect repellent (solid or liquid)
Day or fanny pack
Water bottle

REQUIRED!! Bag Lunch!

Sample Schedules

Here is an example of two different schedules to give you an idea of how a typical day program is run. **Schedule #1** is a sample for programming held here at the Discovery Center. **Schedule #2** is a sample for programming held at the Crystal Lake Nature Center in Sayner, WI.

Schedule #1

9:00	Arrive/Large Group Welcome
9:15-10:15	Class 1
10:30-11:30	Class 2
11:30-12:00	Lunch/Group Games
12:00-1:00	Class 3
1:15-2:15	Class 4
2:30	Board Bus and Depart

Schedule #2

9:00	Arrive/Large Group Welcome
9:20-11:35	Class 1: Canoe lessons/Canoe trip around Big Musky Lake
11:40-12:05	Lunch
12:10-1:00	Class 2
1:05-1:55	Class 3
2:00	Board Bus and Depart

***Class numbers, times and duration will depend on when your group arrives and departs, group size and the amount of classes you would like.**

NORTH LAKELAND DISCOVERY FIELD TRIP RESERVATION FORM

School Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact Person: _____ Email: _____

School Phone: _____ School Fax: _____

Grade/Age of Students: _____ # of Students: _____

Does your school have an Education Foundation? _____

If so, who is the contact? Name: _____ Phone Number: _____

Discovery Center Outdoor Experience

Preferred dates of NLDC Visit: 1st _____ 2nd _____ 3rd _____

What is the earliest time you will arrive at NLDC? _____

What is the latest time you will need to depart NLDC? _____

Naturalist in the Classroom

Preferred dates for Classroom Visit: 1st _____ 2nd _____ 3rd _____

Number of programs and program times: _____

Are there any students or adults with special needs? If so, please describe.

The number of classes your students participate in during your chosen program will depend on the length of time allowed for class participation and the number of participating students. Below, please list your top five class choices in order of preference.

1. _____
2. _____
3. _____
4. _____
5. _____

Upon completion and return of this form, a Discovery Center staff member will contact you and discuss an appropriate field trip itinerary.

Questions? Refer to this Program Planner or contact:

licia@discoverycenter.net
715.543.2085

Please fax or mail this completed form to:

North Lakeland Discovery Center
c/o Environmental Educator Coordinator
PO Box 237 Manitowish Waters, WI 54545
Fax: 715.543.8982