



School Field Trip, In Classroom and Special Interest Program Guide



OUR MISSION: Inspirational leadership and excellences to advance all walks of life, to give back to nature while receiving the outdoors benefits, learning to love nature's beauty to mankind, mentally and physically.



School Field Trips

A field trip to Howard Christensen Nature Center is a day full of exploring, activities and observation in the most hands on program in natural education. Our field trips average a 4 hour guided education experience.

We have a 15:1 student/guide ratio for effective engagement, teachers are free. (please note that this ratio is our target and may change due to illness or other reasons)

Lily's in the Classroom

It's brand new to HCNC to ensure natural science opportunities for all students!!

- Don't worry about transportation, Lily's in the Classroom comes to you.
- Live animals, study displays, and plenty of hands on activities give students the opportunity to experience HCNC from their classroom. 30:1 ratio



2016-2017 School Year



Howard Christensen Nature Center

Something New with Every Visit

Located in northern Kent County and nestled behind the tall red pines, our 135 acre nature center is home to multiple ecosystems, landscapes and opportunities to explore. The center boasts a large and very deep kettle lake only a few fish can live in, and a small population of snapping turtles (including JAWS, the 80 year old resident snapper). Boardwalks will take you through bogs and swamps, past lagoons, along streams, pine plantations, a prairie and more landforms.

Our Animal Resource Center houses our live turtles and reptiles and offer a closer more personal interaction with some magnificent snakes, lizards, turtles and more. This is also the permanent home of our travelling reptiles. 2016 will also see the addition of the new HCNC Barnyard and a new improved play ground area.

HCNC's Programs

Our programs are designed to align with the Science Core Standards and are updated annually. HCNC's hands on approach to learning differentiates us among natural science facilities by allowing students to explore and discover; often teaching just as much as they learn. We use vocabulary words appropriate for grade and curriculum and can offer pre and post trip resources for teachers at no charge. For more information, to register your class or learn more about customizing your trip and curriculum contact the office! Registration can also be done online.

- Cost per student is \$5.00, teachers are free.

Chaperones are welcome at regular \$3.00 admission cost.

- Lunches are 30 minutes, scheduled by our staff and take place in one our mess halls.

- Our programs are 4 hours in length (bus arrival to bus departure, including lunch)

•NEW policy in 2016-2017. Due to the popularity of our programs and to ensure the most effective instruction and experience, we now limit the number of parent chaperones to three (3) per 15 students. Also included in this policy is the requirement that chaperone payment be collected by the teacher in charge prior to the field trip. If you have a special circumstance or request please contact the office.

Program Descriptions

Grade

1

“Planet Full of Homes”

All living things have a “home and a family” is the primary concept students learn. As they explore such natural habitats as a pond, field, and hardwood forest (homes), they will discover the importance of food, water, air and space for plant and animal survival. Students will also see evidence of the different stages of plant and animal life cycles (families).



Grade

2

“How’s It Growing?”

Students will take a discovery hike with an emphasis on plants and their life cycle. Students will also observe sources of water at Howard Christensen Nature Center with an emphasis on the relationship of plants, animals and people in our watershed.



Grade

3

“Secrets of Survival”

Outdoor and indoor studies give students an opportunity to observe physical characteristics of native plants (flower, stem, roots & leaves) and animals (ex: backbone, body covering, limbs). Students will identify renewable and non-renewable natural resources with an emphasis on ways that humans are conserving resources to improve “human survival.”



2016-2017 School Year

Grade

4

“Go with the Flow” (of Energy)

The concept of a “web of life” is explored with an emphasis on the flow of energy. While hiking students will search for and identify producers, consumers, decomposers, predators, prey and more. Students will be introduced to behavioral adaptations as a means of survival, and reflect on human interaction (or interference) with the food web.



Grade

5

“Behaving Like Animals”

An animal’s behavior and physical characteristics help it survive. Students explore these traits and examine how they are influenced by the environment and genetics. Examples of extreme changes in environmental conditions (fire, timber harvest, etc.) can be explored and discussed.



Grade

6

“It’s All About Relationships”

All organisms interact and form living communities within ecosystems. Students will discover different communities within ecosystems (forest, oak savannah, field/prairie, wetlands) and how the relationship of the land and living organisms changes over time. Students will study relationships between living organisms (competition, parasitism, symbiosis) and also explore how humans affect change, purposefully and accidentally.



2016-2017 School Year

Grade

7

"Star Creatures"

Students will discover how plants use photosynthesis to capture and utilize energy from Earth's closest star...the sun. Students will explore the role of plants as producers and their ability to change environments through succession habitats.



Lily's In the Classroom



Customization is also available. All in class programs include hands on activities, animal demonstrations and sensory displays.

- Cost per class is \$90.00. Up to 30 students
Billed per class regardless of student count
- We can accommodate up to 3 classes (90 students) at one time in the classroom.
- Classroom programs are 2 hours in length (45 minutes of presentation, 75 minutes of sensory, hands on activities)

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Vertebrates

Our wild world is full of mammals, fish, reptiles, birds and other common vertebrates, so what makes them unique? How do they survive? Learn the physical adaptations of different species as dictated by its environment! Skulls, Skeletons, live reptiles, furs and track making activities get students engaged through seeing and feeling.



Invertebrates

Insects are probably the most common invertebrates in our world, but what are some others? Do they all fly, like insects? Are they predators or prey...or both? Find out the secrets behind the wide variations in coloring, size, species and range of bugs and more! Extensive insect study collection, microscope discovery, live animal demonstration kicks off your day!



2016-2017 School Year

A N I M A L S

Marine Life

We live in Michigan, not only dotted with thousands of bodies of water, but completely surrounded on 3 sides! It's no wonder these ecosystems are teeming with life. Through observation students will get to find and identify more than 10 living things in our pond water. See the entire lifecycle of a frog, live turtle demonstrations, fish crafts and activities as we learn more about the different types of bodies of water, the effect of the environment and the life they support.



2016-2017 School Year

A N I M A L S

Birds

Not all birds fly, and not all flying animals are birds! So, what makes a bird? Why do they have beaks? Learn what it's like to be a bird with a beak activity, see real bird specimens to identify adaptations and learn what makes raptors so dominant in the wild!



A N I M A L S

Michigan Wildlife

Michigan's extremely diverse ecosystems provide homes and havens for an eclectic mix of wildlife from the common whitetail deer to the random wandering mountain lion. How do these various animals survive? What adaptations are necessary for a healthy life cycle? Get up close and personal with Michigan's wildlife!



P L A N T S

Ecosystem Basics

What is an ecosystem? What are their characteristics and why are they important? We'll learn what makes up a healthy ecosystem and then make our own!! We request, to encourage class enthusiasm, that students collect clear 2-liter bottles for activities.



SCIENCE LABS

Marine Biology

High School Students spend the day at Howard Christensen Nature Center on a single science research project. The Marine Biology Lab introduces advanced concepts and offers the opportunity for students to collect samples, study specimens and draw conclusions from their hypothesis' made at the beginning of the class.



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SCIENCE LABS

Botany Lab

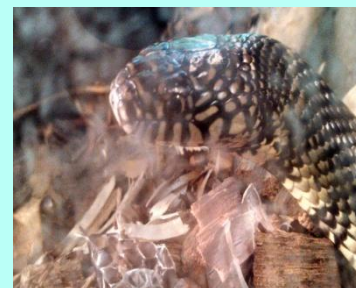
High School Students spend the day at Howard Christensen Nature Center on a single science research project. In the lab, students will observe and research the many species of plants we have living on the property as well as examine and conduct research on the multiple study specimens available to them so they may draw conclusions on their earlier hypothesis.



SCIENCE LABS

Geology

High School students spend the day at Howard Christensen Nature Center on a single science research project. Here students will work with soil samples, ecological differences in terrain and examine the geological history of Michigan.



Study Labs

Science Study Labs are designed for High School aged students. These programs will begin weeks in advance in the classroom and will be concluded and carried out in the labs at Howard Christensen Nature Center. Upon registering for a lab, a general curriculum will be provided along with the guidelines for these labs. Students should be divided into study groups that will prepare for this Lab “field trip” by selecting a topic and creating a hypothesis in line with the program (Marine Biology, Herpetology, Ornithology). Further preparation is done by the study groups in the classroom developing questions to ask to work towards concluding their hypothesis on lab day. Upon arriving at Howard Christensen Nature Center, student study groups will be led to the field with their instructor to collect specimens, evidence and observations that will be brought back to the laboratory for further study and examination. Through the use of microscopes, specimens, study charts and written resources students will conclude their day by answering their previously derived questions to weigh against the hypothesis.

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SEASONAL PROGRAM ADAPTATION

(the following is the adaptation applied to the grade level curriculum listed previously).



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SNOWSHOEING

One of our favorite past times here at HCNC. We do need about 6 good inches of snow to snowshoe. This can be added in to any school field trip for no cost. Of course we do encourage trying out one of our “Serious Snowshoe” classes. A hit with kids, snowshoeing can even go on the road with Lily’s in the Classroom (school would need large open area for this).



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FROG CATCHING, BUTTERFLY COUNTS

Frogs, butterflies, birds and trees alike are coming to life in the spring! Help us by participating in a butterfly or bird count or simply a study of the wildlife diversity at HCNC. Watch as they build their new homes and start their families. Identify several species of frog, turtle, bird and mammals as we learn of their busy spring time preparations.



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MIGRATION, FALLING LEAVES

At a time of year when some of the greatest beauty is found, the “end of life” is eminent. As leaves fall and grass dies out, what really happens? Do the trees die, where are all the animals? Answers to questions like this are answered as students observe the changes taking place in the fall. Much like the reverse of all springs hard work, we discover if it really pays off for nature.

Other Programs-Perfect as Field Trip Add-ons, Scout Badge Workshops, Club Outings and More

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Field Trips, Tours, Scouts, Youth Groups, Clubs

Check our website or contact us for specifics on any current area of interest or study for your class. We have more than four dozen “tour options” with abbreviated core curriculum for multiple scout badges, team building activities for youth groups and guided birding, photography and more. HCNC is always adding to our curriculum, and would also be more than happy to welcome guest instructors for special events.

All nonprofit groups are offered one free night at Camp Lily’s Retreat Center when a 2 hour service project is performed during your stay. Camp Lily’s is perfect for your group with a group campground and large mess hall and meeting rooms! Currently the site of our organic

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gardening program, this secluded getaway has direct access to the entirety of the property.



Howard Christensen Nature Center

Information and Registration

Howard Christensen Nature Center grounds are open to the public, 7 days a week, year round, admission is \$3.00.

Facility and Office hours are as follows-

Regular Season (March-November)

Monday thru Thursday, 9am-4pm
Friday open 9am-2pm
Weekends, 11am - 4pm

Winter Season Hours (January-April 1)

Monday thru Thursday, 11am-5pm
Friday open 12 noon to 4pm
Weekends, 12 noon to 4pm

Schools may still schedule for ANY day of the week!

Registration Information

To register your field trip or Lily's In The Classroom visit, you may visit our website and register online. If you prefer to register by email or phone, please prepare the following information.

- Date Preferences (select at least two just in case)
- Name, address, phone number of School AND Contact person name and email address
- Program Selection

Phone: (616-675-3158) | Email: (info@HowardChristensen.org) | Web: (www.HowardChristensen.org)
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- Anticipated number of students
- Arrival and Departure Times (9:30AM-1:30PM is the most common)