

**DNC Adventure Options:
Topical Choices for the Educator**

Adventure Options

Approx. Grade Level

Animals and Their Habitats

K-6th

All creatures—including human beings—need healthy habitats in which to survive, grow, and thrive. What are the necessary ingredients for a healthy habitat for woodland animals? We will contrast how man can drastically alter his environment to fit his needs with how the animals adapt or move on. This activity includes some tracking and simulation games.

Vocabulary Used: habitats, camouflage, predators, prey, omnivore, herbivore, carnivore producers, consumers

Animal Tracking

3rd and up

If reading the movement of animals was as easy as reading a book, we could all be experts in a few short lessons. But many variables enter into this “art” of tracking the movement and activity of the animals. Come and learn more as we offer this first course in “reading the woods.”

Vocabulary Used: habitats, talons, claws, migration, hooves, paws

Archery

3rd and up

After a quick lesson in terminology and technique, the students will experience this once-important method of survival by shooting for targets and prizes. The presentation will include some description of how the Native Americans made their bows. The students will gain a greater appreciation for the skill needed to survive in Michigan’s pre-pioneer days.

Vocabulary Used: Native Americans, nock, cock feather, bowstring, fletchings, straddle

Birds

3rd and up

Are you a bird-brain? You could be! This introduction to the world of birding will be valuable for your students. Appreciate the creative adaptations birds have and understand more about the variety of species that Michigan has. Some creative team-building experiences are a part of this presentation.

Vocabulary Used: ornithology, species, raptor, songbird, migration

Camouflage

all ages

This amazing feature of many animals and plants is a feature worth exploring more. This survival technique is the primary defense mechanism for so many critters that live in a world where any defense capability can only be helpful. Have fun with this topic!

Vocabulary Used: camouflage, defense mechanisms, vision

Camp Crafts

K-2nd and 3rd-6th

If a visit to the Holiday Inn is “roughing it” for you, this class will make you better able to live in the world of camping. We will encourage your students to learn more about the joy of living in the woods. Both the “city-slicker” and the “expert woodsman” will find helpful tips for enjoying a time in the woods.

Vocabulary Used: “leave no trace,” fire-building, lashing/frapping, campsite

Can This Be Real?

K-6th

This adventure looks at some of the amazing facts regarding the natural world and strives to trace some of them in visible ways for students. “A flea can jump 200 times the length of his own body—how far could I jump if I could do that?” “A mosquito can drink their own body weight in blood each day—how much water would I have to drink each day to match that?” Come and explore some of the weird, the wacky, and the wonderful facts of nature!

Vocabulary Used: largest, smallest, extrapolations, simulations

Candle Making

all ages

The students will make candles in the same way the pioneers did. We will discuss the importance of homemade candles in the lives of these early settlers and then create some of our own, either hand-dipped or molded. This activity works best with groups of 25 students or less.

Vocabulary Used: wax, wick, pioneers, tools, homesteaders, trappers, traders, voyageurs

Cemetery Study

3rd and up

A trip to the nearby Old Bostwick Cemetery will reveal some of the history of the people who lived in Cannon Township. Discover many interesting facts and nostalgia on this expedition. Many markers date back to pre-Civil War days. This is a great springboard into the world of history!

Vocabulary Used: Civil War, consumption, longevity, history, township, veteran

Cross-Country Skiing

5th and up

Come and ski the Michigan winter wonderland! We will spend time teaching about the various techniques, the equipment, and the history of this Nordic sport, but then will journey into the woods of Camp Roger.

Vocabulary Used: Nordic, bindings, poling, Indian stride, skating, telemark

Earth: What Is It *REALLY* Made Of?

K-3rd

We know that peanut butter and jelly make a fine sandwich, but what is the earth really made of? This option explores how the forces of nature (wind, water, time) change the earth. We will also take a semi-scientific look at the layers of the earth. The geology of the greater Camp Roger area will also be discussed.

Vocabulary Used: geology, bedrock, glacier, moraine, kettles, loam, sand, magma

Earthkeeping

3rd and up

What problems does man inflict upon the natural world because of his excess and his abuse? Pollution is obvious—and sometimes not so obvious. This adventure offers an overview of the types, the causes, the effects, and the possible solutions of the pollution problem. Several experiments and practical suggestions for making a difference are offered during this presentation.

Vocabulary Used: litter, garbage, landfills, leachate, methane, acid rain, global warming

The Impact of Early Settlers

3rd and up

What was life like for those who first came to settle this part of western Michigan? This adventure calls for the students to become detectives in the woods as we look for clues about the impact on the land that people of prior generations have left behind. This is a fascinating look at “how to read the woods.” Help us uncover the mysteries!

Vocabulary Used: trapping, trading, farming, hunting, homesteaders, trappers, voyageurs

Insects

K-6th

Over one million different species of insects have been discovered—more than twice the total of all other kinds of animals combined! This class takes a look at what makes an insect...an insect. We include a brief introduction to the world of insect classification and then explore the amazing adaptations God has allowed insects to have.

Vocabulary Used: life cycles, nymphs, larva, pupa, head, thorax, abdomen, cocoon, chrysalis

Insects In The Winter

K-6th

O.K., so where do all the insects go when winter comes? Do they all die? Do they all leave for Florida to play shuffleboard? Actually we are still surrounded by many insects in the dead of winter, even if we cannot hear them or see them. This class looks at those amazing insects and how they are prepared to withstand the harshness of a snowy and cold Michigan winter.

Vocabulary Used: life cycles, nymphs, larva, pupa, migration, glycerol, active, semi-active, inactive

Invasive Species

3rd and up

“We are being invaded!” While this warning may apply to science-fiction movies, it also applies to the natural world. The invaders are the non-native species of plants and animals that are now taking up residence in the Michigan woods and waterways. Learn the species, discover the dangers, and explore the solutions to this ongoing and lethal problem.

Vocabulary Used: native vs. non-native, alien, invasive,

Little Bostwick Lake Expedition For Little People

K-2nd

Take a leisurely tour all the way around an entire lake! This journey is designed to help younger children appreciate the pond community of Camp Roger. We will visit “The Valley of the Giants,” learn about noise pollution, and view the lake from an elevated platform. We will cover the ½ mile loop in about an hour.

Vocabulary Used: distance, depth, spring-fed, kettle lake, glacial deposits

Mammals

K-2nd and 3rd-8th

They can be cute and cuddly, but they can also be mysterious and dangerous. What makes a mammal...a mammal? We will explore this question and handle a variety of objects—pelts, bones, teeth, mounts—as we learn more about the Michigan mammals.

Vocabulary Used: predator, prey, carnivore, omnivore, herbivore, rodent, producer, consumer, hunting, poaching, trapping, nocturnal, diurnal

Map Skills and Orienteering

5th and up

Where are we? How do we get from here to there? Explore how the early travelers used primitive tools to navigate through the wilderness. Learn how to read a compass and use a topographical map. Gain understanding and appreciation for those who traveled these woods many years ago with only these tools!

Vocabulary Used: direction, topographical maps, bearings, sightings, compass housing, degrees, magnetic north, true north, degree measurement

Michigan: A Great State

3rd-6th

We live in a fascinating state. This adventure option focuses on the statistics, history, and cultural identity that make Michigan such a unique component of our country. This is a great opportunity to support the facts that you may be learning in the classroom!

Vocabulary Used: Great Lakes, virgin timber, population, area, history, Native Americans, European influence, wolverine, robin, white pine, Petoskey stone

Native Americans

3rd-8th

Too often misunderstanding and false information cloud the truth of history. During this time we will dispel some of the myths of what life was like for the Native Americans of this area. We will discuss and experiment with different aspects of tribal life. We will also play some games that Native American children played hundreds of years ago!

Vocabulary Used: Ottawa, Chippewa, Pottowatomie, Anishinabe, wigwams, scouts

Nature Crafts

K-6th

Nature is God's masterpiece. But he has also given his children a sense of artistic ability and creativity. During this adventure we will "do art" using only natural materials and items found in the woods. Dare to be creative!

Vocabulary Used: creativity, imagination

Our Changing World

K-2nd

As we grow we are constantly changing. Our clothes that fit last month are now too small. The haircut that looked good three weeks ago is getting a bit shaggy. But what about nature? It is always changing too. This workshop is designed for your younger students to think about change. Change always happens. Explore the world of change with us!

Vocabulary Used: adaptations, decomposing, renewable resources, non-renewable resources

Outdoor Cooking and Edible Plants

4th-8th

Out in the woods with nothing to eat? A little knowledge can change all of that! This class explores the world of edible plants that are all around us. We will dine together on whatever we find that is edible! P.S.: Bring your lunch anyway just in case!

Vocabulary Used: edible, energy, toxic, nutrition

Plants: A Primary Introduction

K-2nd

What makes a plant...a plant? In a fun and creative way we spend some time exploring how plants survive, the different functions of various parts of the plant, and what happens to the plant in the winter.

Vocabulary Used: seed, germination, embryo, water, soil, light, seed pod

Scavenger Hunts Spectacular

all ages

We all love to find treasure. We all love to add a measure of success to our group. Our different scavenger hunts guide children in doing what they want to do anyway: explore! We have different options on our scavenger hunt menu, including the "ABC's Search" and "The All-Natural Scavenger Hunt." Different scavenger hunts are available for different ages.

Seeing Is Believing

K-5th

Because we are human beings living in the 21st century, we have learned to rely on one sense more than any of the others: the sense of sight. But many animals do not see particularly well. How are they able to survive in the woods? This special adventure puts the student into “sightless” situations and allows them the challenge of still sensing—in new ways—what is around them.

Vocabulary Used: sensory awareness, sensory deprivation, nocturnal, diurnal

Snowshoeing

all ages

Come and experience this ancient method of winter travel. The Native Americans, the voyageurs, and the early homesteaders found snowshoes to be more than just a sporting oddity. Today we can go for a walk in the woods and appreciate the importance of these tools of travel!

Vocabulary Used: transportation, Native American, trappers, bindings

Survival Skills

3rd and up

Stories of survival abound in the world of children’s literature. Popular authors such as Jean George and Gary Paulsen capture the imaginations of their readers with tales of survival against incredible natural odds. But what would it really take to survive in a Michigan woods? Come along and experiment with us as we survive the woods together!

Vocabulary Used: fire starters, preparedness, distress signals, hypothermia, dehydration

Team-Building Games

K-8th

We will introduce a few simple team-building cooperative games that you can use and take back to school with you. These games are designed to challenge a group of people with a problem and allow them the joy—or the heartache—of solving it themselves. This is a great option for building a sense of unity and cooperation among your students.

Vocabulary Used: community, cooperation, teamwork, trust, communication

Trees

4th-8th

This adventure will look at man’s most important natural resource—trees. This class discusses such topics as: various species, the history of lumbering, measurement, forest management techniques, and future concerns. Stories and play-acting add to the lively class session.

Vocabulary Used: coniferous, deciduous, broadleaf, needles, hardwood, softwood, sap

The Ultimate Expedition

all ages

We all love to explore. This trip is designed to explore some of the areas of Camp Roger and The Fred Meijer Pickerel Lake Nature Preserve that few people actually visit. One can never predict from day to day what might be seen: a flock of turkey, turtles hatching from a sandy shore, a beaver at work, beautiful swans, or a hunting owl. Learn as we journey, for often the journey is more important than the destination!

Vocabulary Used: Whatever we find!

Up Close: Wetlands

K-8th

According to an old farmer, wetlands are those areas that are "...too thick to drink and too thin to plow." We may call them swamps, bogs, marshes, fens, or some other term, but the focus of this time is to demonstrate how vitally important the wetlands are to the overall health of any ecosystem. We will learn about the importance of protecting these endangered areas.

Vocabulary Used: bog, fen, vernal pond, swamp, marsh, peat, decomposition

The Water Cycle

3rd-6th

It rains...it evaporates...it rains again. But there is so much more to learn about the hydrological cycle than such a simple explanation. Take a new look at water conservation, erosion, run-off, and "thinking like water" in this activity.

Vocabulary Used: condensation, evaporation, conservation, run-off, flooding, drought

Winter Survival Skills

4th and up

Surviving in the Michigan woodlands is EASY compared to surviving in the Michigan woodlands *in the winter!* What would it take to survive in three feet of snow with temperatures hovering around the zero-degree mark and a thirty-mile-per-hour wind? Don't fear! We have some answers! Explore the possibilities with us!

Vocabulary Used: fire starters, preparedness, distress signals, hypothermia, dehydration, squirrel hut, snow cave, moisture, wind-chill factor