

# SEVEN PONDS NATURE CENTER

## *School Field Trip Guide*



*Seven Ponds Nature Center, a private, non-profit organization, is a nature sanctuary and environmental education center.*

structural and behavioral adaptations for life in these wetland environments. Indoors we will take a close-up look at a variety of these adaptations by examining prepared specimens and a slide show. Then we will hike down to the pond for a pond dipping session which will give students a first-hand look at many pond organisms and an understanding of what it takes to survive in the water. S.IP.05.11, S.IP.05.13–14, S.RS.05.15, L.OL.05.42, L.HE.05.11–12, L.EV.05.11–12

### **Grade 6: Ecosystems**

***Life in the Prairie*** Students will explore the striking ecosystem of a tall grass prairie. They will discover a world woven together within the tall grasses. Through discussion, activities, and hikes students will understand the ecological role many of the plants and animals play in the prairie community. They will also learn of the loss of much of the tallgrass prairie because of past human activity, and what people are doing to restore and reconstruct this magnificent ecosystem today. S.IP.06.11, S.IP.06.13–14, S.IA.06.13, S.RS.06.15, S.RS.06.17, L.OL.06.51–52, L.EC.06.11, L.EC.06.21–23, L.EC.06.31–32, L.EC.06.41–42

***Exploring Ecosystems*** Seven Ponds is one of the few places in southeastern Michigan where students can observe a range of distinct ecosystems that include forests, wetlands, fields, and prairie. Along the trail, they will be able to compare such abiotic components as soil type and water availability, as well as the plant and animal communities which are unique to each of these ecosystems. Students will gain an understanding of some of the complex relationships in each natural community, including predator/prey, competition, symbiosis, and parasitism. S.IP.06.11, S.IP.06.13–14, S.IA.06.13, S.RS.06.15, S.RS.06.17, L.OL.06.51–52, L.EC.06.11, L.EC.06.21–23, L.EC.06.31–32, L.EC.06.41–42



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slide show, specimens, and a walk get students thinking about their significant connections to the natural environment. S.IP.04.11–12, S.IP.04.14, S.IA.04.13, S.RS.04.11, S.RS.04.18, L.OL.04.15–16, L.EV.04.21–22, L.EC.04.11, L.EC.04.21

***The Wetland Connection*** This program will take us on an adventure through the wetlands found at Seven Ponds. We will investigate the complex interactions of the plants and animals found in these wet worlds through pond dipping and observation, exploring such topic as producers, consumers, food chains, food webs, and predator/prey relationships. Inside, we will have time to take a close-up look at plants and animals using hand lenses and microscopes. S.IP.04.11–12, S.IP.04.14, S.IA.04.13, S.RS.04.11, S.RS.04.18, L.OL.04.15–16, L.EC.04.11, L.EC.04.21

### **Grade 5: Animals and their Environment**

***Amazing Animals (Survival of the Fittest)*** Bring your class out to Seven Ponds and discover the incredible array of adaptations animals have for surviving the seasonal changes of the natural world. The great diversity found at the nature center will allow us to explore a variety of habitats and learn the many ways animals have become linked to their environment. Students will observe the shapes and sizes of animals and behavior, and gain an understanding of the adaptations animals have to help them survive Michigan's seasonal changes. S.IP.05.11–14, S.RS.05.15, S.RS.05.17, L.OL.05.42, L.HE.05.11–12, L.EV.05.11–12

***Wetland Adaptations*** Lakes, ponds, and streams present a variety of challenges for the organisms residing in them. Plants and animals have many



### **Grade 2: The Water Cycle**

***A World of Water*** The Earth is a water planet and Seven Ponds has plenty of it. Students will understand that water is a natural resource and through hands-on activities will discover all of the different places water is found at the nature center—in the ground, in the air, and in a variety of wetland communities which include lakes, ponds, streams, swamps, and marshes. Students will compare plant and animal life in several locations to gain an understanding of the habitat requirements of a variety of organisms. S.IP.02.11–16, S.IA.02.12–14, S.RS.02.11, L.OL.02.13–14, E.FE.02.11–14, E.FE.02.13, E.FE.02.21, E.FE.02.22

### **Grade 3: Natural Resources & Human Impact**

***Forest Home of the Woodland Indians*** Michigan's once vast forests were a giant supermarket to the Woodland Indians. This habitat provided everything needed for survival. Today, we purchase most of our needs from supermarkets and department stores. Through activities and hands-on nature study, students will learn how natural resources were used by the Woodland Indians, how we use them today, and the impact of each on our natural environment. S.IP.03.11–S.IP.03.13, S.IP.03.16, E.ES.03.41–43, E.ES.03.51–52

### **Grade 3: Adaptations of Living Things**

***Cattails to Crayfish*** Adaptations are everywhere in the natural world, and there is no better place to investigate this than in the water. Students will explore the pond looking for the many different plant and animal groups found there and what adaptations they use to survive in their watery environment. S.IP.03.11 – S.IP.03.13, S.IP.03.16, S.IA.03.12–13, S.RS.03.11, S.RS.03.18, L.OL.03.31–32, L.OL.03.41–42, L.EV.03.11–12

### **Grade 4: Plant & Animal Relationships**

***Native Americans and the Web of Life*** Have you ever eaten sunlight? Do you have plants and animals in your lunch? What is the origin of your food, clothing and shelter? We will explore the nature center from the perspective of the Indians who used this land in the past, and consider our relationship with the land today. A

SEVEN PONDS NATURE CENTER is a nature sanctuary, environmental education center, and a peaceful retreat located in Dryden, Michigan. Over six miles of trails lead visitors through the center's 468 acres, featuring deep, glacial lakes, rich wetlands, a tallgrass prairie, mature woodlands, and a stream with an active beaver colony. It is an area of tremendous diversity where every season and every visit brings new sightings and new insights.

Children are fascinated by nature, yet have little direct contact with it. Seven Ponds is a wonderful outdoor classroom where children can experience nature first-hand. Our knowledgeable staff and well-trained volunteer naturalists guide visitors toward a greater understanding of their natural environment and humankind's inseparable role in it. We share our knowledge and appreciation of the natural world and encourage a sense of responsibility toward it. We invite teachers and youth leaders to schedule a field trip to Seven Ponds.

### SCHEDULING INFORMATION

- Field trips can be scheduled by calling Seven Ponds. All group visits must be arranged in advance and groups have access to the building and trails only under the supervision of a naturalist. When teachers reserve a date, they will be sent a confirmation letter, pre- and post-trip ideas, and driving directions.
- Groups receive an indoor introduction, and then are divided into groups of about 15 students to encourage individual participation on the trails. We are thus limited in the total number of people, students and adults, which we can accommodate.
- We recommend that groups bring at least one adult chaperone for each group of about 15 students on the trails. Additional adults are welcome, as long as their numbers do not create group sizes which take away from the experience of the students.
- Group members should dress for the weather and natural setting. The desire to learn fades rapidly when children are cold, wet, or otherwise uncomfortable.

- Sack lunches may be eaten in the picnic area. We have no indoor eating facilities.
- Seven Ponds is a nature sanctuary. Collecting plants and animals is not permitted unless the collecting is part of the scheduled program.
- When scheduling a program, let us know about children with special needs; physical, emotional, or learning. This allows us to make special arrangements prior to your arrival.
- The bookstore carries a wide selection of nature oriented materials appropriate for students to buy as gifts and souvenirs.
- Seven Ponds also offers a Traveling Naturalist Program that brings nature and science concepts into the classroom, classroom teacher kits, teacher training workshops, and a variety of education materials. Contact the nature center for more information.

### GENERAL PROGRAMS

**Seasonal Walk** Pre-school Children through Adult Seasonal Walks take advantage of the variety of natural happenings at Seven Ponds through the seasons. Spring features woodland wildflowers and singing frogs. During the summer, one finds prairie wildflowers and nesting birds. Fall features changing leaves and animals preparing for winter. In winter, birds abound at the feeders and animals leave tracks in the snow. Each season, indeed each day, has its own fascinating mysteries for eager students to discover along our trails. Much of this program is spontaneous, with our knowledgeable naturalists helping explore interesting objects and events encountered along the trail. The walk incorporates a variety of themes appropriate for each grade level.

*Time: 1½–2 hours Fee: \$3.00*

**Pond Exploration** Grades K through 6 We will “dive” into the underwater world of our lakes and ponds. Through photos, animal specimens and pond sampling, students will learn all about the critters that make the water their home. Grades K – 1 will do pond critter observation and grades 2 – 6 will use pond nets to capture organisms.

### EXPLORER PROGRAMS

Explorer Programs offer a sequential kindergarten through sixth grade curriculum, with each grade focusing on specific ecological concepts. Each program includes state science expectations. We bring classroom lessons to life, reinforcing the work students are doing at school. These interesting programs promote greater knowledge, awareness, and appreciation of our natural world, using hands-on-activities, specimens, slide shows, and nature walks. *Time 2–2½ hours Fee: \$4.00*

#### Kindergarten: Living & Nonliving Things

**Sensing the Forest** Children will use their senses to explore the beautiful forest of Seven Ponds, using simple tools to learn about the natural world. They will discover sights, sounds, and smells, from tiny mushrooms on rotting logs to the sounds of birds singing from the treetops. The children will have plenty of hands-on experiences while looking at and touching many kinds of plants and animals, learning about the basic needs of these organisms in the process. LO.LO.00.11, LO.LO.00.12, S.IP.00.11–15, S.IA.00.12–14, S.RS.00.11

**The World of the Beaver** Beavers are builders and loggers, and their work stands out at Seven Ponds! With the beaver's help, young learners will discover the differences between living and nonliving things. We will become beaver detectives and use our senses and detecting tools to find clues that will lead us to the beaver's home. Along the way, children will see many kinds of plants and animals and learn what these living things need to survive. LO.LO.00.11–12, S.IP.00.11–15, S.IA.00.12–14, S.RS.0011

#### Grade 1: Animal Lifecycles

**From Tadpole to Frog** The nature center's lakes and ponds abound with animals of all shapes and sizes, with a variety of lifecycle types. We will discover how these animals begin their life in the pond, which young animals live in the water, and which animals leave the water as adults. Through pond exploration and animal observations, the children learn how animals live and grow in the wild.



L.OL.01.13, L.OL.01.21, S.IP.01.11–15, S.IA.01.12–14, S.RS.01.11–12, L.HE.01.11–12

**Grasshoppers to Groundhogs** The forests and fields at Seven Ponds are teeming with animal life, including insects, amphibians, reptiles, birds, and mammals. Using nets, magnifying lenses, and animal specimens, we will learn about the lifecycles of these animals, and discover how animals ranging from insects to mammals spend their days from birth to adulthood in the wild. Suggested fall program. L.OL.01.13, L.OL.01.21, E.ES.01.11–12, S.IP.01.11–15, S.IA.01.12–14, S.RS.01.11–12

#### Grade 2: Plant Lifecycles

**The Secret Life of the Prairie** The tallgrass prairie at Seven Ponds contains a variety of amazing plants that sprout, grow, flower, and produce seed each year. Through a variety of hands-on activities, children will learn about the lifecycle of prairie plants, how the prairie provides the needs for these plants, and the many ways that these plants survive in an adverse environment. Students will even collect seeds from selected plants to take back to the classroom for a planting project! Suggested fall program. S.IP.02.11–15, S.IA.02.12–14, S.RS.02.11, L.OL.02.14, L.OL.02.22, L.HE.02.13

**Green Planet** Green plants are all around us, in the forest, prairie, fields, and wetlands. Students will get the opportunity to explore this green natural world. Through applied investigations and discussion, students will learn about the amazing life cycles of many plants, as well as the interesting relationships between plants and animals. S.IP.02.11–16, S.IA.02.12–14, S.RS.02.11, L.OL.02.14, L.OL.02.22