



Northern Lights Wildlife Education Programs

\$200/presentation

Come to us, or have us come to you!

Of course, a field trip is always much more enjoyable than staying at school... so come to the Wolf Centre for an entertaining and interactive look at wolves, plants and other organisms! We can present two-hour specialty programs, or combine programs for a full day of fun and activities! We recommend choosing a grade level lesson as well as one of our general programs. (All of our programs include our standard 20-minute interpretive program offered at Northern Lights Wildlife).

If you would rather have us come to you... we can give your class a break from the usual with an enjoyable power point presentation, a hands-on look at skulls and pelts, and the opportunity to pick at our experienced and knowledgeable minds! These presentations are generally an hour in length and can be adapted to fit your school's class periods.

GRADE LEVELS - According to the Curriculum:

Kindergarten

These young inquisitive minds will have the opportunity to explore the *Characteristics of Living Things*. Students will gain a better understanding of the physical characteristics through comparisons of wolves, coyotes, deer and other local animal species, as well as some local plant species. Sensory activities get the students using their nose, eyes, ears and sense of touch in unfamiliar ways.

Grade 1

Students will gain a better understanding of the *Needs of Living Things*. The difference between living and non-living things will be clarified. We look at wolves and other organisms, exploring how they meet their needs for survival. In identifying how wolves meet their needs, we explore habitats, ability to cope with temperature changes, ways of obtaining food, and how they protect themselves from danger.

Grade 2

Students will have a fun and interactive look at *Animal Growth and Changes*. We will classify animals according to physical similarities and differences, and physical and behavioural adaptations of wolves and other mammals will be highlighted. Learn how wolves are important in the lives of Aboriginal people.

Grade 3

Students will have an in depth look at *Plant Growth and Change*. We compare local plants, looking at resemblance and variation. Activities work on increasing students' knowledge at identifying local plants and shrubs. Learn about the traditional human and medicinal uses, as well as exploring how different species of wildlife utilize plants.

Grade 4

Students will engage in interactive and enjoyable ways of learning about *Habitats and Communities*. We compare the structure and behaviour of the grey wolf as it adapts to different habitats. In analyzing simple food chains, children can learn about the important roles each organism has. Touching on the Aboriginal concept of respect for the environment, students will gain appreciation for the circle of life. We will see how personal choices and actions have an impact on the environment.

Grade 5

We encourage teachers to pick from any of our general programs being offered, as the British Columbia curriculum for this grade focuses on learning about the human body, in which Northern Lights Wildlife does not specialize. (The Alberta grade 5 curriculum focuses on Wetlands, which is offered as one of our general programs).

Grade 6

Students will be engaged in learning about the *Diversity of Life*. We look at real life examples of how wolves affect the diversity of an ecosystem. Students explore the vast diversity of species that surround them, from lichen to plants to mammals. We analyze how different species adapt to their environment.

Grade 7

Students will further understand *Ecosystems*. We look at different plant communities and how they can help define an ecosystem. Students analyze the roles that different animals have as part of interconnected food webs and populations, as well as evaluate the needs for sustaining healthy ecosystems and consider human impacts and consequences on these ecosystems.

GENERAL PROGRAMS:

A. Wolf Ecology

The basic biology and ecology of wolves is explored. Students will discover terms such as carrying capacity, keystone, bio-indicator and umbrella species. The anatomy of wolves and fun facts will be revealed. Food webs and energy cycles will be discussed accompanying an interactive web of life activity. This presentation is designed for student's grades 4 and up.

For the younger students, grades K-3, we have a more simplistic version of wolf ecology. We include the reading of the book "We Are Wolves", covering family structure and puppies. Activities incorporate wolf communication and adaptations.

B. Wolf Adaptations

We will explore the physical and behavioural adaptations of wolves that enable them to survive. With a hands-on look at skulls, teeth and pelts, students get a better understanding of the physical characteristics of wolves. Knowledge is gained on adaptations such as locomotion and communication. Physical and behavioural comparisons of wolves with coyotes and with prey species are conducted. We explore in depth the sensory skills of a predator with the fun and popular 'Thicket Game'. Sensory activities get the students to expand their thinking using their nose, eyes, ears and sense of touch in unfamiliar ways.

C. Predator-Prey Dynamics

We will discuss the elements of predator-prey dynamics covering adaptations and traits of predator and prey animals. The “Animal Game” is played, which further defines the interaction of different species. The importance of predators in an ecosystem is emphasized with examples showing the repercussions of removing such animals from the environment. Due to the complexity and physical aspects of the Animal Game we recommend this program for grades 3 and up.

D. Bears

Exploring the conservation of black bears and grizzly bears, we will discuss current issues and impacts on bear populations. We include an in-depth look at habituation and the use of Karelian Bear Dogs, with the opportunity to interact with these amazing canines. Bear Aware and bear safety is addressed, especially for students living in bear habitat. Students will gain knowledge in the ecology of bears, and familiarity with terms such as keystone and umbrella species. Distinguishing the difference between grizzly bears and black bears through appearance, skulls, tracks and behaviour will give students a clearer ability in identification.

E. Plants

Take part in fun activities that increase knowledge of tree and shrub identification. Learn about the traditional human and medicinal uses, as well as exploring how different species of wildlife utilize plants. Students can learn to identify different ecosystems in accordance to the vegetation of the area.

F. Wetlands

An adventure hike in Golden, west of the railway. Students will need rubber boots and rulers (binoculars would be a plus), plus dipnets and water basins for the collection of aquatic invertebrates for identification. We will explore the ecology of wetlands, identifying both abiotic and biotic components in the ecosystem. The importance of wetlands and streams will be emphasized. We will take a look at the different wildlife that utilizes wetland habitats through identifying tracks, scat, and birds in the area.

This program can be limited to a half-day adventure or extended to a full-day field trip. Safety and transportation (on foot or by bus) must be organized by the school.

G. Quagmire: A Simulation Game for Wetland Decision Making

Provided to Northern Lights Wildlife from Green Street, Quagmire is an interactive role-playing game simulating a real life situation that focuses on the development of a wetland. In a debate format students take on roles of various stakeholders. The goal of this game is to engage students in interactive thinking and to increase their knowledge of wetland ecosystems, land development and preservation issues. This game will enhance skills in critical thinking, evaluation, analysis, application, discussion, questioning, public speaking, and reporting.

Quagmire is designed to meet the curriculums of **grades 5-12 for Science, Social Studies and English**. This activity is designed for in class sessions that may vary in duration depending on the amount of homework given. Teachers can decide what duration is appropriate. We recommend approximately a full week of regular lecture time to conduct the program.