

GETTING STARTED

AN INTRODUCTION TO GRASSLAND GATHERINGS

Science Alberta Foundation is pleased to make *Grassland Gatherings*, one of our *Science-In-A-Crate* programs, available in your community.

This crate provides an opportunity for families, elementary students, (in particular, Grade 1 children), and community groups to use their scientific knowledge and skills to gather information regarding the grassland ecosystem of southern Alberta. Designed for young students at the introductory stages of scientific inquiry, the seven activities within the crate are based on specific learning expectations set out in the Alberta Education Program of Studies (1996). By adopting the persona of junior wildlife biologists conducting a field study, participants are invited to make observations, describe what they have observed, connect these ideas to their knowledge base, interpret their findings, and reflect on their growing understanding of this ecosystem. This investigation of the needs of the plants and animals that make their home on the prairies also provides them with the opportunity to identify the value of these living things and learn about our shared responsibility in caring for them. A number of the optional extension activities invite students to probe further into the needs of those plants and animals that appear on the lists of endangered species of the prairies. The activities within the crate are designed as hands-on experiential learning stations that need not be completed in chronological order.

The Crate Activity Guide provides all the information needed to set up the crate and have participants successfully complete each activity. Included within this guide is a “*Tie it to the story...*” script to set the scene, as well as, a list of specific materials, set-up instructions, and teacher background information for each of the seven activities. Optional extension activities called *Gathering more information*, have been added to each activity and may be used for further guided discussion and research at the end of each specific activity or at a later date. Each activity has a Background Information stand which students need to read or have read to them prior to starting this activity and a What to Do stand that gives step-by-step instructions on how to complete the exercise.

Assuming that there are Grade 1 students who may require assistance in reading the materials and guidance in following the procedures, an instructional card for classroom volunteers/assistants is also included with the print materials. This What to Do card for volunteers is designed to eliminate the need for lengthy instructions by the teacher. The student journal, called My Field Journal, is another useful resource for developing science concepts and may be used as documentation of the learning of each participant. Probing questions provide opportunities for students to deepen their understanding by connecting their learning, interpreting their ideas, and reflecting

upon their insights. The black line masters of My Field Journal, the corresponding answer key, and student copy of a KLEW chart appear at the back of the Activity Guide.

Included in the guide are sections on careers related to mathematics, and other practical references that are useful in piquing the interest and “inspiring the minds” of these young participants as they explore the world of science.

The activities and topics are as follows:

Activity	Topic
Activity 1 Who’s Who?	Through a card game activity, students are able to observe, describe, and compare a number of the plants and animals found on the grasslands of Alberta by classifying them into one of four categories (grasses, wildflowers, birds, and mammals).
Activity 2 Wanted	Using a model of a burrow, students are asked to hypothesize what animals could have made such a home in the grasslands. Probing questions help them understand that living things are valued in many ways, e.g., as part of a community that exists on the prairies, for shelter, as a food source, etc.
Activity 3 Animal Dentistry	Students observe the teeth of 3 different animals that live on the grasslands. Based on observations of these visible characteristics they classify these animals according to their dentistry and their resulting diet. They use this information to build numerous food chains of specific animals on the prairies.
Activity 4 Habitat Hunters	Using magnet pieces and a magnet board, students determine the essentials of a suitable habitat for various grassland animals. Probing questions help them to identify the requirements that animals have for the maintenance of life.
Activity 5 Prairie Plantings	Students assemble and match pairs of puzzles of prairie plants under different growing conditions. They are asked to identify what requirements must be met in order for these plants to maintain life.
Activity 6 Leopard Frogs and Porcupine Grass	Using photographs, illustrations, and specimens in magnifying boxes, students observe and describe the adaptations of plants (i.e., porcupine grass) and animals, (i.e., the Leopard Frog) to the conditions in which they live.
Activity 7 Have Seeds will Travel	Students examine illustrations and specimens in magnifying boxes to observe and describe ways in which plants and animals living on the prairies depend upon each other. They use this information to understand that plants provide a food source for animals while animals help spread their seeds.