

WildFiles.TV

Teachers' Guide for

Hare We Go!

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SERIES SYNOPSIS

WildFiles.TV is a 13-part, interactive science and nature television series for school-aged children. Each half-hour episode profiles a different animal species in a dramatic story of a young character with an animal mystery or a problem to solve. Hosts Chris and Ava, from the Wild Files research station, and real-life Canadian scientists provide information and facts about the animals throughout each episode.

Detailed files of the same 13 animals are also found in the virtual clubhouse, *WildFiles.TV* Interactive. Here children can extend their science learning from the videos and explore the wildlife files and over 100 activities including games, puzzles, quizzes and challenges. The activities are designed to be fun, appealing and accessible to a variety of learning styles with the use of brightly coloured graphics, video, animation, audio, interactive activities and text.

WildFiles.TV promotes environmental consciousness while encouraging children's active exploration, problem solving, science learning and creativity. The dramatic storyline in the videos is used to present science concepts in an entertaining, yet realistic format.

DVD CONTENTS – Snowshoe Hare Episode

- 23-minute video
- Interactive animal content in text, audio, animation, cool facts, video clips and puzzles
- An original song about the animal, with lyrics
- 1 science project lesson plan
- 1 crossword puzzle with answer key
- 1 word search with answer key
- 1 quiz with answer key

CURRICULUM CONNECTIONS (based on Alberta curriculum)

Science, Outdoor and Environmental Education, Social Studies, Health and Life Skills, Language Arts or Fine Arts and Information and Communication Technology.

LEARNING OBJECTIVES

Grade 1: Needs of Plants and Animals

- Observe, describe and compare living things.
- Identify ways in which living things are valued; e.g., as part of a community of living things, as a source of food, clothing or shelter.
- Classify some common local plants and animals into groups on the basis of physical characteristics; e.g., adaptations for survival such as beaks, claws, or prickles.
- Identify examples of animals that are normally under human care (domesticated) and those that are normally independent of human care (wild).

- Recognize that some plants and animals must adapt to extreme conditions; e.g., arctic and desert plants and animals.

Grade 1: Senses

- Recognize that other living things have senses and identify various ways animals use their senses; e.g., sensing danger, finding food, recognizing their own young or potential mates.

Grade 2: Hot and Cold Temperatures

- Identify materials that insulate animals from the cold; e.g., wool, fur and feathers; and identify materials that are used by humans for the same purpose.

Grade 3: Animal Life Cycles

- Classify a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone.
- Observe and describe the growth and development of various species from a variety of groups and identify similarities and differences in their developmental sequences.
- Identify the food needs of animals from different groups and describe changes in how each animal obtains food through different stages of its life.
- Demonstrate awareness that parental care is characteristic of some animals and not of others, and identify examples of different forms of parental care.
- Demonstrate awareness that animals require different habitats in order to meet their basic needs of food, water, shelter and space.
- Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.

Grade 6: Trees and Forests

- Identify why trees and forests are important as a habitat for a variety of living things.
- Describe kinds of plants and animals living on or near trees and how trees affect and are affected by these living things.

Grade 6: Evidence and Investigation

- Recognize recent evidence of animal activity in an outdoor setting.

Grade 9: Biological Diversity

- Investigate and interpret diversity among species and within species and describe how diversity contributes to species survival by exploring concepts such as variation, niches, dependencies among species, and species survival.

Grades 7-9: Outdoor and Environmental Education – Outdoor Core

- Students will develop the skills necessary to apply route information while en route, including map reading skills, compass skills, etc.
- Students will develop skills in environmentally responsible outdoor activities appropriate to different seasons.

Grades 1-9: Health and Life Skills

- Relationship Choices: Understanding and Expressing Feelings
Many of the problems faced by the young characters in the *WildFiles.TV* episodes may be used to promote discussion under this general learning outcome. Problems such as resolving a dispute with a friend, feelings of sadness after a pet dies, fear of new situations, dealing with change, adapting to a new school environment or to the changes that accompany adolescence are all topics addressed in the series.

EPISODE TITLE: *Hare We Go!*

FEATURED ANIMAL: Snowshoe Hare

THEMES:

- Adapting to changing seasons
- Camouflage/Defense from predators
- Rodents
- Orienteering
- Coping with nature by imitating nature

SUMMARY:

Moeah takes a few tips from Snowshoe hares and finds that she can survive anything.

Moeah is feeling low about having to go on a winter survival trip with her class. She has a hard enough time with sport competitions to begin with; she can't imagine trying to compete and move around in all this snow. Chris invites her along snowshoeing with his friend Renee, to give her some practice. Renee just happens to be an expert on Snowshoe hares and other **lagomorphs** and tells Moeah all about the ways hares survive and **adapt** to the **changing seasons**. Moeah learns to spot Snowshoe hare **tracks** and other **signs of animal activity**, finds out about Snowshoe hares' **diet, camouflage, physical features, habitat, and senses**. Chris also shows Moeah how to use a **compass**. As they explore the trails, and try to retrieve a faulty "WildCam" for Ava, Moeah's snowshoeing gradually improves, and so does her confidence.

VOCABULARY: Video

Students can listen for these terms to find many of them defined in the video.

*(*Definitions found in the Wild Words glossary at www.wildfiles.tv)*

adaptation	foot load	precocial*
altricial (<i>helpless, naked and blind when born</i>)	GPS/Global Positioning System	predators*
bearing (<i>direction</i>)	hare chew	rodents*
boreal forest*	incisors*	Run (<i>snowshoe hare trails</i>)
compass	insulation	scientific order*
coprophagy*	keystone species (<i>supports other animals as a food source</i>)	Thermodynamics (<i>relationship between heat and energy</i>)
degrees (<i>unit measures of an angle</i>)	lagomorphs*	toxic
diastema gap	molars*	waypoint (<i>a point between major points on a trail</i>)
	molt*	

VOCABULARY: Interactive Content

(Definitions pop up on the DVD when terms are scrolled over)

molt	coprophagy	precocial
predation	<i>lepus americanus</i>	gestation
population	lagomorph	reproductive
forbs	rodent	
herbivore	incisor	
cellulose	estrus	

SONG: "Rabbits and Hares" - sing along with Chris! (See lyrics on pg.6).

DISCUSSION QUESTIONS: (after viewing video and exploring the interactive content)

- Snowshoe hares turn white in the winter to blend in with the snow better. How do other animals change with the seasons? How do you change with the seasons?
- Give examples of ways the Snowshoe hare adapts to its habitat.

- The video tells us that Snowshoe hares are lagomorphs. Name some other lagomorphs. How are these similar or different from rodents?
- What is coprophagy? We think coprophagy is pretty gross, but hares have to do this in order to survive. How does coprophagy benefit Snowshoe hares? Predict what might happen if they didn't do this.
- How does a Snowshoe hare defend itself from predators? Are these good strategies? Why or why not? Give examples of situations when humans use these strategies.
- Have you ever seen a hare in your community? How can you tell if it's a Jackrabbit or a Snowshoe Hare? Give examples of differences between these two species and explain the reason for the differences.
- Chris says, "The best way to cope with nature is to copy it". How did Moeah copy Snowshoe hares? Identify ways that you cope with nature by imitating what animals do.
- Have you ever used a compass? Give examples of situations when a compass would be useful.

ACTIVITIES:

- After watching the video, have students review the interactive content in groups or independently. Once they have finished all the material, have them complete the Snowshoe hare word search, crossword puzzle or quiz to evaluate their learning.
- Use a dictionary or an Internet search to define 'keystone species'. Make a poster about keystone species demonstrating all the species that depend on the Snowshoe hare for survival and what the Snowshoe hare needs to survive. Include examples of other keystone species and predict what would happen if all the snowshoe hares were removed or extirpated from an area.
- Brainstorm nouns and adjectives related to Snowshoe hares. Use words from this list to write a poem or short story about the Snowshoe hare.
- Watch the "Why Rabbit Turns White" segment in the *Stories From the Seventh Fire: Winter* video. Write a 'pourquoi' tale to explain an adaptation of an animal of your choice.
- Research the reason behind Snowshoe hares' rapid reproduction. What is the advantage of reproducing so quickly? Explain your findings in a paragraph. Draw a diagram or use materials of your choice to represent this exponential growth. Present your findings to the class.
- Take a class outdoor expedition to learn orienteering skills using a compass.
- Moeah was worried about her class survival camping trip because she didn't think she could compete. Think about a time you had to do something you weren't very good at. How did you feel and what did you do about it? Write a play, poem, newspaper article, song or make a video about a similar experience.

HANDS ON SCIENCE:

Print out the complete lesson plan for this Hands on Science experiment.

Snowshoe Hare - Lagomorph Logarithm

Crystals are like an unchecked population of hares; they grow exponentially. Try this activity to see how quickly crystals and hares multiply.

There are a total of 30 lesson plans for experiments and activities available to *WildFiles.TV* members on www.wildfiles.tv. Each activity is related to a science concept from an episode of *WildFiles.TV*.

EDUCATIONAL FEATURES:

WildFiles.TV resource:

- a) Addresses specific learner expectations;
- b) Encourages students to develop and practice skills in science inquiry;
- c) Addresses a variety of learning styles;
- d) Applies to a range of grade levels and abilities;
- e) Shows animal species in their natural habitat;
- f) Is wildly humorous;
- g) Integrates subject matter across several subject areas;
- h) Is teacher-friendly;
- i) Provides students the opportunity to extend learning;
- j) Addresses the Information and Communication Technology (ICT) learning outcomes;
- k) Is interactive; and
- l) Provides practice and study opportunities.

MORE WILDFILES.TV TITLES:

Episode Title	Featured Animal
Arachnophobia On the Loose	Tarantula
Big Ol' Moose	Moose
Feather of Hope	Peregrine Falcon
Just Can't Bear It	Black Bear
Lair of the Tiger	Tiger Salamander
Lone Wolf	Wolf
Owl for One, One for Owl	Barred Owl
Strong as a Muskox	Muskox
Tale of the Giant Beaver	Beaver
The Frog who Would be Prince	Wood Frog
You Go, Caribou	Caribou
You Say Buffalo, I Say Bison	Bison

WildFiles.TV
"Rabbits and Hares"
Song Lyrics

When I was just a boy
I was rather coy
When mom read me a rabbit story
And this particular book
Was worth more than one look
Though I didn't see the allegory

And in some later years
A rabbit led to tears
When a friend brought his bunny by
Well this Easter pet
Without the least regret
It scratched out my kitty's eye

CHORUS:
Well rabbits and hares
In spite of your cares
Are not what they always seem
Most of the time given some line they'll leave you hoppily

That bad experience stuck
Until a stroke of luck
That I saw a hare running through my yard
Following down the block
And through some thick burdock
I watched rabbit fears discard

And from that time to now
I follow the rabbit vow
And I liked every wild one I met
All rabbits and hares and cottontail pairs
I prefer to those bunny pets

CHORUS

Now any place I go
I make it a point to know
The rabbits I meet everywhere
From my back road lanes
To exotic plains
I smile at each passing hare

CHORUS

They'll leave you hoppily
They'll hoppily leave you be