

WildFiles.TV

Teachers' Guide for Tale of the Giant Beaver

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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 – Beaver 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

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

LEARNING OBJECTIVES (based on Alberta curriculum)

Grade 1: Building Things

- Select materials and construct and compare models of animal homes.

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).

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 2: Small Crawling and Flying Animals

- Identify ways in which animals are considered helpful or harmful to humans and the environment.

Grade 3: Animal Life Cycles

- Classify a variety of animals, based on observable characteristics; e.g., limbs, teeth, body covering, overall shape, backbone.
- 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 adaptations of a young animal to its environment, and identify changes in its relationship to its environment as it goes through life.
- Identify examples of environmental conditions that may threaten animal survival, and identify example of extinct animals.
- Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.
- Demonstrate knowledge of the needs of animal studies, and demonstrate skills for their care.

Grade 5: Wetlands

- Identify some plants and animals found at a wetland site, both in and around the water, and describe the life cycles of these plants and animals.
- Identify and describe some adaptations that make certain plants and animals suited for life in a wetland.
- Understand and appreciate that all animals, not just the large ones have an important role in a wetland.
- Identify human actions that can affect the abundance or survival of living things in wetland ecosystems; e.g. adding pollutants, changing the flow of water, trapping or hunting pond wildlife.
- Identify individual and group actions that can be taken to preserve and enhance wetland habitats.
- Recognize that changes in part of an environment have effects on the whole environment.

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.
- Identify an issue regarding forest use, identify different perspectives on that issue, and identify actions that might be taken.

Grade 6: Evidence and Investigation

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

Grade 7: Interactions and Ecosystems

- Analyze a local environmental issue or problem, based on evidence from a variety of sources, and identify possible actions and consequences, such as the trapping of beavers.

Grade 9: Biological Diversity

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

Grade 7-9: Outdoor and Environmental Education: Outdoor Core

- Students will approach the planning of outdoor activities with a positive regard for themselves, for others and for the environment.
- Students will recognize the potential safety and enjoyment of outdoor activities.

Grades 7-9 Outdoor and Environmental Education: Environmental Core

- Recognize changes that result from human use of environments, including: human construction/roads/buildings.
- Recognize natural changes in environments such as extinction or succession.
- Recognize that the materials that make up living things are recycled continuously.
- Develop knowledge of the diversity of life found within these environments.
- Interpret evidence of interaction between a living thing and its environment.

Grade 4: Social Studies: The Stories, Histories and People of Alberta (Consultation draft 2003)

- Recognize the presence and influence of diverse Aboriginal peoples as inherent to Alberta's culture and identity.

Grade 5: Social Studies: Physical Geography of Canada (Consultation draft 2003)

- Appreciate the influence of the natural environment on the growth and development of Canada.

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: *Tale of the Giant Beaver*

FEATURED ANIMAL: Beaver

THEMES:

- Adaptations
- Animal legends
- Animals make positive changes in the environment
- Wetlands
- Coping with an elder's aging

SUMMARY:

Lucas uncovers the truth about the 'giant beaver'.

Lucas wishes his active, outdoorsy grandfather would stop risking his health hiking and camping – he's worried he'll fall and break a hip. He asks Chris to join them on a fishing excursion to try to convince Grandpa to take it easy. Grandpa, on the other hand, wants his grandson to stop coddling him and hiding his hiking boots! As they set off canoeing, Grandpa tells a tall tale about his encounter with a giant beaver whose, "teeth were as big as chainsaws". Chris and Lucas don't believe him, but are interested to see some real beavers in action.

While exploring beavers' natural habitat, they encounter biologist Kathryn Martell and together they examine beaver habits and habitat. She confirms that a long time ago there was in fact a giant beaver, which has since become **extinct**. Lucas learns all about beavers' role in **creating new habitats** for other wildlife **building dams** and **beaver adaptations, diet, physical features, and predators**. He also gets a look at a family of beavers inside their **lodge** on Ava's 'WildCam'. Ultimately, Lucas learns to put his grandpa's aging in perspective and to enjoy the precious time they have to explore wildlife.

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)

bacteria*	dam	nictitating membrane*
beaver chew	<i>Giardia lamblia</i> *	riparian biologist
beaver fever	incisors*	rodent*
castoreum*	kits*	
colonies	lodge	
coprophagy*	matriarchal*	

VOCABULARY: Interactive Content

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

bacteria	<i>Giardia lamblia</i>	nictitating
cambium	incisors	palatable
<i>Castor canadensis</i>	kits	rodents
cellulose	matriarchal order	
coprophagy	microorganism	
gestation	monogamous	

SONG: "Beaver Tail Tale" - sing along with Chris! (Lyrics on pg.7).

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

- List the adaptations that help a beaver to survive in and near the water. How are these similar or different from human adaptations?
- Give examples of how beavers change their surrounding environment. In what ways do humans change the environment we live in?
- Which animals do you think most benefit from the ponds created by beaver dams and why?

- Predict what would happen if beavers were removed from their habitat.
- Lucas worried about his Grandpa's health. Give an example of a time you worried about someone you care about.
- Lucas talked to Chris about his worries and it helped. What would you have done about your fears if you were Lucas?

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 beaver word search, crossword puzzle or quiz to evaluate their learning.
- Take a class trip to explore a wetland habitat and observe a beaver lodge. Return and build a classroom pond (see instructions below).
- Using materials collected from nature, build a model of a beaver lodge and surrounding habitat. Compare the homes built by beavers to the homes of other animals using a chart.
- Research the history of the beaver and its role in the early development of Canada. Choose a format to present your findings to the class, such as a poem, song, play, poster, brochure, story, etc.
- Design a game using questions and answers about beavers and other wetland animals. Explain the games to the rest of the class, and circulate to play them all.
- Have you ever encountered a mysterious animal? Read a selection of animal legends, and then write your own legend about an animal of your choice (real or imaginary).
- Create a comic strip to retell what Lucas learned from his experience in the video. Include images and text in each frame of the comic strip.

HANDS ON SCIENCE:

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

Beaver - Build a Pond

Here's an activity you can use to create your own pond ecosystem, right in your very own room. And don't worry - it won't even stink.

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.
- 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
Hare We Go!	Snowshoe Hare
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
The Frog who Would be Prince	Wood Frog
You Go, Caribou	Caribou
You Say Buffalo, I Say Bison	Bison

WildFiles.TV
“Could it Bea...ver?”
Song Lyrics

I was walking through the woods; it was getting dark and spooky
Night was falling faster than I'd hoped
And since I couldn't see well I had to listen closely
When all at once what sounded like a gunshot made me gulp

Could it be somebody shot at a wolf?
Or maybe even cougar or bear
I was getting curious but fear made me delirious
I went to see although I was scared

I came into a clearing and heard some water trickling
Soon I found myself standing by a pond
On the other shoreline a great big tree fell crashing
Was it some big bull moose knocking that thing down?

Could it be that somebody shot him?
Or was it another noise instead?
I wasn't gonna find out, I was just about to cry out
When on the water I could see a pair of little heads

Looking at me, they went on cutting down trees
Big ones and small ones, building up their pond
They didn't take a break there, but when they sensed some danger
They quickly dove below and then their tails did make that sound

I watched them for a little while but night was now upon us
And after all I had to get back home
But just as I was leaving I overheard one say
“If you're gonna do some target practice, wait 'til we're alone”

Could it be, who knows?
I'll see all you guys later
It's getting way too dark for me