

WildFiles.TV

Teachers' Guide for

You Say Buffalo, I Say Bison

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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 – Bison 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).

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 a variety 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.
- Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.
- Demonstrate knowledge of the need for animal studies, and demonstrate skills for the care of animals.

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.

Grade 9: Biological Diversity

- Investigate and interpret diversity among species and within species and describe how diversity contributes to species survival in terms of 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 continuously recycled.
- 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 – Alberta: A Sense of Land (Consultation draft 2003)

- Appreciate the environmental significance of national and provincial parks and protected areas in Alberta.

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 4: Social Studies - Alberta: Celebrations and Challenges (Consultation draft 2003)

- Value and respect their relationships with the environment.
- Understand the ways in which Aboriginal peoples and communities have changed over time.

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.
- How are Canada's national and provincial parks and protected areas important to the sustainability of Canada's natural environment?

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.

EPIISODE TITLE: *You Say Buffalo, I Say Bison*

FEATURED ANIMAL: Bison

THEMES:

- Historical significance of bison to First Nations people and the Fur Trade
- Adaptations for survival
- Wildlife rehabilitation
- Bison's role in the ecosystem
- Working together

SUMMARY:

Amanda discovers bison sometimes butt heads but they also know the value of working together.

Sometimes two heads are better than one – even if it doesn't seem like it at the time. Chris and Ava are butting heads over space requirements for their separate projects when the 'animalarm' sounds. It's Amanda calling and she's frustrated with her know-it-all science partner Jennifer; the two girls can't even agree if those big brown beasts are called bison or buffalo!

Chris brings Amanda out to Elk Island National Park in Alberta, Canada to meet environment officer Carmen Calihoo to help figure it all out. They venture to where the bison herds now roam, and along the way look for **bison sign**. Amanda learns all about the bison's **role in history**, their slaughter and near **extinction** and the **importance of National parks** in preserving bison populations. Carmen and Chris tell Amanda about the two subspecies, **Wood bison** and **Plains bison**, bison **habitat**, **physical features**, **behavior**, **diet**, and **defensive strategies** to protect the herd. Amanda now knows a whole "buffalo" about bison and returns home to work things out with Jennifer.

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)

bison	subspecies	wallow*
<i>bos bison</i>	boreal forest*	parasites*
buffalo	Wood bison*	rut*
buffalo chips	Plains bison*	genes
ecology (<i>interrelationships of organisms and their environments</i>)	morphological (<i>form and structure of an animal</i>)	forbs*
	migrate*	ruminoids/ruminant*

VOCABULARY: Interactive Content

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

cape	ruminating	polygamous
clouts	regurgitated	gestation
boreal forest	microorganisms	weaning
forbs	<i>bos bison</i>	longevity
sedges	ungulates	flehmen
cow	bovids	
ferments	rut	

SONG: "Why Don't We Ever Learn" - sing along with Chris! (See lyrics on pg.6).

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

- The First Nations people had many uses for bison. What do you think happened to the First Nations way of life after so many bison had been killed?
- Identify bison adaptations that help them to survive and predict what would happen if bison hadn't adapted this way.
- According to the video, what happened to help the bison population recover? Give examples of other wildlife that benefit from the creation of national and provincial parks and protected areas.
- How do bison help other species of wildlife? What impact would the loss of Bison have on the environment?
- In the video, Amanda learned the value of working together from watching the bison protect their young. Give examples of things in your life that are easier when you cooperate or work with others.

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 bison word search, crossword puzzle or quiz to evaluate their learning.
- In pairs, make a list (using index cards) of problems or conflicts that can arise when working in groups. On the other side of the cards, write down three possible solutions to the problem. Join up with two other groups, put the cards together and play a trivia game. Afterwards, with the whole class, classify the cards according to type of problem, label them and put them in a box for students to pull out when conflicts arise.
- Make a list of all the uses First Nations people had for bison. Research other kinds of wildlife First Nations people depended on for survival. Create a poster, putting bison and the other animals/plants in order of importance to First Nations people's traditional way of life. Present your poster to the class, and give reasons for the order you chose.
- Identify the special adaptations bison have to live in their habitat, and how each adaptation helps the bison. Research another animal and its adaptations and habitat. Make a diagram of the animal in its habitat and label each adaptation. Draw a line from the body part to show which part of the habitat this adaptation helps them with.
- Take a class trip to a national or provincial park like Elk Island National Park. Think about the kinds of plants and animals you see in the park. In your journal make a note of differences in the plants or animals in the park compared to those near your home. Research another species that has been saved from extinction by parkland. Write a report about the park's role in saving this species.

HANDS ON SCIENCE:

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

Bison - The Seed Snare

Many of the plants that grow "where the buffalo roam" depend on bison to disperse them. These plants grab onto bison fur and go for a ride. Put on some 'fur' and see what rides on you.

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
Hare We Go!	Snowshoe Hare
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

WildFiles.TV
“Why Don’t We Ever Learn”
Song Lyrics

Many thousand years ago the Great Ice sheets melted north
And the gasses grew upon the lands
By the millions came the herds of grazers and their predators
The most dangerous of which was humans

They learned to make their weapons sharp, which made short work when they hit the mark
And they learned to hunt in groups and make plans
The mammoth and the mastodon were too slow and soon were gone
But there were many more Buffalo

CHORUS:

Why...do we never learn?

Must we repeat all our mistakes so many times?

Why...are we so unaware?

Do we only see the value of a life when it has died?

(It took) centuries for Man to understand and strike a balance
And not to kill every animal that was found
When Europeans came and saw the Bison on the Plains they said
"There are so many: they'll always be around"

So with these newer deadly tools they slaughtered countless cows and bulls
Their bleached out bones piled high as mountains in the sun
Some people realized their crime and stopped these killings just in time
And finally the Buffalo was free to run

CHORUS

Now of the Bison just a few remain, crowded out in fields of grain
To feed our hungry millions who are starving still
As we grow out of control we still don't see what is our role
Maybe it's our turn to be the Buffalo