

WildFiles.TV

Teachers' Guide for

Arachnophobia On the Loose

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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 – Tarantula 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: 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.

Grade 2: Small Crawling and Flying Animals

- Compare and contrast small animals that are found in the local environment, including three invertebrates.
- Recognize that like humans, small animals have homes where they meet their basic needs of air, water, food, shelter and space; and describe any special characteristics that help the animal survive in its home.
- Identify each animal's role within the food chain.
- Describe the relationship of these animals to other living and non-living things in their habitat, and to people.
- Identify and give examples of ways that small animals avoid predators, including camouflage, taking cover in burrows, use of keen senses and flight.
- 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.
- Observe and describe the growth and development of various species from a variety of groups and identify similarities and differences in their developmental sequences.
- Predict the next stages in the growth and development in various species 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.
- Demonstrate knowledge of the need for animal studies, and demonstrate skills for animal care.

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.

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: *Arachnophobia on the Loose*

FEATURED ANIMAL: Tarantula

THEMES:

Tarantulas and spiders (arachnids)
Definition of 'bug'
Common spider myths
Overcoming fear of spiders or bugs

SUMMARY:

Meeting Spider-man helps Alicia solve her spider mystery and cure her arachnophobia.

What would you do if you'd accidentally killed your brother's pet tarantula? Arachnophobe Alicia calls Chris and Ava in a panic – she was spider-sitting her brother's pet tarantula and it mysteriously shriveled up and died! Chris gets her to bring the corpse over to expert "Spider-man" Dr. Robin Leech, who explains that the corpse is actually the spider's shed **exoskeleton**. But now Alicia has a whole new problem – since she left the lid off the terrarium this rather big and hairy **arachnid** is loose in her house! To locate the roaming tarantula, Chris and Alicia gather clues on **tarantula behavior** and in the process they meet 'chief Bug-wrangler' Terry Thormin, who helps dispel some common spider myths. Meanwhile Ava is madly gearing up to thwart the 'Spider Virus' that's rumored to destroy entire computer systems. Alicia's fear of spiders is cured once she learns about tarantulas' **physical features, habitat, reproduction, diet, extra-oral digestion, growth, and defense against predators**. She also gets a chance for a closer look at other **spiders** and **bugs** and finds out the difference between an insect and a bug. Alicia returns home with some surprising news about her brother's spider. She just hopes she's able to find the tarantula before her mother comes home from work....

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)*

abdomen*	Crusader bugs	scorpion
antennae	enemies/predators*	silk
arachnids*	exoskeleton*	sperm webs
arachnologist	extra-oral digestion*	spinnerets*
arachnophobia	fertilization*	spiracles
arboreal*	hemipterans (<i>true bugs</i>)	Tailless Whip scorpion
arthropods	invertebrates*	Tarantula Hawk Wasp*
Black Widow	Madagascan orb weaver	theraphosidae*
book lungs	Mexican Red-kneed tarantula	urticating hairs*
burrows	nocturnal	venom*
carnivores*	nursery webs*	Walking Stick
chelicerae*	pedipalps*	White-eyed Assassin bug

VOCABULARY: Interactive Content

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

abdomen	fertilize	
arachnid	venomous	pedipalp
cephalothorax	predator	yolk
chelicerae	spinneret	nursery web
dehydrate	Tarantula Hawk Wasps	spiderling
exoskeleton	ocelli	
extra-oral digestion	urticating hairs	

SONG: "Animals are Disgusting" - sing along with Chris! (See lyrics on pg.6).

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

- Name some tarantula body parts and facts mentioned in the video. Give a definition of these terms.
- How are tarantulas different from other spiders? In what ways are tarantulas and other arachnids different from mammals?
- Why do some spiders have no eyes? What other kinds of creatures have no eyes? Where do these creatures live?
- How do tarantulas defend themselves? Why doesn't that work against the Tarantula Hawk Wasps?
- What is the definition of a bug? Are all insects bugs? Why or why not?
- The video told us that some of the things we usually believe about spiders are not always true. Give examples of some of these myths or generalizations. When can we be certain that information we hear is accurate? How can we verify this?
- Why do you think so many people are afraid of spiders? Would you kill a spider because you're afraid of it? Why? Why not?
- When was the last time you saw a spider? What did it look like? Where was it? What kind was it?

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 Tarantula Word Search, Crossword Puzzle or Quiz to evaluate their learning.
- Make a model or draw a tarantula and label the body parts, explaining the function of each part. Use information from the video and the Tarantula wildlife file as a source.
- List what you learned about bugs and spiders from the video. Use reference books to help if needed. Compare bugs and spiders using a Venn diagram. Discuss the similarities and differences.
- Research 10 different types of spiders (provide information and pictures or have students make notes of their diet, habitat, physical features, adaptations, etc.) and put them in categories according to how they obtain food (hunters, web weavers, trap door spiders). What do you notice about the spiders in each category?
- Write a brochure for people who suffer from arachnophobia. Include information about spiders that you feel will help them overcome their fear of spiders.
- Design a trivia game about spiders, insects and bugs. On cards, have students write the name of a spider, bug or insect at the top, followed by three true facts about the creature and one "myth" or false fact. Put the cards together and have students guess which fact is the myth.

HANDS ON SCIENCE:

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

Tarantula - This Project Really Sucks

Tarantulas don't really suck the life out of their prey; they more or less just eat up their innards. Use a straw and see if you can drink like a spider.

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
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
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

"Animals are Disgusting"

Song Lyrics

CHORUS:

Animals are dis-gus-ting things
They do gross stuff every day
They stink and slime and regurgitate
Like food that has decayed
But think of this and face this fact
The next time you smell poo
No matter how sickened you might be
Remember you're an animal too

Now let's look at people
What's so gross about us?
We keep our bodies scrubbed and clean
So what's there to discuss?

Often we don't see the mess
And filth that we create
But we better pay attention
Before it is too late

A Black Widow Spider
Sends chills through you and me
To us a she's a little toxic
To her mate she is deadly

CHORUS

No matter how sickened you might be
They're no worse than me...and you

So I say to all you widow men:
Keep your mate well fed
'Cause while you're reproducing
She might just eat you instead

CHORUS

You've all seen that butterfly
Flying through the sky
It's such a pretty thing
It makes you wonder why?

When some of them are thirsty
They puddle with such glee
Too bad their favourite puddle drink
Is someone else's pee

CHORUS

Now what can be cuter
Than a little cottontail?
From their noses to their toeses
They're off the beauty scale

But this furry beauty
Comes at quite a price
For in order to digest their food
They got to eat it twice

CHORUS