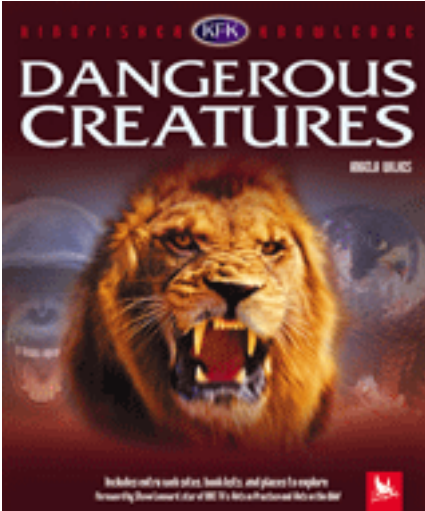


## A Teacher's Guide



### Dangerous Creatures

by Angela Wilkes

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### About the Book

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Dangerous animals fascinate us all, and that fascination can certainly enhance science and natural history lessons, creative writing, literature, mathematics, geography, and art in the fourth through eighth grades. In *Dangerous Creatures* your students will discover that dangerous animals come in all shapes and sizes; that the most dangerous creatures may not be the largest and strongest; and that dangerous animals live in all environments. *Dangerous Creatures* also gives your students a factual basis to bring to their reading of a favorite fiction genre—the action/survival novel.

### Reading Comprehension

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Give your students time to read the book on their own or in small groups. To get a sense of their understanding and how much they are learning and retaining, use the chapter summaries to open discussions. It is easy to turn the straightforward review sentences in these summaries into questions to pose to your students. For example:

- Chapter 1, page 24: "Tooth and Claw": Ask your students to discuss how different dangerous animals stalk and kill their prey.
- Chapter 2, page 40, "Venomous Creatures": Talk about how and why different animals use poisons to kill their prey.
- Chapter 3, page 58, "Small But Deadly": The smallest of dangerous animals can also

be the deadliest. Discuss how small animals can inadvertently transmit deadly diseases

## Standards:

### Language Arts:

- Uses reading skill and strategies to understand a variety of informational texts.
- Summarizes and paraphrases information in texts.
- Draws conclusions and makes inferences based on explicit and implicit texts.
- Uses new information to adjust and extend personal knowledge base.

## Map Studies

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Hang a "Where Do Dangerous Animals Live?" map in the room. Have the students research more fully the habitat of each animal they read about.

For example, they should find out *where* in Africa the African hunting dogs live and *where* in North America you find the grizzly bear. Have them create a chart of dangerous animals and the places they inhabit. Then they should put Post-its with the animal's name and habitat on the proper location on the map. When the map is complete, discuss the most dangerous places in the world to live. Some questions to answer are:

- Which animals are specific to one geographic area?
- Are there dangerous and deadly creatures that can be found in all parts of the world?
- Are some creatures moving into new environments?

## Standards:

### Geography:

- Understands the characteristics and uses of maps.
- Knows the locations of places, geographic features, and environmental patterns.
- Understands the concept of regions.
- Understands the characteristics of ecosystems on the earth's surface.

### Language Arts:

- Uses reading skills and strategies to understand and interpret a variety of informational texts.

## Class Project

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Create a virtual zoo of dangerous animals. Discuss with your students how zoos can be organized according to species, geography, environment, etc. Brainstorm how your zoo will be arranged. The class may decide to use the chapters in the book as their organizing principle. Use photographs, drawings, and handcrafted models to represent the animals.

Have students write brief descriptions for each animal on view. Invite lower–grade classes to visit. Create a script for student zookeepers to use as these guests tour the zoo.

### **Standards:**

#### Visual Arts:

- Knows how visual, spatial, and temporal concepts integrate with content to communicate intended meaning in artwork.
- Knows how subject matter, symbols, and ideas are used to communicate meaning.

#### Cooperative Learning:

- Works with others to produce a common goal.

## **Research**

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After reading pages 52–59 in Chapter 3, introduce the following research project.

The threat of West Nile virus has been a major problem in North America for the past several years. Have your students investigate this disease and report on their findings. The reports should include

- what West Nile virus is
- how a disease that originated in Africa found its way to North America
- how it is transmitted
- what the dangers are
- where and when it first showed up in North America
- how it is spreading, and what health and government officials are doing about it

An excellent source of information is the National Institutes of Health. Visit them on the Internet at <http://www.nih.gov> and click on West Nile in the left-hand column. You will find links to the history of the West Nile virus, bug-borne diseases, and microbes in sickness and in health, as well as publications of the NIH.

If you want to divide your class into two research-reporting groups, a second insect-transmitted disease to study is Lyme disease. Again, the NIH will provide a wealth of information.

### **Standards:**

#### Language Arts:

- Writes in response to literature.

- Uses electronic media to gather information.
- Uses computer databases to locate sources for research projects.
- Uses a variety of resource materials.
- Organizes ideas.
- Writes research papers.

## Art/Writing

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Great white sharks, grizzly bears, and killer bees, to name a few, have been the subjects of beast-against-human survival books and films. Have your students write an adventure/survival short story featuring an escape from one of the animals in *Dangerous Creatures*. The actions of the animal should reflect its true behavior.

To satisfy your students' thirst for fantastical creatures, have them create a superdangerous animal. They can combine body parts, abilities, and weapons from any number of animals described in the book to make an invulnerable monstrous being. They can make original drawings, cut and paste photographs, or write narrative descriptions.

### Standards:

#### Language Arts:

- Writes narrative accounts.
- Writes expressive compositions.
- Writes in response to literature.

#### Visual Arts:

- Knows how visual, spatial, and temporal concepts integrate with content to communicate intended meaning in one's artwork.

## Mathematics/Statistics

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From killer chimps to sinister spiders to monsters of the deep, the dangers deadly animals present fascinate children and adults. Have students do a survey of their families, friends, school personnel, and members of the community to find out which animals they fear most. Then do a statistical analysis of the results.

The survey should consist of two parts. The first part is general information about the person being interviewed. The second part contains specific questions about dangerous animals. Brainstorm with the class about the types of questions they will ask, such as the following: Which animal is the most dangerous? What animal scares you the most? If you could have a dangerous animal as a pet, what would it be?

An alternative survey method is to give the subject a list of dangerous animals and have him or her rank the animals in order of most dangerous to least dangerous, or from the scariest to the least scary. If you choose this method, brainstorm with the class the list of animals they will present. Whichever survey method you use, have the students pool their results.

and present them as percentages.

**Sample Survey Form:**

**Dangerous Animals**

Subject Surveyed:

Age (check one)  
7–10 \_\_\_\_  
10–14 \_\_\_\_  
15–24 \_\_\_\_  
25–35 \_\_\_\_  
35–49 \_\_\_\_  
Adults 50+ \_\_\_\_

Sex: Male \_\_\_\_ Female \_\_\_\_

Level of education (choose one)  
Present grade \_\_\_\_  
High school grad \_\_\_\_  
Highest college degree \_\_\_\_

Survey:

Rank the following animals from most to least scary, most to least dangerous, and most to least disgusting:

Place a number from 1 to 16 in each column, with 1 indicating the most and 16 the least.

Animal	Scary	Dangerous	Disgusting
Tiger			
Eagle			
Grizzly bear			
Hyena			
African hunting dog			
Alligator			
Great white shark			
Giant jellyfish			
Cobra			
Tarantula			

Scorpion  
Piranha  
Killer bee  
Vampire bat  
Rat  
Tsetse fly

The class should survey a wide range of people. The larger the sample, the more meaningful the results will be.

After the results are tallied, they can be analyzed using several parameters, examining single factors (age, sex, and level of education) or two factors (males ages 10–14, female college graduates, adults 50+ with a high school education). The class can determine which parameters they prefer. For each analysis of the data they should calculate the mean, mode, and median.

### **Standards:**

#### Mathematics:

- Uses data and statistical measures for a variety of purposes.
- Reads and interprets data in charts and tables.
- Understands basic concepts about how samples are chosen.
- Understands basic characteristics of measures of central tendency.

## **Cooperative Learning**

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*Dangerous Creatures* contains a wealth of information on deadly animals large and small. Have your students create a game of trivial information based on the book. Create at least six interestingly named categories of questions to cover the many different animals studied. To get you started, here are some ideas: The Gang's All Here, for animals that hunt in packs; "A Little Bite Will Do You," for venomous animals; "I'm Bigger, Faster, and Badder Than You," for animals that kill by brute force and speed; "What You Can't See Can Really Hurt You," for the smallest dangerous creatures; "Up, Up, and Away," for flying creatures; "I'm Stuck on You," for animals that sting; and "Don't Go in the Water," for dangers from the deep.

Divide your class into teams, one for each category, and have them write ten questions for the animals that fit into their category. (Some animals will show up in more than one group.) Have the students write their questions on one side of an index card and the category name on the other side. Teams will take turns. Each team can select a question to answer from a category other than its own. A correct answer gets 10 points. If a question is answered incorrectly, any other team can answer it for a 5-point bonus. The team with the

most points wins.

### **Standards:**

Cooperative Learning:

- Works with others to produce a common goal.

Language Arts:

- Writes in response to literature.
- Uses content, style, and structure appropriate for specific audiences.

## **Ethics and Values**

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Many of the dangerous creatures talked about in the book can be found outside of their native habitats in zoos around the world. While zoos provide a useful way to study these animals, they can also inhibit the animals' well-being. Many people believe that zoos represent cruel and inhumane treatment.

Visit a zoo or invite a zookeeper to talk to the class about the importance of zoos and how he or she handles dangerous animals in captivity. Then invite an animal rights advocate to speak to the class on the ethical treatment of animals.

### **Standards:**

Language Arts/Listening and Speaking:

- Listens in order to understand topic, purpose, and perspective in spoken texts.

## **Career Paths**

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Career paths for students interested in animals are listed on the summary page of each chapter. Compile a list of the careers mentioned and have the students find out more about what each occupation involves. One such career path (p. 58) is that of entomologist. The book directs readers to an interactive Web site ([http://www.umass.edu/ent/BugNetMAP/r\\_state.html](http://www.umass.edu/ent/BugNetMAP/r_state.html)), which includes a map of state insects and insect museums. The URL is case sensitive, so make sure you type it exactly as it is written.

### **Standards:**

Language Arts:

- Organizes information and ideas in a systematic way.
- Uses electronic media to gather information.

# Natural History

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All of the dangerous animals talked about in the book have, over time, developed specific skills and adapted body parts that allow them to stalk and kill their prey, as well as defend themselves from other predators. For example, owls have developed enormous eyes that are specially adapted to see in the dark. They also have developed an acute sense of hearing so that when hunting at night they can find their prey with pinpoint accuracy. Have your students examine each of the animals in the book and create an organizer to describe the developed abilities and adapted parts.

## Sample Organizer:

Animal	Adapted Body Parts	Developed Skill
cheetah	long tail	helps keep it balanced
	small head	lowers body weight to increase speed
	nonretractable claws	allows it to grip the ground

## Standards:

- Language Arts:
- Writes in response to literature.
  - Organizes information and ideas in a systematic way.

# Discussion

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If you could pick a single weapon or tool used by any of the dangerous animals, which would you pick? Why? How would it serve your needs in your day-to-day life?

## Standards:

- Language Arts/Listening and Speaking:
- Contributes to group discussions.
  - Responds to questions and comments.
  - Listens in order to understand topic and purpose.
  - Makes basic oral presentations.