

Animal Behaviors

Jessica Harwood
Douglas Wilkin, Ph.D.

Say Thanks to the Authors

Click <http://www.ck12.org/saythanks>

(No sign in required)



To access a customizable version of this book, as well as other interactive content, visit www.ck12.org

CK-12 Foundation is a non-profit organization with a mission to reduce the cost of textbook materials for the K-12 market both in the U.S. and worldwide. Using an open-source, collaborative, and web-based compilation model, CK-12 pioneers and promotes the creation and distribution of high-quality, adaptive online textbooks that can be mixed, modified and printed (i.e., the FlexBook® textbooks).

Copyright © 2015 CK-12 Foundation, www.ck12.org

The names “CK-12” and “CK12” and associated logos and the terms “**FlexBook®**” and “**FlexBook Platform®**” (collectively “CK-12 Marks”) are trademarks and service marks of CK-12 Foundation and are protected by federal, state, and international laws.

Any form of reproduction of this book in any format or medium, in whole or in sections must include the referral attribution link <http://www.ck12.org/saythanks> (placed in a visible location) in addition to the following terms.

Except as otherwise noted, all CK-12 Content (including CK-12 Curriculum Material) is made available to Users in accordance with the Creative Commons Attribution-Non-Commercial 3.0 Unported (CC BY-NC 3.0) License (<http://creativecommons.org/licenses/by-nc/3.0/>), as amended and updated by Creative Commons from time to time (the “CC License”), which is incorporated herein by this reference.

Complete terms can be found at <http://www.ck12.org/about/terms-of-use>.

Printed: November 11, 2015

flexbook
next generation textbooks



AUTHORS

Jessica Harwood
Douglas Wilkin, Ph.D.

EDITOR

Douglas Wilkin, Ph.D.

CONTRIBUTORS

Doris Kraus, Ph.D.
Niamh Gray-Wilson
Jean Brainard, Ph.D.
Sarah Johnson
Jane Willan
Corliss Karasov

CHAPTER 1

Animal Behaviors

- Explain the meaning of animal behavior.
- Give examples of animal behaviors.
- Discuss the importance of animal behavior.
- Explain how animal behaviors can increase fitness.



Why do spiders spin webs?

You have probably seen a spider web before. You may even know that spiders create webs to catch their prey. This is an example of animal behavior. Animals have many different behaviors.

Introduction to Animal Behavior

Barking, purring, and playing are just some of the ways in which dogs and cats behave. These are examples of animal behaviors. **Animal behavior** is any way that animals act, either alone or with other animals.

Examples of Animal Behavior

Can you think of examples of animal behaviors? What about insects and birds? How do they behave? Pictured below are just some of the ways in which these, and other animals act (**Figure 1.1**). Look at the pictures and read about the behaviors. Think about why the animal is behaving that way.



FIGURE 1.1

These pictures show examples of animal behaviors. Why do the animals behave these ways?

Importance of Animal Behavior

Why do animals behave the way they do? The answer to this question depends on what the behavior is. A cat chases a mouse to catch it. A mother dog nurses her puppies to feed them. All of these behaviors have the same purpose: getting or providing food. All animals need food for energy. They need energy to move around. In fact, they need energy just to stay alive. Energy allows all the processes inside cells to occur. Baby animals also need energy to grow and develop.

Birds and wasps build nests to have a safe place to store their eggs and raise their young. Many other animals build nests for the same reason. Animals protect their young in other ways, as well. For example, a mother dog not only nurses her puppies. She also washes them with her tongue and protects them from strange people or other animals. All of these behaviors help the young survive and grow up to be adults.

Rabbits run away from foxes and other predators to stay alive. Their speed is their best defense. Lizards sun themselves on rocks to get warm because they cannot produce their own body heat. When they are warmer, they can move faster and be more alert. This helps them escape from predators and also find food.

All of these animal behaviors are important. They help the animals get food for energy, make sure their young survive, or ensure that they, themselves, survive. Behaviors that help animals or their young survive, increase the animals' **fitness**. Animals with higher fitness have a better chance of passing their **genes** on to the next generation. If genes control behaviors that increase fitness, the behaviors become more common in the species. This occurs through the process of evolution by natural selection.

Summary

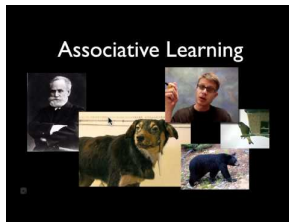
- Animal behavior is any way that animals act, either alone or with other animals.
- Animal behavior may be aimed at getting food for energy, making sure their young survive, or ensuring that they, themselves, survive.

Explore More

Use the resources below to answer the questions that follow.

Explore More I

- **Animal Behavior** at <http://www.youtube.com/watch?v=6hREwakXmAo> (9:52)



MEDIA

Click image to the left or use the URL below.

URL: <http://www.ck12.org/flx/render/embeddedobject/57409>

1. When do animals learn innate behavior?
2. Can you think of why "grasping" behavior would help human babies survival?
3. A crow vending machine is associated with what type of learning?
4. Compare and contrast "trial and error" learning and "observational" learning.
5. How do "mirror neurons" work?

Explore More II

- **Cnidarians: Anemone Swims Away From Sea Star** at <http://vimeo.com/37443347> (2:01)



MEDIA

Click image to the left or use the URL below.

URL: <http://www.ck12.org/flx/render/embeddedobject/57410>

1. What type of behavior do you think the sea anemone (*Stomphia coccinea*) is exhibiting? Explain your thinking fully and be specific.

Review

1. What are two examples of animal behaviors that are aimed at getting food?
2. What are two examples of animal behaviors that are aimed at protecting the young?
3. What is meant by fitness? What is the relationship between animal behaviors and fitness?
4. Is there a relationship between genes and fitness? Explain your answer.

References

1. Cat and mouse: Vorstius; Dog: Robin Taylor; Bird: Lilla Frerichs; Wasps: GanMed64; Lizard: Jimmy Harris; Rabbit: Lauris Rubenis. [Examples of animal behaviors include hunting, nursing, building a nest, sunning, and running away from predators](#) . Bird: Public Domain; Remaining images: CC BY 2.0