



# Ranger Rick

# EDUCATOR'S GUIDE



EDUCATIONAL EXTENSIONS FOR THE JUNE/JULY 2016 ISSUE OF RANGER RICK® MAGAZINE

## SHARP ANIMALS

In “**Prickly Porkies**,” pages 6–11, students discover that a porcupine’s quills are actually sharp, stiff hairs with tiny hook-like barbs at the tips. After students have read the story, divide them into three groups: Hedgehogs, Echidnas, and Spiny Rats. Point out that like the porcupine, each of these animals also has prickly hairs. Ask each group to research its animal and then use a Venn diagram to list how the animal is like a porcupine and how it is different from one.

To make a Venn diagram, draw two overlapping circles. Label the circle on the right “Hedgehog,” “Echidna,” or “Spiny Rat.” Label the circle on the left “Porcupine.” Where the circles overlap, students should list some things the two animals have in common. Outside the overlapping area, they should list things that make each animal different from the other.

Another fun activity is to have students use the “Super Porky Saves the Day” student page to help them write a story about a porcupine that uses its quills to rescue someone in trouble. If students are “stuck” for amusing rescue ideas, suggest they review this month’s **Critter Crackups**, page 5. The theme just happens to be porcupine quills.

## TRAWLING THE GULF

In “**This is OUR Gulf**,” pages 20–25, student volunteers help scientists monitor the Gulf of Mexico’s health by trawling along its coast for animal samples and recording information about their “catch.” You don’t need to leave the classroom to give your students some hands-on fun “trawling” for “ocean creatures” and sorting, measuring, and graphing the results. See the Edible Trawl activity at <http://gcoos.tamu.edu/documents/Lesson-Plans/Edible-Trawl-Simoniello-2014.pdf>. This lively lesson was developed by the author of “This is OUR Gulf,” research scientist/educator Chris Simoniello.

## PANGOLIN PATTERNS & PALS

Direct students’ attention to the opening photo of the baby pangolin in “**Tipping the Scales for Pangolins**,” pages 32–36. Point out the pangolin’s overlapping scales and discuss how this pattern appears elsewhere in nature (e.g., pine cones, artichokes, some fish and reptiles) and also in human creations (e.g., some roof tiles and ancient Chinese armor). Have students look for examples of the pattern and gather photographs or objects that display it. Then as a group, compare the examples and discuss what makes this arrangement advantageous.

After students have read the article, make pangolin pals out of pine cones. Start with an outdoor excursion to collect pine cones. Then transform the cones into pangolins by adding heads, eyes, legs, claws, and tails. Provide beads (for eyes) and modeling clay (for everything else), or encourage students to be creative in finding their own materials to complete the creatures.

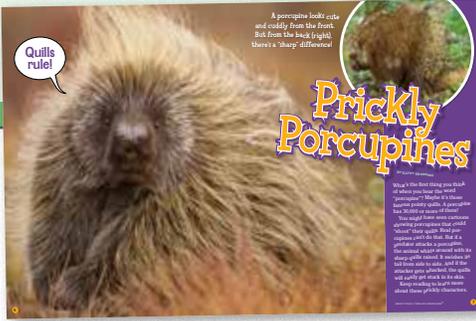
## GREAT AMERICAN CAMPOUT

National Wildlife Federation’s Great American Campout is a summer-long celebration of camping as a way to connect with nature and wildlife. For more information on this year’s Great American Campout and to register a campsite for the event, visit [nwf.org/campout](http://nwf.org/campout).

If you can’t camp as a group, here are two ways you can generate students’ interest in camping just the same:

- 1. Miniature Campsite.** Have students use the “My Little Camp” student page to build a miniature campsite in their backyards or in the schoolyard.
- 2. Camping Funnies.** As a class, use the **Riddles on page 30** (as well as others with a camping theme) to construct a bulletin board of amusing riddles and related illustrations.

# SUPER PORKY SAVES THE DAY



Follow these two steps to make up a story about a super-special porcupine that uses its quills to rescue someone in trouble.

1. Complete the story frame below.
2. On separate paper, use the ideas in the frame to write your story.

## STORY FRAME

In this story, the problem starts when \_\_\_\_\_

---

---

Next, \_\_\_\_\_

---

---

After that, \_\_\_\_\_

---

---

The problem is solved when \_\_\_\_\_

---

---

It all ends happily ever after as \_\_\_\_\_

---

---

# TRICKS FOR STAYIN' ALIVE



Read "Stayin' Alive," pages 14–19. Then look at the example in the chart below. Fill in the rest of the boxes for three more animals from the story.

INSECT	HOW IT KEEPS FROM BEING EATEN
Moth caterpillar	It puffs out the front part of its body. That changes it from a meek little caterpillar to a scary, but fake, snake with fake eyes and scales.