

Watershed Protection

illustrations by Peter Grosshauser

A WATERSHED IS...

RIVER REFLECTIONS

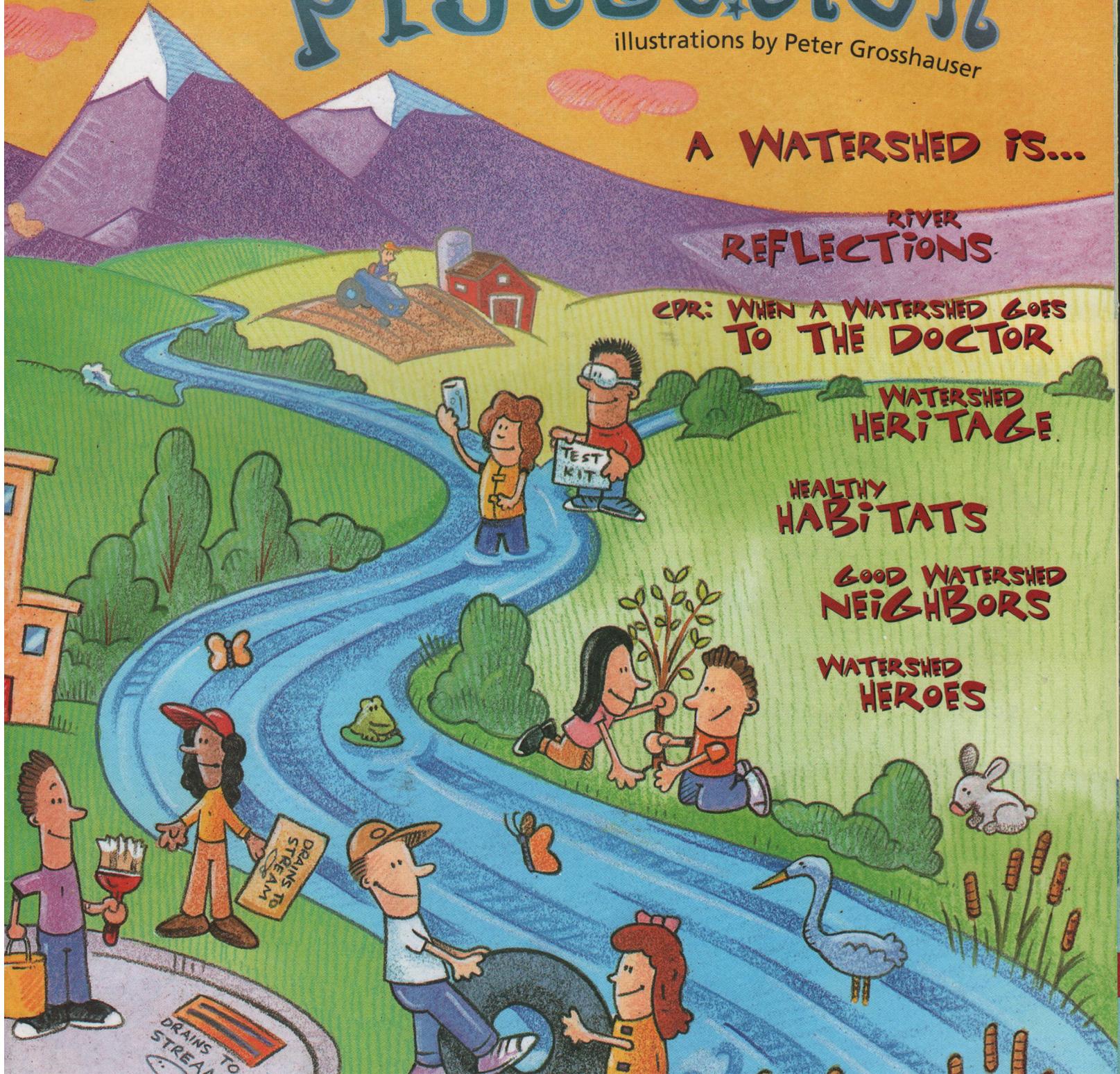
CPR: WHEN A WATERSHED GOES TO THE DOCTOR

WATERSHED HERITAGE

HEALTHY HABITATS

GOOD WATERSHED NEIGHBORS

WATERSHED HEROES



A Watershed

No matter where you live, there is a watershed. A large watershed, for example the Hudson River Watershed in New York, is an area of land that drains into a specific body of water like a river, stream, or lake. It includes everything within its borders: all the land, air, plants and animals; mountains, deserts, cities and farms; even people, their stories and traditions. Within a large watershed there are many small water-

sheds which contain streams that drain into it. It is also part of a larger watershed that contains all the streams that drain into it.

Protecting watersheds is important because they support everything from the water we drink and use to grow food, to water for industry, transportation, and wildlife. Clean drinking water depends on clean source water, like springs.

Protecting source water is an important part of watershed protection.

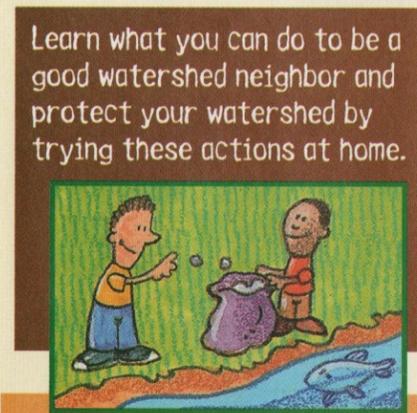
Every watershed is different, but the old saying holds true for all watersheds: We All Live Downstream. This means we're all watershed neighbors and share responsibility for protecting our watersheds. To protect our watersheds, we need to first understand what a watershed is...

Is...

Find the following features in this picture: springs, groundwater, river, ocean, mountains, and the watershed boundary. How can you tell which way the river flows? Trace the river's journey as it falls and flows to the ocean. Locate the stars and the streams they represent and count the streams that flow into the main stem of the river. How many are there?

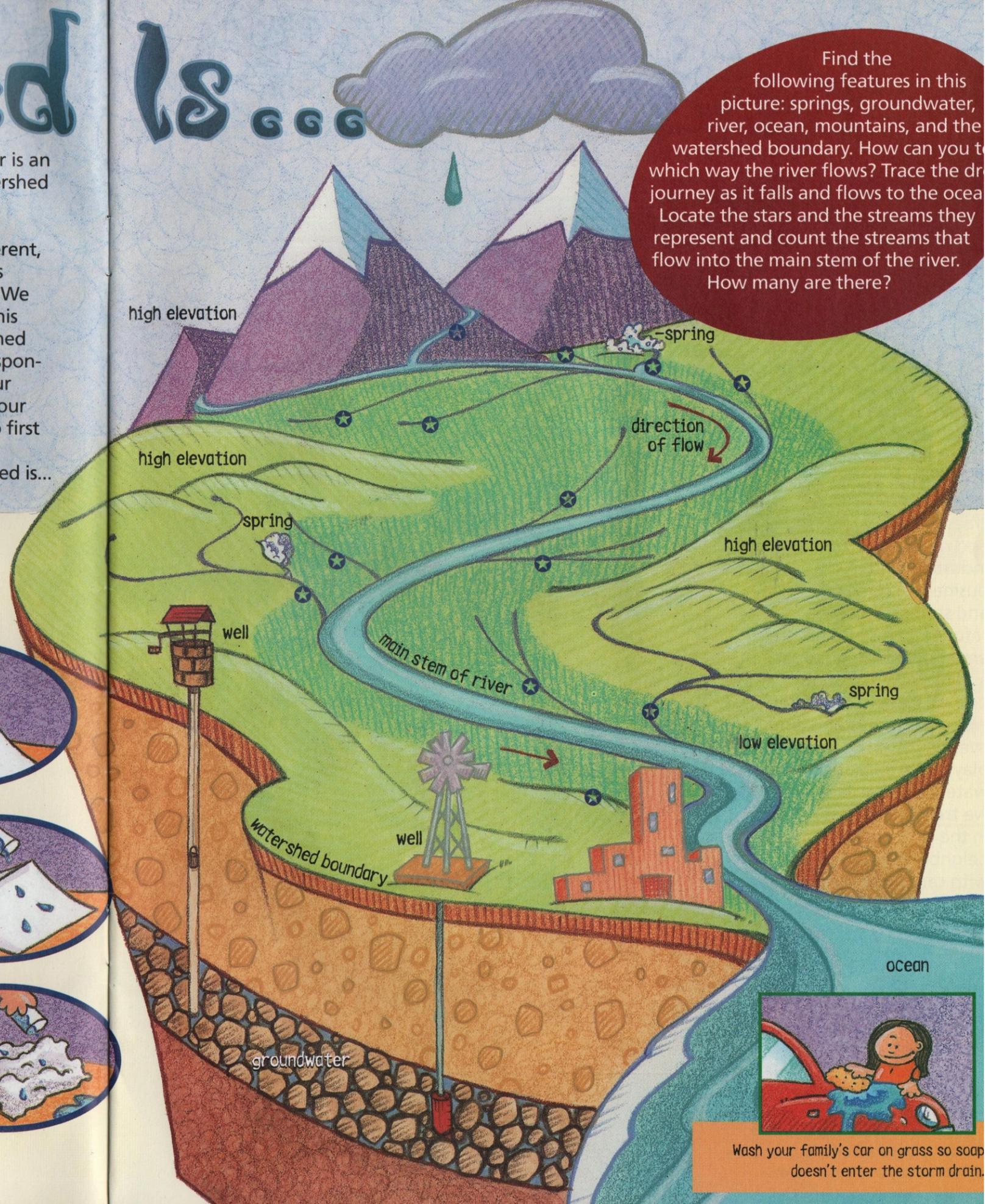
ACTIVITY

- 1 Water falls as rain or snow. Place a drop of water on a flat sheet of wax paper. Does it run off the paper? If water falls on a flat surface, it may not run off or drain.
- 2 In what direction does water flow? Using a piece of wax paper, raise one end. Drip water from a cup onto the paper. It should flow downhill. Did it flow downhill?
- 3 How are watersheds divided? Fold your wax paper in the center into a tent. Drip water from a cup onto the peak. Down which side does the water drain—left, right, or both? The peak represents the boundary between two watersheds, and the water flows down whichever side it falls on. Watersheds are divided at their highest points.



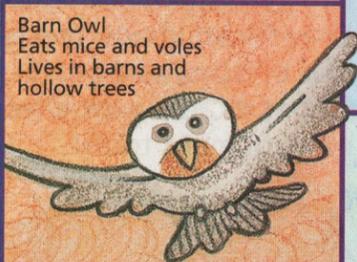
Keep it clean: Participate in a river, pond, or highway cleanup project.

Are large watersheds made up of smaller watersheds? Loosely crumple your wax paper. Drip water onto the peak again. Does the water follow a crease or line as it flows? Does it pool in spots? What watershed features could these represent? Large watersheds may contain many smaller watersheds, each with several streams and lakes.

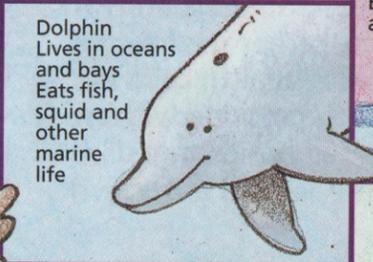


Wash your family's car on grass so soap doesn't enter the storm drain.

Healthy Habitats



Barn Owl
Eats mice and voles
Lives in barns and hollow trees



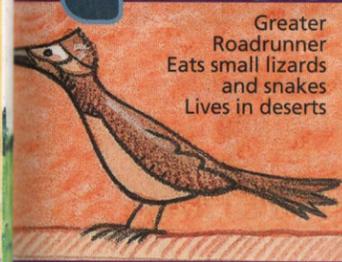
Dolphin
Lives in oceans and bays
Eats fish, squid and other marine life



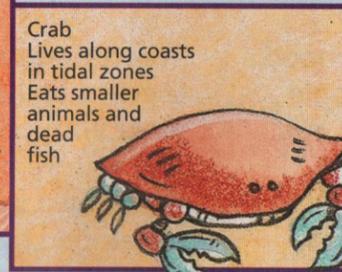
Wood Duck
Lives in ponds and lakes surrounded by forests
Eats aquatic plants, seeds and aquatic insects



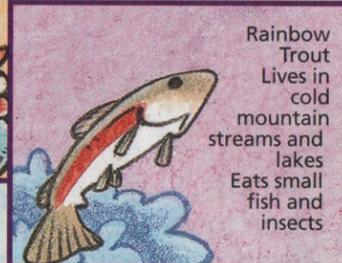
Big Bluestem (Grass)
Found in native prairie grasslands



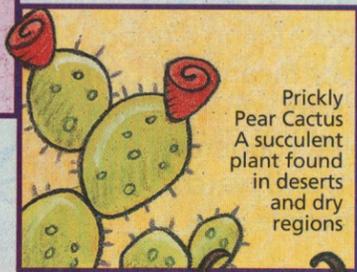
Greater Roadrunner
Eats small lizards and snakes
Lives in deserts



Crab
Lives along coasts in tidal zones
Eats smaller animals and dead fish



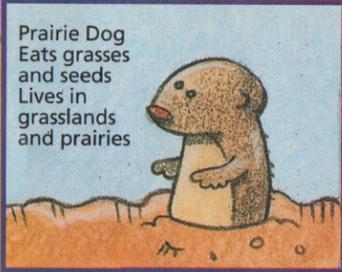
Rainbow Trout
Lives in cold mountain streams and lakes
Eats small fish and insects



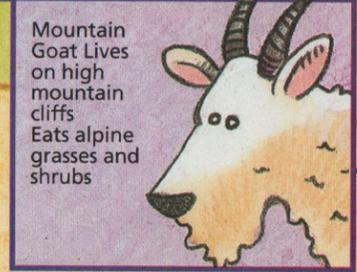
Prickly Pear Cactus
A succulent plant found in deserts and dry regions



Coyote
Eats everything!
Lives everywhere!



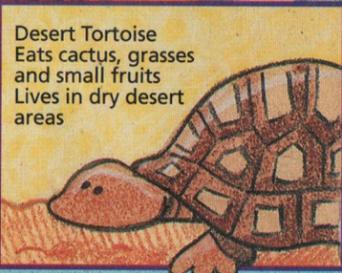
Prairie Dog
Eats grasses and seeds
Lives in grasslands and prairies



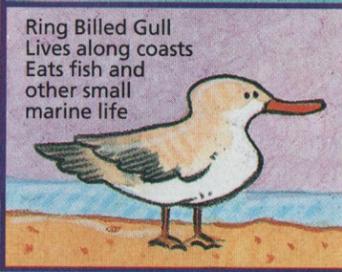
Mountain Goat
Lives on high mountain cliffs
Eats alpine grasses and shrubs



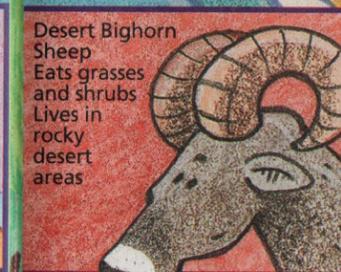
Grey Squirrel
Lives in forested city and suburban areas
Eats seeds and nuts



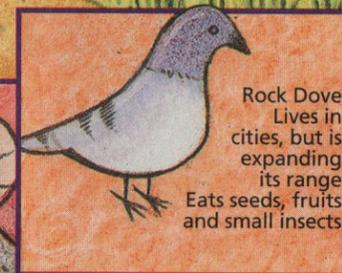
Desert Tortoise
Eats cactus, grasses and small fruits
Lives in dry desert areas



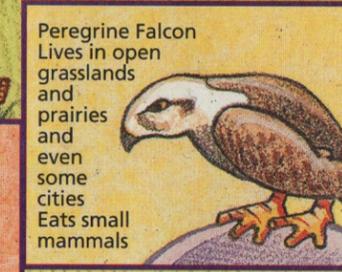
Ring Billed Gull
Lives along coasts
Eats fish and other small marine life



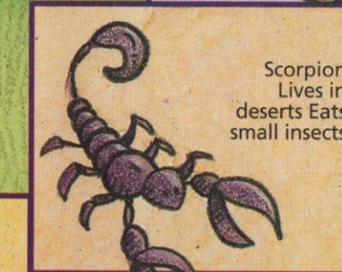
Desert Bighorn Sheep
Lives along coasts
Eats grasses and shrubs
Lives in rocky desert areas



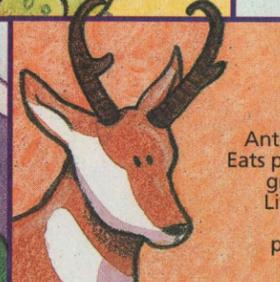
Rock Dove
Lives in cities, but is expanding its range
Eats seeds, fruits and small insects



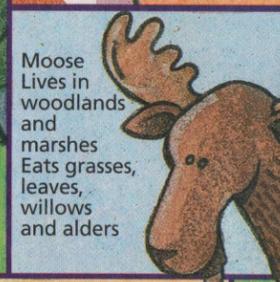
Peregrine Falcon
Lives in open grasslands and prairies and even some cities
Eats small mammals



Scorpion
Lives in deserts
Eats small insects



Antelope
Eats grasses
Lives in prairies



Moose
Lives in woodlands and marshes
Eats grasses, leaves, willows and alders



Don't litter; it could enter storm drains and local rivers

Why does a mountain goat or prickly pear cactus need a healthy watershed? Watersheds, and the plants and animals that depend on them, need healthy habitats to survive. A habitat is a home for a plant or animal that contains everything they need to live—water, food, shelter, and space. From the highest peaks, where mountain goats live, to the coastlines where dolphins feed, watersheds provide important habitats for animals and plants.

One indicator of a healthy watershed is the diversity, or number of different plants and animals it supports across a variety of habitats. These habitats include **estuaries** (coastal bays), wetlands, springs, lakes, deserts and mountains.

Watersheds can have many different habitats, and each plays an important role in supporting plants and animals. Some animals roam among several habitats, while others have specific needs or stay in one.

Connect the animals and plants with the watershed habitat that fits best.



Help keep open spaces clean by collecting trash along trails and in parks.

Watershed

Just as rivers start with small springs and streams, protecting watersheds starts with your actions, both big and small. Students everywhere are doing amazing things to protect their watersheds—read about these watershed heroes:

WATERSHED HEROES

West Virginia Students Create Conservation Society!

Students in West Virginia have joined with faculty and community leaders to form the Baker Run Conservation Society. They have learned how their everyday actions affect the health and welfare of their watershed; how to conduct biological and chemical water quality monitoring; and helped re-establish a nature trail that runs by their school.

Students Training Students in Maryland!

A Girl Scout troop in Maryland stencils storm drains and created a "how to" video to teach others.

Wind River Students Making Waves!

Students on the Wind River Indian Reservation in Wyoming are writing stories about the importance of water culturally and scientifically, and broadcasting their stories on a local radio station.



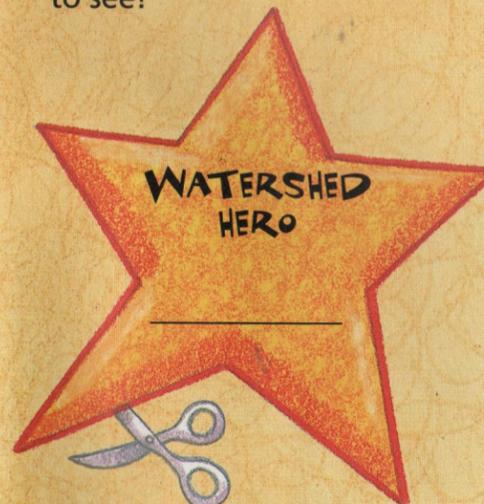
Recycle all your bottles and cans, and start a recycling program at school.

Heroes

Nickels for Nature in Florida!

In Florida, award-winning students have improved their watershed by designing and building an outdoor classroom and butterfly gardens; wetland planting; an intensive water conservation program; and "Nickels for Nature," where students donate change to support watershed protection. They also saved water by using rain barrels at home to water plants and fill fish tanks. Students compared water bills and found 35 households saved 1,950 gallons of water per month.

We can all be watershed heroes! Now tell us what you have done to protect your watershed. Email your watershed hero story to info@projectwet.org and check our Web site at www.projectwet.org to see if your story is posted for all to see!



Cut out this badge & wear it proudly!

BECOME A WATERSHED HERO!

Take this pledge and become a watershed protection hero:

I _____ pledge to protect my watershed by keeping my water clean; reducing water use; learning about my watershed, understanding where my water comes from, how it's used, how it is protected, and where it goes.

_____ Name

_____ Date



List five things that you will do to conserve and protect your watershed.



Be a good watershed neighbor—Become a watershed hero!