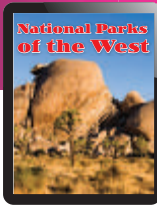
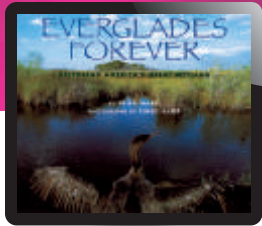


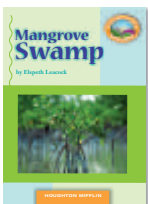
# Lesson 8



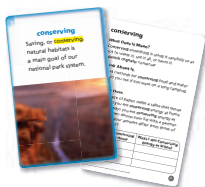
## ✓ TARGET VOCABULARY

conserving  
restore  
regulate  
vegetation  
endangered  
responsibility  
attracted  
adapted  
unique  
guardians

### Vocabulary Reader



### Context Cards



# Vocabulary in Context

## 1 conserving

Saving, or **conserving**, natural habitats is a main goal of our national park system.



## 2 restore

Park workers **restore** harmed habitats by bringing them back to their original state.



## 3 regulate

Managers **regulate**, or control, access to an area. Fewer people cause less harm.



## 4 vegetation

Many animals survive by feeding on the **vegetation**, or plant life, in a habitat.



COMMON  
CORE

**L.5.6** acquire and use general academic and domain-specific words and phrases

- ▶ Study each **Context Card**.
- ▶ Use a thesaurus to find an alternate word for each Vocabulary word.

**5 endangered**

Damaged habitats put **endangered** animals at risk of dying out.

**6 responsibility**

Humans have a duty, or **responsibility**, to preserve and protect wild habitats.

**7 attracted**

Birds are **attracted**, or drawn to, habitats that can hide their nests from predators.

**8 adapted**

Gills are specially **adapted** features that let fish breathe in the water.

**9 unique**

Many habitats support **unique** plants and wildlife that are not found elsewhere.

**10 guardians**

One day some of these students may become **guardians**, or caretakers, of wild habitats.



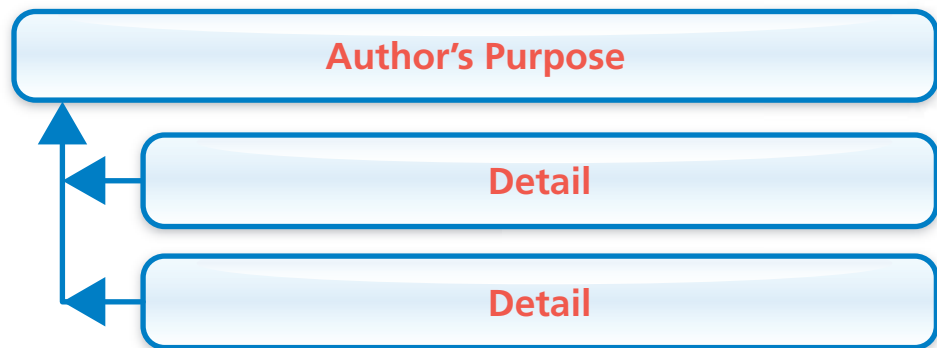


# Read and Comprehend



## ✓ TARGET SKILL

**Author's Purpose** Every author has a specific reason, or **purpose**, for writing. The author of "Everglades Forever" writes about the Everglades region. As you read the selection, think about whether the author's purpose is to entertain, to inform, to describe, or to persuade. Use the graphic organizer shown below to record facts and other details that help you determine the author's purpose.



## ✓ TARGET STRATEGY

**Analyze/Evaluate** As you read "Everglades Forever," **analyze** the facts and other text evidence the author presents to support her points. **Evaluate** this evidence by asking yourself questions such as *Does this fact really support the author's ideas? Do I feel convinced by her argument? Why or why not?*



## PREVIEW THE TOPIC

### Conservation

The term *conservation* refers to any activity that helps protect wildlife and natural resources, such as water and soil. Conservation includes what people can do every day, such as walking instead of driving, or turning down the thermostat. It also includes large projects conducted by experts, such as reintroducing a species of animal to a particular habitat.

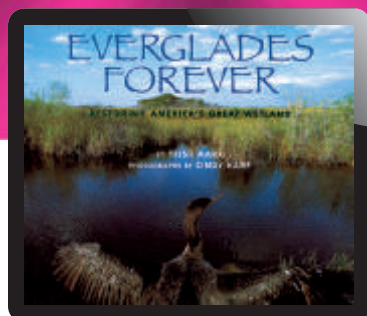
In “Everglades Forever,” the author goes along on a field trip in southern Florida to learn about conserving the Everglades. By sharing the students’ discoveries, the author also shows readers how they can help and why their efforts are necessary.





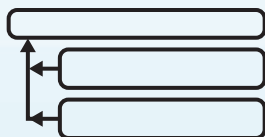
## Lesson 8

# ANCHOR TEXT



### ✓ TARGET SKILL

**Author's Purpose** Determine the author's purpose, and find details and information in the text that help her achieve it.



### ✓ GENRE

**Narrative nonfiction** tells about people, things, events, and places that are real. As you read, look for:

- ▶ factual information that tells a story
- ▶ features such as photographs and captions



**RI.5.3** explain the relationships between individuals/events/ideas/concepts in a text;

**RI.5.8** explain how an author uses reasons and evidence to support points; **RI.5.10** read and comprehend informational texts

### MEET THE AUTHOR



## Trish Marx

Trish Marx travels to the people and places she writes about to get firsthand information for

her nonfiction books. For *Everglades Forever*, she spent time studying and going on field trips with Ms. Jacquelyn Stone's fifth-grade class at Avocado Elementary School in Homestead, Florida.

### MEET THE PHOTOGRAPHER

## Cindy Karp

Cindy Karp has worked with Trish Marx on several books for children. She is also a photojournalist whose



pictures have appeared in national magazines and newspapers. Karp is a resident of Miami, Florida, and has spent many days exploring the Everglades.





# EVERGLADES FOREVER

**RESTORING AMERICA'S GREAT WETLAND**

**by Trish Marx • photographs by Cindy Karp**

## **ESSENTIAL QUESTION**

What reasons do people have for protecting the environment?



In Homestead, Florida, the students in Ms. Stone's fifth-grade class have been learning about the Everglades, a vast natural wetland located on the southern tip of Florida. Since 2000, the Comprehensive Everglades Restoration Plan has helped to preserve this wetland and its natural water system. Now all of Ms. Stone's students are visiting the Everglades to experience this amazing place and learn what they can do to preserve it. The map on the right shows where Everglades National Park is located in Florida and the areas Ms. Stone's class explored.

On the morning of the field trip, the bus traveled west from Avocado School. The students saw the landscape change from houses and shopping centers to a flat, grassy prairie that met the horizon miles away. Soon they arrived at the Royal Palm Visitor Center, part of Everglades National Park.







*Overlooking sawgrass on Anhinga Trail*

Ms. Stone had arranged for the class to meet Ranger Jim at the visitor center. From there the ranger led them to the start of the Anhinga Trail, a boardwalk circling into a slough (sloo). It was the dry season, which lasts from December through April, so the water levels were low. But there is a deep part of the slough at the beginning of the trail that never dries up. Around the edge of this part, large waterbirds called Anhingas sunned their wings. Anhingas hold out their wings to thermoregulate (thur moh REHG yuh layt), or **regulate** their body temperature, by soaking up the sun's energy to keep their bodies warm. An Osprey, a fish-eating hawk, waited in a tree for a flash of fish in the water. In the distance an egret stood in the sawgrass, and a flock of **endangered** wood storks flew overhead.





*Great Blue Heron feeding on fish*

“Right now you’ll see many animals close together around the deeper water areas,” said Ranger Jim. Fish and smaller water animals had migrated to these deep water areas to search for food. Wading birds, alligators, Ospreys, and Cormorants (large diving birds with bright green eyes) followed to feed on the fish and smaller animals. Alligators also use their tails, snouts, and feet to dig deep holes, which fill with water. These holes are places for alligators to cool off while they wait for a meal of the small animals that are **attracted** to the water-filled holes. During the wet season, which lasts from May through November, water covers much of the land. Then the animals spread out because the water that carries their food is spread out.

The Everglades has wet and dry seasons, but it also has wetter and drier areas caused by how high the land is above the water level. Even a few inches of elevation can make a difference in how wet or dry the soil remains throughout the year. These differences in moisture help create **unique** habitats, each with its own special set of plants and animals.

*Mangrove trees*





One of the lowest Everglades habitats is the mangrove swamp, which is named for the mangrove trees that line the islands and bays leading into the ocean. Fresh rainwater flows toward these areas and mixes with the salty ocean water, making the water in mangrove swamps brackish. The mangrove trees have specially **adapted** roots and leaves so they can live in this salty, muddy water. The swamps also serve as nurseries for shrimp, bonefish, and other marine animals that need a protected place to grow before they head to the ocean. If the brackish water in mangrove swamps changes, these animals cannot survive. Since two goals of the Restoration Plan are to allow Everglades water to flow more naturally to the ocean and to regulate the amount of freshwater flowing during each season, animals of the mangrove swamps—including pelicans, sea turtles, and the endangered American crocodiles and manatees—will be helped to survive.

#### ANALYZE THE TEXT

**Domain-Specific Vocabulary** What domain-specific words does the author use on these two pages? How do these words help deepen your knowledge of the topic?





The class was too far from the ocean to see a mangrove swamp, but as they walked the Anhinga Trail, the students saw several of the Everglades habitats. The slough filled with slow-moving water stretched in the distance. A sawgrass prairie covered the shallow parts of the slough, and in the distance the rounded domes of hardwood hammocks rose above the surface of the water.

As the students came to the end of the Anhinga Trail, Ranger Jim pointed out a gumbo limbo tree. “It’s also called a tourist tree,” he said, “because the bark of the tree peels off, just like the skin of sunburned tourists.” Then he directed the students back to the bus for a short ride to a pine forest called the Pinelands.

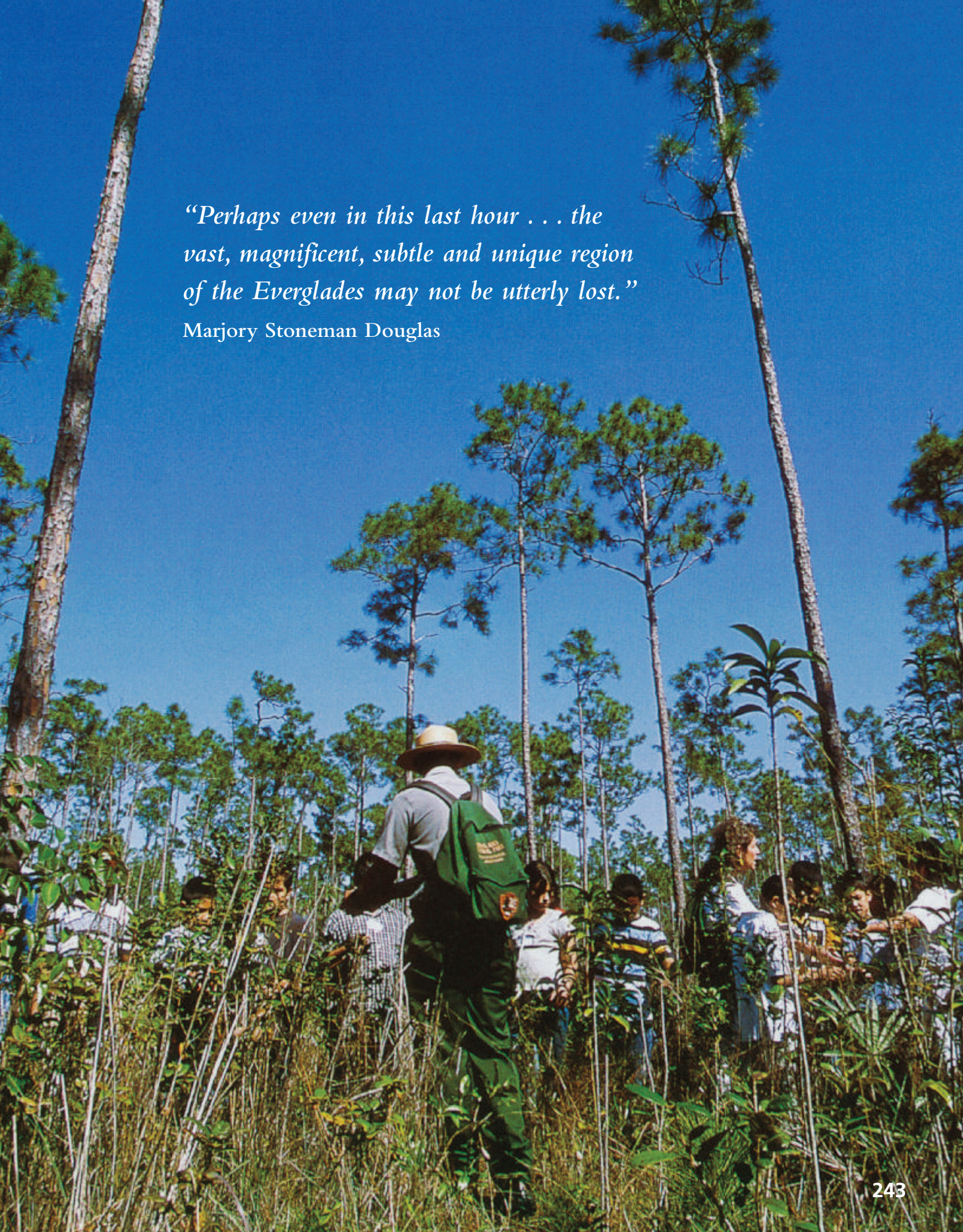
Ranger Jim took the class on a hike through the Pinelands, one of the driest habitats in the Everglades. The sunlight filtered through the trees. Everything was quieter than on the Anhinga Trail. The floor of the Pinelands is covered with cabbage palms, marlberry bushes, blue porter flowers, and other **vegetation** that help absorb sounds from the outside world.

“This is where you’ll find solution holes,” Ms. Stone told the students. They searched the forest for the large holes that have been carved out of the limestone by tannic acid, a chemical formed when rainwater mixes with the pine needles and other leaves in the forest. Small animals live, feed, and raise their young in the solution holes. The students also watched as a tiny yellow tree snail nestled under the bark of a tree, eating a growth on the tree called lichen. They saw a Red-Shouldered Hawk swirl in the sky, and they waited for a golden orb spider to catch its next meal in its web close to the ground.

*Hiking through the Pinelands*







*“Perhaps even in this last hour . . . the vast, magnificent, subtle and unique region of the Everglades may not be utterly lost.”*

Marjory Stoneman Douglas





As they walked through the Pinelands, the students talked with Ms. Stone and Ranger Jim about the circle of life—the Miccosukee (MIHK uh SOO kee) belief that all plant and animal and human life is connected. They had seen this today in the habitats they visited. The students also realized how terrible it would be if the habitats in this part of the Everglades were not protected from the effects of farming and development that were still putting the Everglades in danger. What would happen to all the unique plants and animals they had seen? Ranger Jim said they could help by **conserving** water, even when brushing their teeth or washing their faces, because most of the water used in southern Florida comes from the Everglades. With responsible water conservation, the Everglades Restoration Plan could, over the next thirty years, **restore** a healthy balance so all living things—plants, animals, and people—will be able to live side by side in the only *Pa-hay-okee*, “Grassy River,” in the world.

It was the end of a long day for the class, but there was one more part of the Everglades to visit. Ms. Stone and Ranger Jim led the students into an open space hidden at the end of the hiking trail.



*Flock of White Ibis*









“This is a finger glade,” Ms. Stone said. “It’s a small part of the sawgrass prairie that does not stay wet all year.” During the wet season, the finger glade would be filled with water and fish. But now the ground, which is higher than the larger sawgrass prairies, was dry and hard.

“For a few minutes you can walk as far as you like and enjoy the finger glade,” said Ms. Stone.

The students fanned out. Some pretended they were birds, flying low overhead. Others studied the sawgrass, pretending to be explorers discovering the glade. Still others talked about how the hard ground on which they were walking would turn into a lake deep enough for fish to swim through during the wet season. And some just lay on their backs, looking at the sky and the ring of trees around the glade.





When the students came back, they sat in a circle close to Ms. Stone.

“Close your eyes,” said Ms. Stone, “and listen.”

“Do you hear cars?” she whispered.

“Do you hear sirens?”

“Do you hear people?”

“What do you hear?”

*Silence.*

“You are not going to find silence like this anyplace else in the world,” Ms. Stone said quietly. “This glade is protected by a circle of trees and marshes and natural wildlife. It is far from the noise of the outside world. It’s full of *silence*. Any time you are in a sawgrass prairie like this one, stop and listen to the silence.”

#### ANALYZE THE TEXT

**Explain Scientific Ideas** Why do you think the author includes this description of the finger glade? What has it helped you understand about the sawgrass prairies of the Everglades? How does this area compare to the mangrove swamp and Pinelands habitats?









The sun was setting over the Everglades as the class walked back to the bus. Birds flew low over the sawgrass prairie. It was a peaceful time, a time for everything to settle down for the night. The students knew that for the near future the Everglades would look the same, and might even be almost the same. They also knew about the dangers facing the Everglades, and that it would not stay the same unless people watched over it and took care of it.

Restoring the Everglades will take a long time, and it may never be finished. But the students knew they could play a part as they grew older. They had learned that they too were a part of the Everglades, connected in the same circle of life with the tiniest insect and largest alligator. They knew that someday in the not-too-distant future, **responsibility** for the Everglades would pass on to them. They would become the **guardians** and protectors of the only Everglades in the world, helping this wild and wonderful place go on *forever*.

#### ANALYZE THE TEXT

**Author's Purpose** Why might the author have written about a class field trip to the Everglades? Why do you think she included so many vivid details about the wetlands?





## COMPREHENSION

# Dig Deeper

## How to Analyze the Text

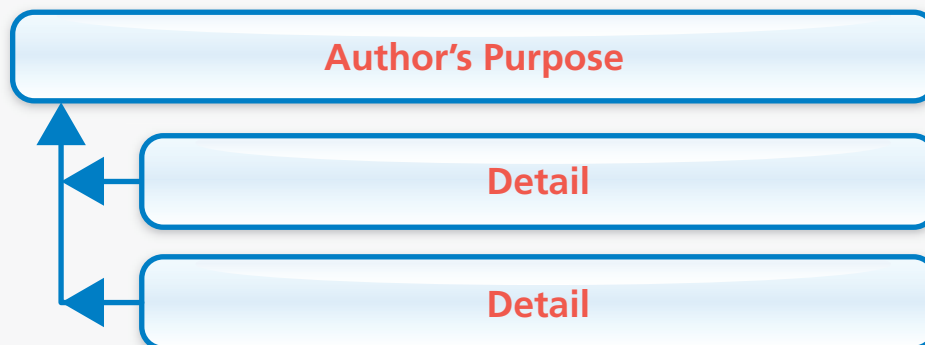
Use these pages to learn about Author's Purpose, Explaining Scientific Ideas, and Domain-Specific Vocabulary. Then read "Everglades Forever" again to apply what you learned.

### Author's Purpose

Authors of narrative nonfiction, such as "Everglades Forever," have a variety of reasons for writing. They may want to share information, describe an event or a person, or persuade readers to agree with their position on an issue. In their writing, they include details such as facts, examples, and descriptions that will help them fulfill their purpose.

In "Everglades Forever," the **author's purpose** is to persuade. She wants to convince readers that it is important to protect the Everglades. She presents her argument and main points in the form of a narrative about a school field trip. This structure allows her to give reasons and evidence in a way that interests readers.

Look through the selection. What are the facts, examples, and other pieces of text evidence that help convince you the Everglades should be preserved?



**RI.5.3** explain the relationships between individuals/events/ideas/concepts in a text; **RI.5.4** determine the meaning of general academic and domain-specific words and phrases; **RI.5.8** explain how an author uses reasons and evidence to support points; **RI.5.10** read and comprehend informational texts; **RF.5.4a** read on-level text with purpose and understanding





## Explain Scientific Ideas

In “Everglades Forever,” the author explains several important scientific ideas. For example, she talks about the migration of animals within the wetlands, their various habitats, and the need for water conservation. By thinking about the relationships between these different aspects of the same topic, readers can understand the author’s argument more fully.



## Domain-Specific Vocabulary

The author includes **domain-specific words** in her text. These are words directly related to the topic of Everglades conservation, such as *endangered*, *wetlands*, *habitat*, *thermoregulate*, and *slough*. Using domain-specific vocabulary allows textbook and informational text authors to explain things precisely and to show their knowledge of the subject. Domain-specific terms are often defined in the text. When they are not, readers can use context clues to figure out their meanings.





# Your Turn



## RETURN TO THE ESSENTIAL QUESTION



Review the selection to prepare to discuss this question: *What reasons do people have for protecting the environment?* Draw information from the text as well as your prior knowledge. Then share your ideas in a small-group discussion.



## Classroom Conversation

Continue your discussion of “Everglades Forever” by using text evidence to answer these questions:

- 1 What are some of the habitats found in the Everglades?
- 2 How does the selection help you understand the connections between humans, plants, animals, and natural resources?
- 3 What are some ways that you can help protect the environment?

## ADD GRAPHIC FEATURES

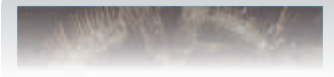
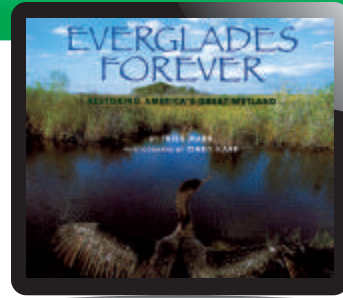
**Write Captions** With a partner, use the Internet or print resources to find additional graphic features for the selection. Look for photographs of Everglades animals, maps of the wetlands, or charts about the area’s resources. Write a brief caption for each. Explain how the graphic feature supports an important idea in the text.





## WRITE ABOUT READING

**Response** The author of “Everglades Forever” believes it is important to preserve the Everglades. What reasons and evidence does the author include to support her point? Write a paragraph to explain whether you agree or disagree with the author’s argument. Use facts, examples, and other text evidence to support your position.



### Writing Tip

Use precise language and domain-specific vocabulary as you present details to support your position.



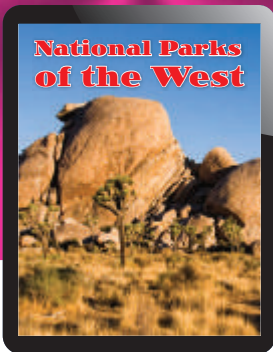
**RI.5.8** explain how an author uses reasons and evidence to support points; **W.5.2d** use precise language and domain-specific vocabulary; **W.5.9b** apply grade 5 Reading standards to informational texts; **W.5.10** write routinely over extended time frames and shorter time frames; **SL.5.1a** come to discussions prepared/explicitly draw on preparation and other information about the topic;

**SL.5.1c** pose and respond to questions, make comments that contribute to the discussion, and elaborate on others' remarks



## Lesson 8

# INFORMATIONAL TEXT



### ✓ GENRE

**Informational text,**  
such as this website, gives facts  
and examples about a topic.

zxcvbnm

### ✓ TEXT FOCUS

#### Graphic Sources

Informational text may include  
a graph, which shows how  
different facts and numbers  
relate to each other and to  
the text.



**RI.5.10** read and comprehend informational  
text



# National Parks of the West

## Big Bend National Park: Texas

Big Bend National Park is located along the Rio Grande, also called the Rio Bravo, the river that forms the boundary between Mexico and the United States. The park is open year-round. [more](#)

### Wildlife and Vegetation

Big Bend is the home of more than 1,200 plant species, including 60 kinds of cactus, and more than 4,000 animal and insect species. This diversity is due to the park's many natural habitats, from the Chihuahuan Desert to the Chisos Mountains. [more](#)





## World Record Breakers

Plants are always blooming in California. The scent of rich soil fills the air. Every year in Half Moon Bay, the town holds the World Championship Pumpkin Weigh-Off. The judges all nodded yes when they saw the 2007 winner. It weighed 1,524 pounds, more than a big horse!

Pumpkins aren't the only giant veggies though. Some farmers use their muscles and heavy shovels to dig up 30-pound beets and turnips. Although these giants look tough, they are tender and delicious to eat.

Thadd Starr won first prize at the Half Moon Bay contest for his super-sized pumpkin.





## ENVIRONMENT

## Yellowstone National Park: Wyoming, Montana, and Idaho

Yellowstone National Park is the first and oldest national park in the United States. It was established in 1872. Yellowstone has at least 150 geysers. The most famous geyser is Old Faithful. This natural wonder shoots hot water as high as 200 feet in the air. [more](#)

### Wildlife

Yellowstone has dozens of animal species. Today, wolves are among them, but in 1994, Yellowstone had no wolves. Humans had killed off the park's native gray wolves.

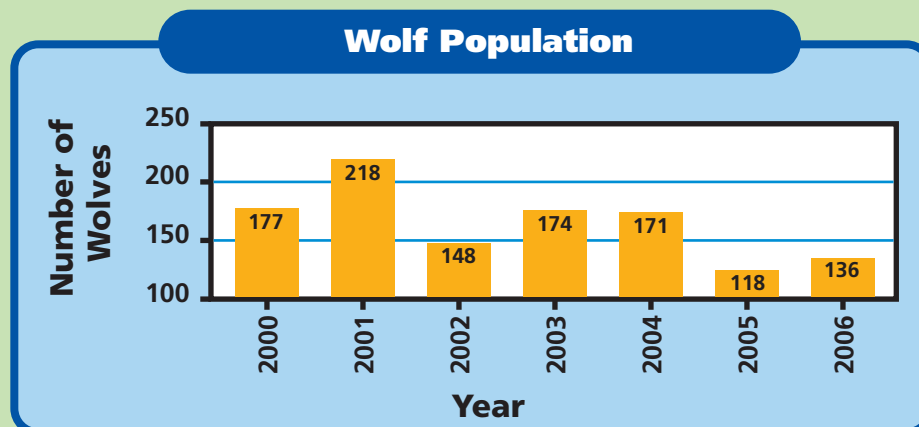
In the 1990s, scientists decided to restore this endangered wolf species to the park. In 1995 and 1996, scientists captured thirty-one gray wolves in Canada and brought them to Yellowstone. At first, the wolves lived in three large pens. In time, they were released into the wild.

The wolf restoration program is not unique. It was modeled after other similar programs. But it is one of the most successfully adapted programs of its kind. In 2006, 136 gray wolves lived in Yellowstone. They live in thirteen different areas of the park.



A gray wolf running

Analyze the graph below. In what year was the wolf population the highest? The lowest? How many wolves were there in each of these years?







# Compare Texts

## TEXT TO TEXT

**Compare and Contrast Texts** With a partner, review “Everglades Forever” and “Quest for the Tree Kangaroo” (Lesson 6). Take notes on what you learn about wildlife conservation and human interaction with nature. Consider how the text structure, or overall organization of each text, affects your understanding of the topic. Discuss and compare the two selections.



## TEXT TO SELF

**Write an Informal Letter** Write a letter to your classmates to persuade them to plan a field trip to the Everglades. Use facts and details from “Everglades Forever” to make a strong case.



## TEXT TO WORLD

**Identify Viewpoint** Review the website features on pages 254–256. What viewpoint is presented? Think about how that viewpoint affects your interest in national parks. Then search the Internet for a website about another wildlife preserve similar to Yellowstone. Discuss with classmates your thoughts about the website’s information and its viewpoint.



**RI.5.5** compare and contrast the overall structure in two or more texts; **RI.5.7** draw on information from print and digital sources to locate answers or solve problems; **W.5.4** produce writing in which development and organization are appropriate to task, purpose, and audience; **W.5.10** write routinely over extended time frames and shorter time frames



# Grammar



**What Is a Conjunction?** A **conjunction** is a word that connects other words in a sentence. *And*, *but*, and *or* are **coordinating conjunctions**. They can connect two words, two groups of words, or two sentences. A sentence formed when a coordinating conjunction is used to connect two sentences is called a **compound sentence**. Words such as *if*, *because*, *although*, *after*, and *when* are **subordinating conjunctions**. A subordinating conjunction can connect a sentence and a dependent clause to form a **complex sentence**.

## Coordinating Conjunction in a Compound Sentence

The egret stood in the sawgrass, **and** the osprey dived into the slough.

## Subordinating Conjunction in a Complex Sentence

**When** the osprey dived, the egret flew away.

### Try This!

**Work with a partner. Identify each conjunction in the sentences below and tell whether it is coordinating or subordinating. Then explain the purpose of the conjunction in each sentence.**

- 1 Most plants cannot live in salty water, but mangrove trees thrive in it.
- 2 Where mangrove trees grow, shrimp and other marine animals can raise their young.
- 3 If the water in a swamp becomes too salty, some animals cannot survive there.
- 4 Fresh water is needed, and only rainfall can provide that.



A good writer avoids run-on sentences. One way to correct a run-on sentence is to add a comma and a coordinating conjunction to turn the run-on sentence into a compound sentence. Another way to correct a run-on sentence is to add a subordinating conjunction to turn it into a complex sentence.

### Run-On Sentence



The hikers entered the  
Pinelands the world  
became very quiet.

### Compound Sentence

The hikers entered the  
Pinelands, and the world  
became very quiet.

### Complex Sentence

When the hikers entered the  
Pinelands, the world became  
very quiet.



## Connect Grammar to Writing

As you revise your cause-and-effect essay, look for run-on sentences. Correct a run-on sentence by dividing it into separate sentences or by using conjunctions to form a compound or complex sentence.






**W.5.2a** introduce a topic, provide an observation and focus, group related information/including formatting, illustrations, and multimedia; **W.5.2b** develop the topic with facts, definitions, details, quotations, or other information and examples; **W.5.2c** link ideas within and across categories of information using words, phrases, and clauses; **W.5.2d** use precise language and domain-specific vocabulary

# Informative Writing



 **Ideas** The author of “Everglades Forever: Restoring America’s Great Wetland” uses specific facts and details to inform readers about the Everglades habitat. When you revise your **cause-and-effect essay**, make sure your supporting details are specific.

Colin drafted an essay on what would happen if alligators disappeared from the Everglades. Later, he made his supporting details more specific so that his key points would be easy to follow.



## Writing Traits Checklist

### **Ideas**

Did I support my ideas with specific details?

### **Organization**

Did I group related information logically and make relationships between causes and effects clear?

### **Sentence Fluency**

Did I use clauses effectively to link ideas?

### **Word Choice**

Did I use precise words?

### **Voice**

Is my writing clear and informative?

### **Conventions**

Did I use correct spelling, grammar, and punctuation?

## Revised Draft

Alligators help create the habitats of other living things in the Everglades. ~~others~~ They dig deep holes, and the <sup>^</sup> , which is part saltwater and part freshwater, holes fill with water. This brackish water <sup>^</sup> that other animals depend on for food is home to young bonefish and shirimp. <sup>^</sup>

## Protecting the Everglades

by Colin Diep

What would happen if alligators left the Everglades? In an ecosystem, every creature plays an important part in keeping the others alive. No part of life can be taken away or harmed without affecting other animals and plants.

Alligators help create the habitats of other living things in the Everglades. They dig deep holes, and the holes fill with water. This brackish water, which is part saltwater and part freshwater, is home to young bonefish and shrimp that other animals depend on for food. Many plants and animals gather in these wet alligator holes and use them to survive the dry season.

If alligators were to disappear, the life that depends on alligator holes in the dry season would not survive. The birds that feed on those plants and animals would have to find food elsewhere, or they would not survive either. By protecting alligators, we can help protect all life in the Everglades.

### Reading as a Writer

How do specific details make the causes and effects more clear? Where can you strengthen words and details in your cause-and-effect essay?

In my final paper, I made my supporting details more specific. I also made clear connections between my ideas.

