Fisheating Creek: Wild River of the Everglades

Teacher's Guide Answer Key

Vocabulary

Term	Answer		Definition
Anthropogenic activities	E	Α	the process where atmospheric gasses, such as carbon dioxide and methane, absorb and re-emit heat
Wildlife Corridors	Н	В	an area of land where freshwater flows and drains into a common body of water.
Greenhouse effect	Α	С	the benefits natural ecosystems provide for human well-being
Succession	G	D	species that modify their environment in a significant manner, creating new habitats and modifying existing ones to suit their needs.
Watershed	В	E	processes carried out by humans that impact the environment such as burning fossil fuels, mining, and agricultural land changes.
Ecosystem services	С	F	an organism that is not native to the area it inhabits and which causes significant damage to that ecosystem
Commensalism	- 1	G	the process of change from one habitat to another
Invasive species	F	Н	areas of continuous green space that allow wildlife to safely roam or migrate
Ecosystem engineers	D	I	a relationship between two organisms in which one benefits and the other is neither benefited or harmed

Quiz

Multiple Choice

- 1. Which of the following is <u>not</u> part of the Florida Panther's diet? Circle all that apply.
 - a) White tailed deer
 - b) Feral hogs
 - c) Pond apples
 - d) Florida manatees
- 2. Which of the following is characteristic of the Florida scrub habitat? Circle all that apply.
 - a) It needs regular fires to prevent succession
 - b) It is home to many endemic species of plants and animals
 - c) The sandy substrate is ancient Sahara dust
 - d) It is typically hot and dry
- 3. The relationship between the Florida mouse and gopher tortoise due to the burrows is an example of which symbiotic relationship?
 - a) Parasitism
 - b) Mutualism
 - c) Commensalism
 - d) Decomposition

True & False

- 4. All species of apple snails found in Florida are native to Florida wetlands.
 - a) True
 - b) False
- 5. Fisheating Creek and Kissimmee River are both components of the Everglades Watershed.
 - a) True
 - b) False
- 6. The greenhouse effect only occurs due to recent human activities such as burning fossil fuels.
 - a) True
 - b) False

Short Answers: Write 2 - 4 sentences for each of the following questions.

7. Name an ecosystem engineer in Florida and describe how it alters its surrounding environment.

One example is the gopher tortoise and how their burrows shape their ecosystems and provide shelter for hundreds of other species. Another is the alligator. They create pathways in the mud moving around wetlands and create holes for weathering the dry season. These holes of water create habitats for smaller animals like fish, and oasis for other animals to find water. Another answer could be woodpeckers. They peck at the wood in trees to make holes. This changes hollows parts of the trees and makes space for small animals to live, nest and scavenge.

8. List and describe 3 ecosystem services provided by wetlands.

5 possible answers:

1) Aquatic plants act as water filters to remove nutrients like nitrates and phosphates from the water 2) Roots stabilize the sediment, helping to control erosion during storms 3) Plants also store carbon for long periods of time that would otherwise be released into the atmosphere as carbon dioxide 4) Food source for commercial seafood industry 5) Recreation benefits and tourism

9. Name a species (other than the Florida panther) that relies on the Florida Wildlife Corridor and why.

Manatees and black bears are both examples of species that rely on the Florida Wildlife Corridor because they both require large areas of continuous unfragmented habitat to roam. Manatees tend to travel long distances and utilize the connection of narrow passages with larger water bodies. Black bears roam through vast regions of the forest in search of food.

10. How has human development and other anthropogenic activities affected the Florida Panther's population?

Agricultural and urban development have fragmented the panthers' historical range. Although they prefer upland habitats with dry conditions, urban development and persecution have pushed them into wetland areas such as Big Cypress National Preserve. Today most of the panther's natural habitat has been fragmented and intersected by roads and highways. As a result, automobile strikes are the number one cause of panther fatalities today.