

Families ForEverglades TURTLE TALK

Learn more about turtles from the ocean to the Everglades with these lessons and resources!

The Everglades Foundation www.evergladesfoundation.org

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WHAT'S INSIDE?



Sea Turtle Interview Activity p. 3-5 and Worksheet

After watching a sea turtle interview and using what you learned in the presentation, answer the following questions.



Wanted Alive! 4th Grade p. 6-7 Everglades Lesson

Students will read a book titled *Everglades* by Jean Craighead George, then they will research a threatened or endangered animal species and create a poster of their findings.



Links and Resources

Use these links from Inwater Research Group, Florida Fish and Wildlife, Loggerhead Marinelife Center, and more to learn about turtles in the Everglades. In English and Spanish!

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Sea Turtle Interview Video Activity Worksheet

Directions: After watching the Sea Turtle Interview video: <u>https://youtu.be/xzaE-1x4uyE</u> , answer the following questions.

Pt. 1: Draw a line connecting the sea turtle on the right with its correct species name on the left.



Sea Turtle Species Name

A. Leatherback sea turtle

B. Loggerhead sea turtle

C. Green sea turtle



- Pt. 2: Define the following vocabulary words.
 - A. Keystone species B. Threatened species C. Endangered species D. Beach renourishment E. False crawl

Pt. 3: Answer the following true or false questions. If the statement is false, correct the sentence.

- 1. True or False: There are 8 sea turtle species in the world.
- 2. True or False: All sea turtle species are either threatened or endangered.
- 3. **True or False:** The three most common species of sea turtles that nest in Miami-Dade County beaches are: Hawksbill, Leatherback, and Green sea turtles.



- Pt. 4: Open response; answer the following questions.
 - 1. How does Everglades restoration impact sea turtles and the marine ecosystem?

2. How can YOU help protect sea turtles?



EVERGLADES CURRICULUM

Grade 4 - Lesson 2



Grade Level: 4th

Objective:

Students will be able to:

• Explain the threats to animals in certain Everglades habitats and why they are threatened or endangered.

Standards:

- SC.4.L.17.4 Recognize ways plants and animals, including humans, can impact the environment.
- LAFS.4.W.3.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.

Everglades Literacy Conceptual Framework Connections:

- Fundamental Concept 6
- Fundamental Concept 7

Duration: 60 minutes

Materials:

- Everglades by Jean Craighead George
- List of Everglades Threatened or **Endangered Animal Species**
- Internet access or other sources of information OR copies of data sheets
- Crayons, colored pencils, pictures from Internet
- 11" by 17" or chart paper for posters
- Poster Rubric

At A Glance:

Students will read a book titled *Everglades* by Jean Craighead George. They will research a threatened or endangered animal species and create a poster of their findings. Find the full lesson here.

Background:

Threatened wildlife include species of plants and animals that are likely to become endangered in the near future, unless steps are taken to protect and manage the species and/or its habitat for its survival. A species is considered endangered if it is, or soon may be, in immediate danger of **extinction** unless the species or its habitat is fully protected. Each species must be listed on the Federal list of Endangered and Threatened Species before it can receive protection under the Endangered Species Act (ESA). The ESA was enacted in 1973 to conserve and set up recovery plans for listed species and their associated habitats.

In addition to the Federal list of Endangered and Threatened Species, the state of Florida maintains its own endangered species list: The State of Florida's Endangered and Threatened Species List. The Florida Fish and Wildlife Conservation Commission (FWCC) maintains the state list of animals designated as Federally-designated Endangered or Threatened, state-designated Threatened, or state-designated Species of Special Concern. All Federally listed species that occur in Florida are included on Florida's list. In addition, the state has a listing process to identify species that are not Federally listed but at risk of extinction.

The American alligator is a success story. It was first listed as endangered in 1967 in accordance with a law that preceded the ESA. However, populations quickly recovered, resulting in delisting it as an endangered species. It is still listed as threatened on the Federal list of Endangered and Threatened Species due to its similarity of appearance to the American crocodile for purposes of protection where the two species share habitat, such as the Everglades.

Preparation:

- Some suggested websites for student research are: 1. Florida Museum-Threatened & Endangered Species, U.S. Fish & Wildlife Service (Hint: Use searchable database by state and animal), and National Park Service (Hint: Use search box).
- If student access to computer lab is not available, teachers can access 2. and print the Everglades Threatened and Endangered Species Factsheets here.

Vocabulary:

- Endangered Plants and animals that are, or soon may be, in immediate danger of extinction unless the species or its habitat is fully protected and managed for its survival.
- **Extinction** When a plant or animal species no longer exists.
- **Threatened** Plants and animals that are acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range/habitat is decreasing in area at a rapid rate and, as a consequence, is very likely to become endangered in the foreseeable future.



Procedure:

- 1. Read the book <u>Everglades</u> by Jean Craighead George to the class. Ask students to think about the different sources of information that they have investigated over the last few lessons and discuss how the Everglades has changed over time.
- 2. Ask them how they think the 'good story' is turning out. Explain that many animals in the Everglades are threatened or endangered. Ask students what they think the terms threatened and endangered mean. Use background information to elaborate. Explain that in some cases, animals that were once endangered, like the American alligator, have been able to recover because laws were put in place to protect them and are now considered threatened or stable. Tell students that they are going to research a current Everglades threatened or endangered species.
- 3. Randomly assign to each student one of the endangered or threatened species from the list of animal species provided. Hand out the "Wanted-Alive!" rubric, one for each group. Review the rubric with the students so that they have a clear understanding of the assignment expectations.
- 4. Explain that they will use internet sources to find information on their endangered or threatened species to make a "Wanted-Alive!" poster. Access additional <u>teacher tips</u> on research at the elementary level.
- 5. Take them to a website of your choosing, use the suggested websites, or print fact sheets to demonstrate how to search for the needed information. Suggested research sites:
 - Florida Museum-Threatened & Endangered Species
 - <u>U.S. Fish & Wildlife Service</u> (Hint: Use searchable database by state and animal)
 - National Park Service (Hint: Use search box)
- 6. Student posters should include:
 - A physical description of their species and a picture
 - Type of habitat they live in
 - Predator/prey relationship (what do they eat/what eats them)
 - Human impacts and how they threaten the species survival
 - Factors/threats contributing to species being endangered/ threatened (i.e. poaching, habitat degradation, invasive species, and increased predation)
 - What is being done or what we can do to protect them

Assessment:

1. Students should complete a poster with all required components. Have students present their posters, then display their posters around the room for an Everglades Threatened and Endangered Species Gallery. Tell students that during the gallery walk their task is to pick three species besides their own and record at least one threat for each of those species. Use the Wanted-Alive! poster rubric to score each poster.

Resources:

FAU/Pine Jog Environmental Education Center.

(n.d.) Endangered Species "Wanted - Alive!" In *Exploring the Everglades: Teacher's Guide Lesson Plans for Elementary School* (Lesson 6).

George, J. C. (1995). Everglades. New York, NY: HarperCollins Children's Books.

LINKS AND RESOURCES

Inwater Research Group

 Learn more about Inwater Research Group's education programs including sea turtle outreach programs, curricula requests, turtle walks, traveling trunks, and <u>Amigos de Las</u> <u>Tortugas.</u>

Florida Fish and Wildlife Gopher Education Corner

 Check out FWC's Gopher Tortoise Program with resources on how to ID a gopher tortoise and burrow, how to create a gopher tortoise-friendly yard, and <u>educational materials</u> including brochures, fact sheets, information packets, activity books, and more.

<u>Una Guía Para Vivir con Tortugas de Tierra</u>

• Contiene información sobre la importancia de la tortuga de tierra en Florida y lo que debe hacer si encuentra una.

Loggerhead Marinelife Center Resources

• Visit the Loggerhead Marinelife Center education page with videos and lesson plans about sea turtles and check out the <u>Kid's Fun Zone</u> with coloring pages and crafts.

Florida Nature Trackers - Diamondback Terrapins

 Participate in Citizen Science and help monitor diamondback terrapin populations in coastal Florida marshes, tidal creeks, and mangroves. Submit your observation to this project to help better track their habitat use.

Florida Box Turtle Project

 Learn more about the Sanibel Captiva Conservation Foundation's Florida Box Turtle Project with box turtle facts, news, how you can help, and how you can adopt a Florida box turtle.

Florida Oceanographic Society Educational Resources

 Discover the Florida Oceanographic Society's educational resources page with sea turtle lessons and activity packets, science Saturdays featuring sea turtle STEM models, and virtual field trips.

<u>Gopher Tortoise: Ecosystem Engineer</u>

 Find out more amazing facts about this lovable builder, its behaviors, and the many other animals that rely on gopher tortoises to survive with this Odyssey Earth video and teacher toolbox.