

**Subject:** TAG

**Grade:** 3rd

Note: TAG instruction occurs one day a week for each student. These plans are meant to replace the time that would be spent on core learning activities (reading, ELA/writing, math, social studies/science) for that one day each week. Students should still complete activities for specials classes (art, music, PE) on their TAG day.

**Week 5**

<b>Standard</b>	Science: S3L1 & S3L2 TAG: Higher Order Critical Thinking Skills (HOT 2 & HOT 7)
<b>Brief Description</b>	Students will learn about endangered animals that live in Georgia. They will complete a Six Thinking Hats strategy to think about the topic more critically, creatively, and through different points of view. Then students will create a diagram to illustrate the perfect habitat and a poster to educate the public on how to help save an endangered animal.

**Student Directions**

1. Complete the Creative Thinking Warm-Up.
2. Read both articles on endangered animals. Complete the Six Thinking Hats Activity.
3. Complete the Critical Thinking Logic Puzzle.
4. If possible, ask your parents to take a picture of your work with their phone and e-mail it to your TAG teacher.

## Creative Thinking Warm-Up

If you could be any animal in the world, what would you be? Why?

Imagine that a scientist discovered a new bird and named it a "hexabird". What would it look like? Draw a picture and describe why its name fits.

Brainstorm a list of 3 different insects. Combine parts from each bug to make a new bug species. Draw a picture of your new bug in its habitat. What would you name it?

# Endangered Animals

## What are Endangered Animals?

Endangered animals are animals that are in danger of becoming extinct. This means that there will be no more of these animals alive on earth. An animal is considered endangered or threatened when there are very few of them alive.

Some animals are more threatened than others. To keep track of how at risk of becoming extinct a species may be, scientists categorize the level of risk with a different name. From the most threatened animal to least threatened these names are:

- 1) critically endangered (most threatened)
- 2) endangered
- 3) vulnerable (least threatened)

There are also some animals that only exist in captivity (for example in a zoo). These animals are called "extinct in the wild".

## What are some of the most endangered animals?

These are animals that are categorized as critically endangered.

- Black Rhinoceros - There are only a few black rhinos left. They mostly live in Western Africa. They are mostly threatened due to hunters killing them for their horns.
- Red Wolf - The red wolf originally lived in the Southeastern United States. There are only a few hundred left, most of them living in captivity.
- Other critically endangered animals include the Siberian Tiger, Florida Panther, Mountain Gorilla, California Condor, and the Giant Ibis.

Some endangered animals include the Sea Otter, Loggerhead Sea Turtle, Giant Panda, Blue Whale, Albatross, and the Snow Leopard. Some vulnerable animals include the Lion, Cheetah, Hippo, Dingo, Polar Bear, Humpback Whale, and the Macaroni and Royal Penguins.

## How are endangered animals protected?

Many countries throughout the world have laws that protect endangered species. It is often a crime to kill or injure an endangered or protected animal. In the United States there are a number of laws that protect endangered animals. These laws are part of the Endangered Species Act which was signed into law by President Nixon in 1973. These laws help protect the animals and their habitat. They also include programs to help animals recover called Recovery Plans. The main agencies that enforce the laws and help protect the animals are the United States Fish and Wildlife Service and the National Oceanic and Atmospheric Administration.

Throughout the world there are also wildlife or nature preserves. These preserves are large areas of land where animals and their habitat are protected. Development is very limited or prevented altogether on the lands. Hunting is also limited or illegal. Critically endangered animals are often protected by keeping some of them captive and breeding them in captivity. This helps scientist to keep the species alive and also helps them study the animals.

Scientists also study the animals in the wild in order to understand what may be affecting their population. With good science, scientists may be able to help a species of animal survive extinction.

Source: [https://www.ducksters.com/animals/endangered\\_animals.php](https://www.ducksters.com/animals/endangered_animals.php)

# The Most Endangered Animals in Georgia

There are 48 threatened or endangered animals in GA, including loggerhead turtles. Here are the two most at risk.

By Deb Belt, Patch Staff | May 21, 2018 7:00 pm ET

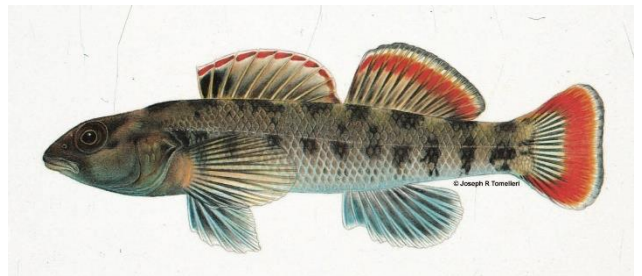
Adapted from: <https://patch.com/georgia/atlanta/here-are-most-endangered-animals-georgia>

When you think of the planet's most endangered species, some common examples that might come to mind include rhinos, elephants, tigers, gorillas and leopards. But a new report has identified the two most endangered species in every state — and the answer might not be what you think.

In Georgia the two most threatened animals are the Etowah Darter fish and the North Atlantic Right Whale.

## Etowah Darter

- U.S. Fish and Wildlife Service classification: Endangered
- Geographic range: Only the Etowah River system above and below Allatoona Reservoir, in northern Georgia.
- Habitat: Adults typically live in streams with moderate to strong current over gravel. They feed on small aquatic invertebrates. They need flowing water and cannot live in pools.
- Threats: Habitat destruction due to the reservoir construction and water pollution from the greater Atlanta area.



A fish only found in Georgia! It grows to about 2 inches long.  
Photo: <https://tnacifin.com/fish/etowah-darter-eteostoma-etowahae>

## North Atlantic Right Whale

- U.S. Fish and Wildlife Service classification: Endangered
- Geographic range: The Atlantic Ocean along the eastern coast of the United States. Females migrate to the waters along the coast of Georgia to give birth during winter.
- Habitat: Right whales feed on calanoid copepods and other small invertebrates generally by slowly skimming through patches of concentrated prey at or below the surface.
- Threats: Historical overhunting, getting caught in fishing lines, crashing into boats, and underwater noise pollution.



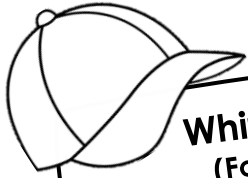
There are only about 400 of these whales remaining in the world.  
They can weigh up to 79 tons and can be about 50 feet long.  
They have a lifespan of about 70 years.  
Photo: <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale#:~:text=North%20Pacific%20Right%20Whale>

According to the U.S. Fish and Wildlife Service, there are 48 threatened or endangered species in the Peach State, including the gray bat, loggerhead turtle and the frosted flatwoods salamander.

Hawaii has by far the greatest number of animals on the federal registry at more than 500. While accounting for just 0.2 percent of America's land mass, it is home to a quarter of the federally endangered species, according to the Mother Nature Network.

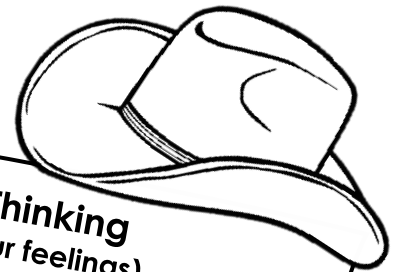
# Six Thinking Hats Activity

**Directions:** The Six Thinking Hats strategy helps us look at topics more creatively and through different points of view. On a separate piece of blank paper, answer the following questions. When you finish the questions for each hat, color in the hat on this handout.



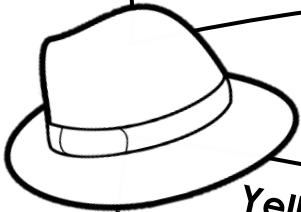
## White Hat Thinking (Focus on the facts)

1. Why do animals become endangered?
2. How can humans help protect endangered animals?



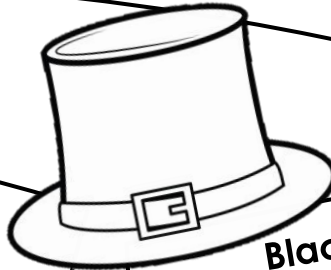
## Red Hat Thinking (Focus on your feelings)

1. If you were an endangered animal, would you rather live in the wild or in a man-made habitat like an aquarium or zoo? Why?
2. If you were an endangered animal, what would you think about the humans that you see? Why?



## Yellow Hat Thinking (Focus on the pros or benefits)

1. How can an aquarium or zoo be a good thing for animals?
2. Why are they good things for humans?



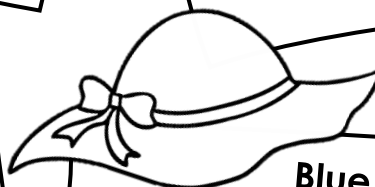
## Black Hat Thinking (Focus on the cons or problems)

1. How could an aquarium or zoo be a bad thing for animals?
2. What would happen if all the endangered animals in the world became extinct?



## Green Hat Thinking (Focus on being creative)

1. In what way is an animal like a bicycle? In what ways are they different?
2. If animals could talk, what do you think they would want to tell us most? Why?



## Blue Hat Thinking (Focus on summarizing what you've learned)

Choose either the Etowah Darter fish or the North Atlantic Right Whale.

1. Create a diagram to illustrate and label the perfect habitat for them to live and grow.
2. Create a poster to teach others about them and how they can help save them.

# Critical Thinking Logic Puzzle

**Directions:** Read the clues to complete the logic puzzle. Cross out possibilities that are not true, and circle the correct ones.

## 2 Batting Average

### THE STORY

Bobbi, Boris and Betty were three bats who lived in the same cave. Scientists followed them one night and discovered that they ate an average of 300, 150 or 75 insects an hour and managed to scare 8, 4 or 2 people in an average night. After that, for no reason at all, they painted themselves orange, pink or purple. Based on the clues, match the bats with their insect totals, scaring totals and new colors.

### THE CLUES

1. The purple bat scared the most people but didn't eat the most insects.
2. The orange bat ate the fewest insects but didn't scare the fewest people.
3. Boris ate twice as many insects as Betty.
4. Bobbi wasn't painted purple.

Bobbi	Boris	Betty
300 insects	300 insects	300 insects
150 insects	150 insects	150 insects
75 insects	75 insects	75 insects
8 scares	8 scares	8 scares
4 scares	4 scares	4 scares
2 scares	2 scares	2 scares
orange	orange	orange
pink	pink	pink
purple	purple	purple