



## Attwater's Prairie Chicken – Shrinking Habitat

### Materials:

- White board
- Tape
- Dry erase markers
- Pictures of APC
- Plastic animals
- Plastic trees

### Preparation:

1. Gather materials listed above.
2. Create grid on board with tape.

### Background Information:

The Attwater's prairie chicken is a critically endangered grouse species found in coastal prairies. Coastal prairies once covered all of the Houston and southeast Texas area but now only about 1% of all coastal prairies remain. Urbanization is one of the main reasons for the decline of this habitat and species.

### Instructions:

1. Share with the students background information on the Attwater's prairie chicken and coastal prairies. Discuss the reason behind the decline of the habitat and species.
2. Discuss with the students what elements are necessary to animals in a habitat (food, water, shelter, space).
3. Assign the students to be herbivores, carnivores or vegetation. Plan to have more herbivores than carnivores. Have the vegetation start by coloring 4 green squares each for vegetation in the habitat.
4. Explain to the students that they will be selecting their habitat on the coastal prairie (white board). First have the herbivores select their habitat by coloring 2 squares brown for their shelter, 3 squares yellow for their food, and 1 square blue for their water. All squares should be in the same area and touching. Once each herbivore has completed their habitat, have them place a plastic animal on their habitat to distinguish which animal lives there.
5. Next, have the carnivores select their habitat by finding an area near herbivores (potential food sources) and have them color 1 square brown for shelter, 4 squares red for area to hunt around their habitat, and 1 square blue for water. Once each carnivore has completed their habitat, have them place a plastic animal on their habitat to distinguish which animal lives there.
6. Next the instructor will play the role of the land developer. The land developer will be creating a housing and shopping area. The land developer will color 30 squares black to signify where the buildings will go. You will be coloring over habitat taking up by vegetation, herbivores and carnivores.
7. Once the development has been constructed, engage the students in a discussion of what happened. What action took place? With what consequences? Would or did any animals die?

From what causes? Could the developers have done anything differently to change the consequences? Could they have developed several scattered small areas instead of one large area or vice versa with what effects? Would it have reduced negative consequences for wildlife if they put the development in a different area of the habitat?

8. Ask the students to consider what seemed realistic about the activity and what did not. For example, sometimes development can take place that enhances the area for some kinds of wildlife. Often, however, it will not be the same kinds of wildlife that were in the area before development. Planners and developers can sometimes add to the vegetation in an area, creating additional shelter and food for some kinds of wildlife and can make water sources available under some conditions if there is insufficient water in the area.
9. Ask the students to summarize some of the possible effects on wildlife from human activities such as the development of land areas. Are there places in your community where wildlife habitat has been lost to human development?
10. Discuss loss of habitat as something that is affecting wildlife all over the planet. Ask the students to summarize the importance of suitable habitat for wildlife.

### **Take Action:**

#### **Zoo:**

Believe it or not, the Attwater's prairie chicken is not a chicken! It's technically a grouse – and it's vanishing from the coastal prairies of Texas. It is estimated that less than 100 of these birds are left in the wild. The Houston Zoo manages the captive breeding program for the Attwater's prairie chicken. We have breeding facilities both behind the scenes at the Zoo and at NASA's Johnson Space Center. When the birds hatch and grow large enough, they are slowly introduced and then released into the wild, where they will support the already existing populations.

These amazing birds face many threats once they are in the wild and we support the efforts to protect them to give them a fighting chance. Half of the Attwater's Prairie Chicken National Wildlife Refuge (totaling 5,500 acres) received fire ant treatment to protect habitat and Attwater's prairie chicken nests in 2014.

Since 1995, the Houston Zoo has raised and released over 1100 Attwater's prairie chickens into the wild. This number continues to grow, as an additional 127 Attwater's prairie chickens have been released so far this year. As just one of many efforts the Zoo is involved in to save wildlife, our zoo keepers breed these animals behind the scenes and release them into the wild to ensure Attwater's prairie chicken populations will recover and thrive for years to come.

Native to Texas, this small, brown bird calls the coastal prairie grasslands home. This species is best known for "booming" – a dance done by males to attract females during mating season in which they stomp their feet and fill the orange air sacs on the sides of their neck, creating a sound that can be heard up to half a mile away! With historic populations numbering close to 1,000,000 birds, it is

estimated that less than 100 of these birds are left in the wild. The Houston Zoo manages the captive breeding program for the Attwater's prairie chicken. We have breeding facilities both behind the scenes at the Zoo and at NASA's Johnson Space Center. When the birds hatch and grow large enough, they are slowly introduced and then released into the wild, where they will support the already existing populations.

Last year, the Attwater's prairie chickens released into the wild faced challenges similar to those encountered by fellow Texans as the release site in Goliad County took a direct hit from Hurricane Harvey. The eye of the storm passed directly over or within a few miles of the release site, and the lingering rains flooded most of the Attwater's historic range. These amazing birds face many threats once they are in the wild, but robust captive breeding programs around the state serve as a safety net, giving this species a fighting chance.

It is officially hatching season for our Attwater's prairie chickens (May), and over 500 eggs are currently being incubated to raise and release back into the wild thanks to the amazing bird department here at the Zoo! Post Harvey, the habitat at NASA has rebounded and is in the best condition anyone has seen in a long time. It would seem as though things are looking up for our feathered friends this year, thanks to a dedicated network of organizations and zoo goers like you that are helping to save wildlife each time you visit us here at the Zoo.

**You:**

Donate to the Houston Zoo's conservation fund to help support this project and prevent the Attwater's prairie chicken from going the way of the dodo bird.

Visit the Houston Zoo!