

# TEXAS WILDLIFE

## MIDDLE SCHOOL

### Life Science TEKS

<i>Sixth Grade:</i>	6.12C, 6.12E, 6.12F
<i>Seventh Grade:</i>	7.10A, 7.10B, 7.11B, 7.12A, 7.13A
<i>Eighth Grade:</i>	8.11A, 8.11B, 8.11D

### Vocabulary

abiotic, amphibians, biotic, Chihuahuan Desert and Mexican Mountains in Texas or Trans-Pecos, class, Coastal Prairies or Gulf Coastal Plain, diurnal, eco-region, ecosystem, Edwards Plateau, elevation, insectivores, invertebrates, kingdom, landforms, mammals, nocturnal, Oaks and Prairies or Grand Prairie and Plains, Osage Plains (Cross Timbers), Pecos and Staked, Plains or High Plains, phylum, precipitation, reptiles, Rolling Plains, soil, South Texas Brushlands, vegetation, West Gulf Coastal Plain or Piney Woods

### Pre-Show Activity

#### Pre-Show Lesson: Texas Eco-regions (3 day activity)

Post this question on the board: "What do you know about the nine eco-regions in Texas?"

#### *Materials:*

Per class: 9 pieces of large chart paper,

Per group: Eco-region map, Eco-region chart and Eco-region map answer key (Appendix A-1), a different colored marker, 8 pieces of computer paper, Internet accessibility

#### *Procedure:*

##### Part 1

1. Groups will get a map of Texas with the nine eco-regions numbered and a list of the names of the regions. They will try to guess which region goes with each area on the map. To

guess, they will place the number of the associated region of the map next to the appropriate region name on the chart (see Appendix A-1).

2. Groups will check their guesses with the answer key to see how many they got right.
3. Hang nine separate chart papers, each with one of the following titles, around the room in a carousel-like arrangement:

- Region One: Coastal Prairies or Gulf Coastal Plain
- Region Two: West Gulf Coastal Plain or Piney Woods
- Region Three: Oaks and Prairies or Grand Prairie and Plains
- Region Four: Osage Plains (Cross Timbers)
- Region Five: Rolling Plains
- Region Six: Pecos and Staked Plains or High Plains
- Region Seven: Edwards Plateau
- Region Eight: South Texas Brushlands
- Region Nine: Chihuahuan Desert and Mexican Mountains in Texas or Trans-Pecos

4. Put students into nine groups. Number the groups one through nine and give each group one different color of marker. Groups will start at the chart paper with their region number. When time starts, they will go to that chart paper and write everything they know about that eco-region (biotic and abiotic features). If they don't know anything, they can turn the paper over and write questions on the back. After one or two minutes rotate the groups so that each group gets a minute or so at each chart paper.

*Note: Students are not expected to know a lot. This is a way to get them thinking about the regions. It is also an opportunity for you to see what they know and any misconceptions that they might have.*

5. Regroup as a class and discuss the overall impression of the activity. How knowledgeable are you as a class?
6. Give each group a chart paper. They can look it over to see what their classmates wrote. This is the eco-region that they will be researching. You may want to have resource books available. In addition, they can use the following websites:

<http://texastreeid.tamu.edu/content/texasEcoRegions/>

[http://www.tpwd.state.tx.us/kids/about\\_texas/regions/](http://www.tpwd.state.tx.us/kids/about_texas/regions/)

Collect the chart papers.

### Part 2

7. Groups will each get eight pieces of computer paper for their research. Each piece of paper will represent a separate part of their eco-region: elevation, precipitation, landforms, soil, vegetation, animals, a problem the eco-region is facing and, an endangered species from that region. Each piece of paper should have detailed facts and a drawing relating to each element of their assigned eco-system.

### Part 3

8. Hang up the chart paper from day one. Groups will stand next to their chart and do a short presentation about the eight elements in their eco-region, briefly connecting it to the chart. Collect the eight papers from each group and randomly pass a paper to each student in the class. They will see if they can identify which eco-region it is associated with by standing next to that chart. Hold out their paper for all to see. Discuss results. Repeat if time permits.

## Post-Show Enrichment Activities

### Activity One: Find Someone Who...

*Materials:* chart (Appendix A-3)

*Procedure:*

1. Using the chart in Appendix A-2, students will walk around the room and try to find a classmate who knows the answer to a question on the chart. The rules are:
  - You must walk at all times and work quietly.
  - You cannot have the same person answer more than one question.
  - You need to keep your answer column folded back after an answer is written so that others cannot see the answers.
  - Sit down when you finish.
  
2. When all/most students have finished, discuss the answers as a class. Answer key:
  1. ?
  2. jaguar
  3. bony and cartilaginous
  4. Kemps Ridley Sea Turtle
  5. Lightening Welch
  6. water
  7. Rio Grande
  8. tortoise
  9. peregrine falcon
  10. Mexican free-tailed bat
  11. diurnal
  12. nocturnal
  13. insectivores
  14. to smell
  15. Alligator

## Activity Two: Oil Spills

### *Materials:*

Per class: *Prince William (An Owlet Book)* by Gloria Rand and Ted Rand

Per group: bowl, water, oil, brown food coloring (optional- to put in the oil to make it brown), feathers (you can get these from a craft store), different brands of dishsoap, talcum powder, various cleaning products including dishwasher soap, washing powder, etc., spoon, beaker, paper towels

### *Procedure:*

1. Read aloud *Prince William (An Owlet Book)* by Gloria Rand and Ted Rand. Discuss with students what they know about oil spills and why this can be a problem for Texas animals. (The Gulf of Mexico is on our coast and there is a lot of oil drilling in the coast.)
2. Students will perform an experiment to see the best way to clean animals after an oil spill.
3. Groups will fill the bowl half way with water. In a beaker, they will put 100 ml of oil and use food coloring to try to make it brown. Students will pour the oil on the water. Students will dip 10 feathers into the solution. Nine of the feathers are the ones that they will try to clean, one is a control.
4. Groups will chose three cleaning agents that they would like to test. They will test each cleaning agent three times on three different feathers. Students will need to discuss how they are going to make this a fair test by keeping variables the same: same amount of cleaning agent, same cleaning method, etc. This should be shown when they write out their procedure.
5. Students should start a page in their notebook stating the problem, their hypothesis, the procedure (showing how they are controlling the variables to make it a fair test), and a data chart in which they will record their observations.
6. Students will try cleaning three feathers with each of their three chosen cleaning agents. They will compare it to the control feather and record their results in their data chart. Students will need to devise a way to measure how clean the feather is. They may want to create a scale from one to five to do this.
7. Students will draw conclusions.
8. Discuss the findings as a class.

### Activity Three: Endangered Texas Wildlife

*Materials:* internet access, chart (Appendix A-3), scissors, baggie

*Procedure:*

1. Students will use the website below to complete the chart in Appendix A-3. Do not copy the chart front to back. You will need to copy each page on a separate piece of paper. Website:  
[http://www.tpwd.state.tx.us/huntwild/wild/wildlife\\_diversity/texas\\_rare\\_species/listed\\_species/](http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/texas_rare_species/listed_species/)
2. After students have completed the chart, they will cut the squares apart and put the pieces in a baggie. Then they will try to put it back together. After they have completed it, they should put it back in the baggie and exchange with another person.

*Hint:* You may want to photocopy the finished chart before allowing the students to cut them apart. This way there will be an answer key to put in the baggie with the pieces.

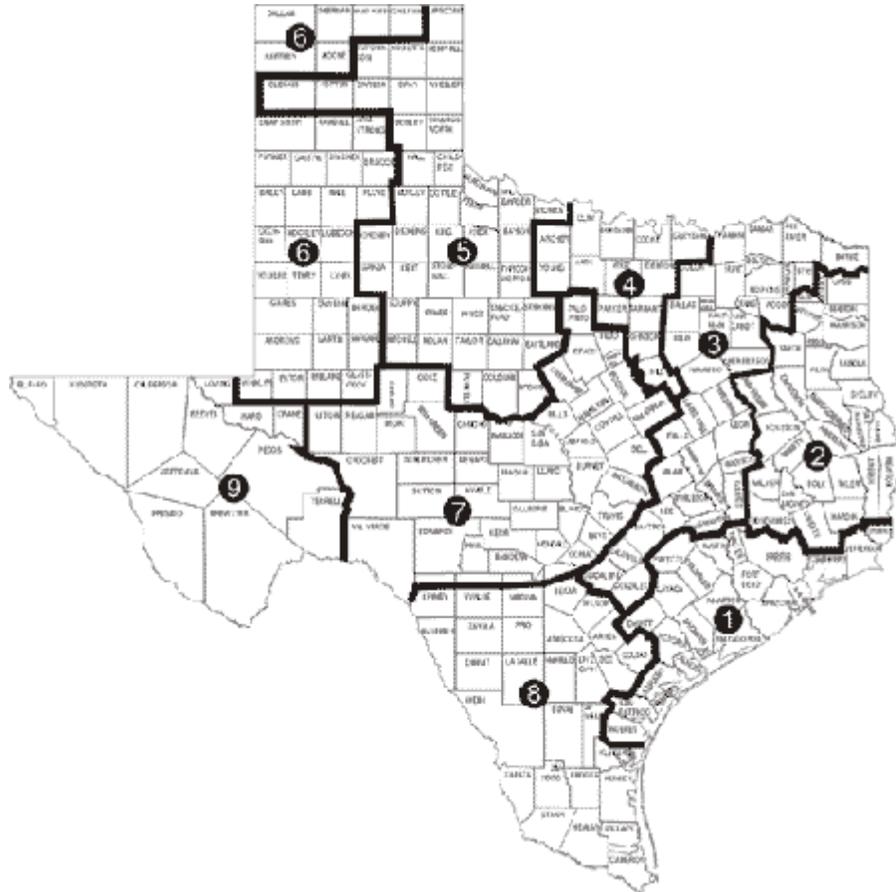
### **Additional Resources:**

[http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd\\_bk\\_w7000\\_0030.pdf](http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_0030.pdf)

This is a curriculum unit entitled “Exploring Texas Wildlife” written by Texas Parks and Wildlife.

## Appendix

A-1

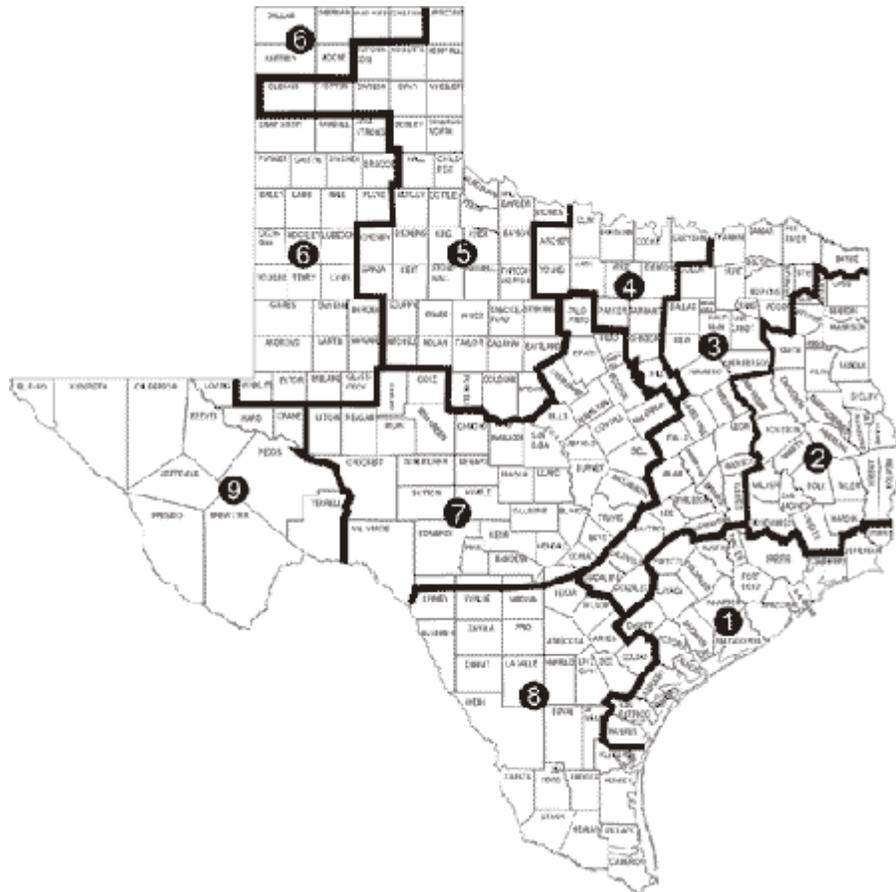


Directions: Match the number of the area on the map with its ecoregion name. Place the number next to its name in the chart below.

	West Gulf Coastal Plain
	Pecos and Staked Plains
	Osage Plains (Cross Timbers)
	South Texas Brushlands
	Chihuahuan Desert and Mexican Mountains in Texas
	Rolling Plains
	Edwards Plateau
	Coastal Prairies
	Oaks and Prairies

Map Source: Texas Parks and Wildlife

## Answer Key



- Region 1 – Coastal Prairies
- Region 2 – West Gulf Coastal Plain
- Region 3 – Oaks and Prairies
- Region 4 – Osage Plains (Cross Timbers)
- Region 5 – Rolling Plains
- Region 6 – Pecos and Staked Plains
- Region 7 – Edwards Plateau
- Region 8 – South Texas Brushlands
- Region 9 – Chihuahuan Desert and Mexican Mountains in Texas

HMNS Texas Wildlife Presentation

	Find someone who...	Person's Initials	Answer
1.	Knows the name of the presenter		
2.	Knows the name of an animal that used to be found on the Texas border but no longer lives in Texas.		
3.	Knows the two classifications of fish		
4.	Knows the specific name of an endangered reptile that migrates and lays eggs on the beach		
5.	Knows the name of the only left handed Welch which is also the state snail of Texas		
6.	Knows the hardest thing to find in a desert		
7.	Knows the name of the river that separates Texas and Mexico		
8.	Knows the name of an endangered reptile that loves to eat prickly pear cactus		
9.	Knows the name of the bird that lays eggs on the side of a cliff and loves to eat other birds		
10.	Knows the name of the mammal that eats a lot of insects in our area which keeps our crops healthy		
11.	Knows the scientific name for animals that are active during the day		
12.	Know the scientific name for animals that are active during the night		
13.	Knows the scientific name for animals that only eat insects		
14.	Knows why snakes stick out their tongue		
15.	Knows the name of the longest reptile predator in the United States		

**A-3**

## **Endangered Texas Wildlife**

Directions:

1. Go to the website:  
[http://www.tpwd.state.tx.us/huntwild/wild/wildlife\\_diversity/texas\\_rare\\_species/listed\\_species/](http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/texas_rare_species/listed_species/)
2. Choose an animal group: reptile, amphibian, bird, fish, invertebrate or mammal.
3. Choose an endangered or threatened animal from that group. Click on the “Nature Serve Explorer profile button for that animal.
4. Click on the “Conservation Status” link for that animal.
5. Record the data in the chart.

	<b>Name of Organism</b>	<b>Kingdom Phylum Class</b>	<b>Habitat or Ecosystem</b>	<b>Primary Threat (be specific)</b>	<b>Protections Needs</b>
<b>Reptile</b>					
<b>Amphibian</b>					
<b>Bird</b>					

<b>Fish</b>					
<b>Invertebrate</b>					
<b>Mammal</b>					