Ecoregions of Texas

Subject and Social Studies and Science,

Grade 7th grade

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Time Two 50-minute class periods duration

Objective Students will map the ecoregions in Texas and illustrate native vegetation. Students will use ecoregion maps to

infer why prehistoric hunter-gatherers might have

preferred to live in certain areas, such as the ancient Gault

site north of Austin, Texas.

TEKS Social Studies, Grade 7

(2A), compare the cultures of American Indians in Texas prior to European colonization such as Gulf, Plains, Puebloan, and Southeastern

(8A), locate and compare the Mountains and Basins, Great Plains, North Central Plains, and Coastal Plains regions

(20A), differentiate between, locate, and use valid primary and secondary sources such as media and news services, biographies, interviews, and artifacts to acquire information about Texas

(22A), use social studies terminology correctly

(22C), create written, oral, and visual presentations of social studies information



Science, Grade 7

(8B) analyze the effects of weathering, erosion, and deposition on the environment in ecoregions of Texas

Materials

- Ecoregions of Texas Map (included)
- Ecoregions of Texas Student Activity Map (included)
- Internet access
- Assorted geographical and botanical reference materials (e.g. field guides to Texas, Texas maps, travel guides, nonfiction trade books)

Activities and procedures

Step 1: Engage students in a discussion of the different kinds of landscapes and vegetation that they have seen around the state of Texas. How do some parts of Texas look different from other parts? If you were a huntergatherer, which area would you choose to live in? Why? Introduce the term "ecoregion," or ecological region, which means the plants and animals of a particular area. Ecological regions are formed by different soil and climate, which in turn allow various plants and animals to live in the area.

Step 2: Present the "Ecoregions of Texas Map." Model how to learn about the plants in an ecoregion by using vegetation maps, and pictures of plants from the Internet and other reference materials. Good sites include:

- 1. http://texastreeid.tamu.edu/content/texasEcoReg ions/
- 2. https://texashighways.com/wildflowers/the-wildflower-regions-and-vegetational-areas-of-texas/

Step 3: Ask students to choose one ecoregion to study in more depth with a partner. Using the Internet and other reference materials, student pairs should:

- 1. Color Ecoregions of Texas Map and identify colors and/or patterns in the map key.
- 2. Find and label the Gault site (Bell County, TX).
- 3. Find and label 2 major cities in their chosen ecoregion.
- 4. Illustrate and label 3 kinds of vegetation found in their chosen ecoregion.

Extension Activities

Create an educational bulletin board for the classroom or hallway that illustrates Texas ecoregions. Create a large Texas Ecoregions Map on butcher paper. Have students illustrate and label vegetation in the ecoregions and decorate with pressed leaves.

Closure

Have student pairs share their ecoregion vegetation information with the class. Ask students to speculate on why hunter-gatherers in Central Texas were attracted to the Gault site.

Ecoregions of Texas and the Gault Site: Background for the Teacher

Archeologists tell us that the Gault site north of Austin was something of an "Eden" **11,000** years ago. It was in many ways an ideal location, strategically placed between different ecological regions (or "ecoregions"). These ecoregions included the vast tallgrass prairies to the east and the Edwards Plateau grasslands and savannah to the west. Because they had lots of rich natural vegetation, nuts, and berries, hunter-gatherers in Central Texas were among the last of the early Americans to decide to start using farming and agriculture for food.



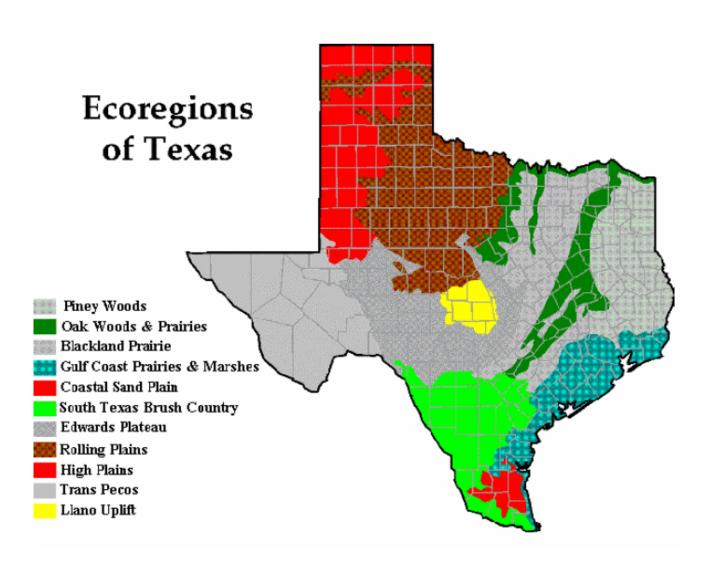
Grassy Landscape at Gault



Native Vegetation at Gault

Even today, the Gault site has plenty of useful native vegetation. You can find trees like native pecan, oak, elm, Black walnut, Black hickory, and post oak (which are all common to the Blackland Prairie ecoregion). You can also see switchgrass, buffalograss, live oak, juniper, and curly mesquite (which are all common to the Edwards Plateau ecoregion). Early people used plants like the prickly pear, yucca, sotol, and the wild hyacinth to make food, fibers for clothing, sandals, and baskets, and materials for tools. All of these plants can still be found in that region today.

The website, *Texas Beyond History*, features more information on the <u>Gault site</u>. Under the section entitled <u>Clovis Reconsidered</u>, scroll down to read *Ecotones and Endless Flint* for some more good information on why prehistoric hunter-gatherers chose that location as a campsite.



Map courtesy Texas Parks and Wildlife (http://www.towd.state.tx.us/imalZes/tx-eco95.git)

Ecoregions of Texas



KEY	
Piney Woods	Edwards Plateau
Oak Woods and Prairies	Rolling Plains
Blackland Prairie	High Plains
Gulf Coast Prairies and Marshes	Trans Pecos
Coastal Sand Plain	Llano Uplift
South Texas Brush Country	