

Sustainably Fed

Fair Food Chains and Resources

FOODIES

QUEST 10 ENVIRONMENTAL SCIENCE

STATE FAIR OF TEXAS CURRICULUM

Hoads of people flock to the Fair just for the food, but what other critters also find the Fair food delectable? Check out how the Fair affects the food chain for other species while you also judge vendors' use of renewable and nonrenewable resources.



During this Foodie Quest, you will:

- ★ Observe which other species also get to enjoy the awesome eats at the Fair.
- ★ Document vendors' sources of water and their use of renewable and non-renewable resources.
- ★ Design and create a sustainable art piece.



Standards

- ★ Environmental Science TEKS: 4G, 5B, 5C, 5D, 5F
- ★ Art TEKS: Art I: 1D, 2D, 2F, 4A; Art II: 1D, 2A, 4E
- ★ ELAR TEKS: E4(14)(A), E4(18), E4(19)
- ★ Career Development TEKS: 4C, 4D

Before You Go

- ★ Use food webs and trophic pyramids to discuss food chains. Toss in different predators or prey species to see how adding something to a food chain can alter it.
 - o You can also use a predator/prey simulation such as this one: http://www.phschool.com/atschool/phbio/active_art/predator_pre_simulation/
- ★ Practice drawing population curve graphs for varying resource situations.
- ★ Review definitions of renewable and nonrenewable resources.
 - o As a class, make a list of resources that fall under each category.



Invitation

- ★ Invite students to bring the listed materials and follow the route, and perform the tasks below at the State Fair of Texas:



Plan Your Route

- ★ Read ahead through the instructions below, so that you know where to go before you get to the Fair.

STATE FAIR MAP



Optional Materials to Bring

- ★ Writing utensil and something to write on
- OR
- ★ A way to digitally take notes
- ★ A device with a camera



While You're There

The objective of your visit is to observe which species other than humans are noshing on Fair foods and observe how vendors are using renewable and non-renewable resources.

- ★ **FOOD IN THE WILD:** Find a spot where you can observe a group of outdoor food vendors.
 - o Note or take photos of what non-human species are also eating Fair foods. What critters are around the trash cans? Are there any eating foods that people have dropped on the pavement? Are there any (gasp) trying to get a snack while food is being prepared?
 - o Also observe the vendors' preparation methods.
 - What is their water source and how are they using it? Do they ever just leave it running? How do they plate their food or drinks? What material are plates and cups made of?
 - Note where vendors are getting their energy to run their booth.
 - o Note what refuse receptacles are available and how people are using them. Are there recycle bins or only trash?
 - Are people using recycle bins correctly?
- ★ **SUSTAINABLE ART:** As you make your way through the Fair, keep an eye out for renewable and nonrenewable resources.
- ★ **ANTHROPOMORPHIZING (ENGLISH PORTION):** As you walk through the Fair, try to really notice at least one example of a non-human patron eating Fair foods.
 - o Take a picture of the squirrel, pigeon, dog, etc. eating the food and observe the animal as it eats.
 - What is it eating?
 - Was the food dropped or fed to the animal?
 - Is the animal enjoying the food?
 - Does it finish the food or move on to another food item?



After the Fair

When you return to class following your State Fair visit, you will work with a partner to analyze how other species are affected by this sudden change in the food chain:

- ★ What effects do you think this introduction will have on the populations of species you've observed?
- ★ Draw a population curve graph to illustrate your ideas.
- ★ Discuss what you observed about resource use with your partner.
- ★ Develop a proposal for the Fair to help make Fair practices more sustainable.
 - Include a list of allowed/non-allowed materials for vendors to use and suggestions for energy and water conservation.



ART PORTION

Before You Go

- ★ Just as there is a focus on sustainability in environmental science, there has also been a strong art movement occurring for about the last 10 years focused on sustainable art.
- ★ Because this is a newer field in the art world, the specific definition of sustainable art is a bit fluid. However, the focus of the work, overall, is to bring attention to issues facing our environment today that will have a strong impact in the future.
- ★ There are a number of contemporary artists working in this genre, and art students have even been given the choice of sustainable art as a minor to a Bachelor of Fine Arts in a small number of art schools in the country.



“One Beat One Tree” by Nehiza Mestaoui. Source: http://www.huffingtonpost.com/2014/07/15/environmental-art_n_5585288.html

- ★ Below are two fantastic articles on sustainable art, what it means, and what it looks like. Read through these and look at the examples given prior to your visit to the State Fair.
 - http://www.huffingtonpost.com/2014/07/15/environmental-art_n_5585288.html
 - http://www.huffingtonpost.com/daniel-grant/sustainability-and-art-schools_b_1417562.html

While You're There

See the main portion of the Quest for instructions.

When You Return

Equipped with the new knowledge of what sustainable art is, and having seen a number of examples in the websites provided, it is your turn to create some sustainable art.

- ★ Think about the renewable and nonrenewable resources that you noticed being utilized at the Fair.
- ★ What about recycling in the food areas? Were there bins for recyclable materials?
- ★ What were some of the positive steps that were taken by vendors to reduce their impact on the environment?
- ★ As you think about your project, think back to how the article discusses sustainable art.
 - It isn't always about the product; it can be about the message.
 - This could be a performance piece, a piece of slam poetry, a painting, etc.
 - Have fun with this, and be sure that your message is clear.
 - When finished, perform or display your sustainable art for your class.
 - Talk about what inspired you at the Fair, and your process for deciding the best medium for your work.



ENGLISH PORTION

While You're There

See the main portion of the Quest for instructions.

When You Return

When you get back to class, review your notes and get your imagination moving.

- ★ On your computer you will write a 1-page story about the animal you observed and the food it was eating.
 - For example, what is it like to be a squirrel at the Fair?
 - What are its experiences like compared to human experiences?
 - The story should be told from the perspective of the animal and include details about how they found the food, how they kept themselves safe from danger while eating the food, and what happens once the animal stopped eating.