

# Waste Not, Want Not

*Animal Waste at the Fair*



QUEST 10  
BIOLOGY

STATE FAIR OF TEXAS  
**CURRICULUM**

## STUDENT EDITION

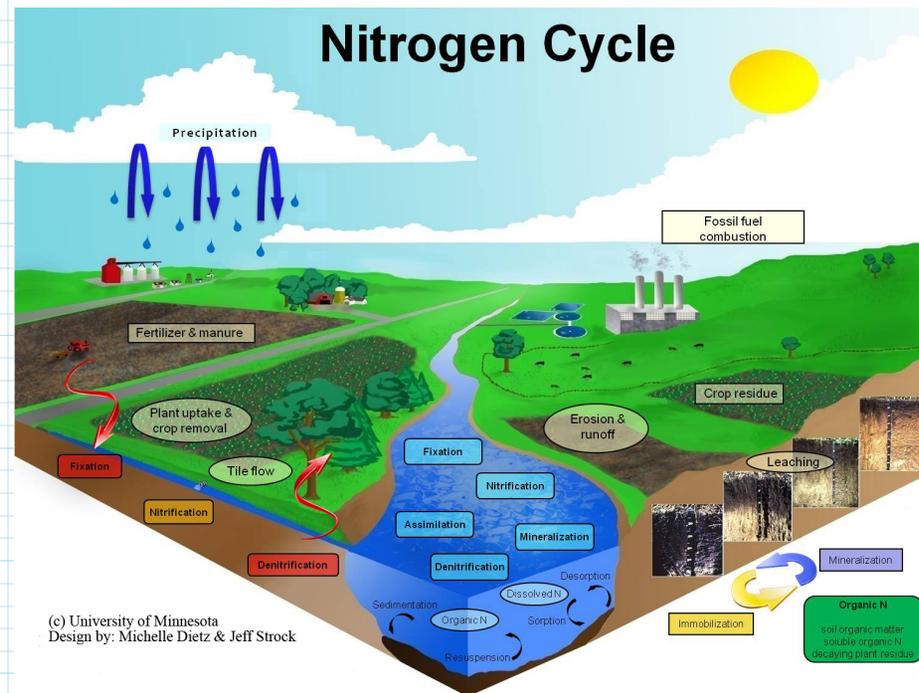
**Recap**  
You will be going to the State Fair of Texas to investigate waste management in the Livestock area. It sounds doody, but somebody has to "do" it, and it'll be interesting to see where it all goes! Sorry for all the puns... we couldn't resist!

### STATE FAIR MAP



Recall from your class discussions:

★This is the nitrogen cycle:



(c) University of Minnesota  
Design by: Michelle Dietz & Jeff Strock

- o Virginia Tech has an interactive tool that shows how nitrogen can be good and bad, and you can visit it here:  
o [http://www.sites.ext.vt.edu/virtualfarm/flash\\_mov/nitrogencycleintro.swf](http://www.sites.ext.vt.edu/virtualfarm/flash_mov/nitrogencycleintro.swf)
- ★You should have also discussed microbes and bacteria that cause stool-to-mouth/fecal-oral infections. *Campylobacter*, *E. coli*, *Listeria*, *Salmonella*, and *Trichinosis*, are all especially important. Google them!

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### Plan Your Route

- ★ Use Google to find the Woofus at the State Fair of Texas.
- ★ Make your way to the Woofus, and gaze upon the glorious beast.
- ★ Ponder what type of waste the Woofus might produce.
- ★ You are now near the Livestock Barns. Go in and follow the instructions for this Quest!



### Optional Materials to Bring

- ★ Writing utensil and something to write on
- OR
- ★ A way to digitally take notes

### While You're There

You will use information you gather at the State Fair to help you with THREE project goals:

1. Create a model of what would happen to the area around the animal barns if the waste were improperly managed.
2. Design an art piece that reflects the ways that waste has been repurposed for good.
3. Imagine an alternate reality in which animal waste was not controlled, and compose a short story about it.

The objective of your visit TODAY is to investigate animal waste management methods at the Fair and gather information to take back for your projects.

- ★ **DO YOUR DOODY!:** Investigate how waste management methods at the Fair help keep animals (and fairgoers) happy and healthy.
  - In the animal barns, note which animals are currently on display.
    - Count the number of animals present in the barn.
    - Note how the animal barns are designed.
    - What bedding is used for the animals?
    - How are the floors designed to contain (or not contain) waste?
    - Where is water located?
  - Look for ways that the Fair has managed waste.
    - If you can't find receptacles or information, then find someone you can interview about what is done and who is responsible for animal waste.



### Back at School

When you return to class following your State Fair visit, you will work on your three projects. See your teachers for more information.