

## **SENIOR SOW WHAT? JOURNEY AWARD - MEETING 1**

**Award Purpose:** When you've earned this award, you'll become aware of your place in the global food network as you start to think about where food really comes from and how your choices about food impact Planet Earth.

Activity	Materials Needed
Variety—The Spice of Life  • Take a trip to your local grocery store and see what varieties of produce are available.	<ul> <li>□ "Fruits &amp; Veggies" checklist</li> <li>□ Writing utensils</li> <li>□ Phone or computer with internet access</li> </ul>
Slow Erosion  Investigate the causes and impact of soil erosion.	<ul> <li>□ "Erosion Experiment" instructions</li> <li>□ 2-liter bottles (3)</li> <li>□ Clear cups (3)</li> <li>□ Plywood (12" x 12" x 1")</li> <li>□ Wood glue</li> <li>□ String</li> <li>□ Scissors and X-Acto knife</li> <li>□ Soil (enough to fill the bottles at least halfway when laid on their sides)</li> <li>□ Mulch</li> <li>□ Grass seedlings</li> <li>□ Water</li> <li>□ Water bottle or watering can</li> <li>□ (Optional) phone or computer with internet access</li> </ul>

## Activity #1: Variety—The Spice of Life

Award Connection: Step 1 – Identify, and dig into, a food or land issue, tapping some community experts as you go Materials Needed: "Fruit & Veggies" checklist; writing utensils; phone or computer with internet access Prep Needed:

- Print out copies of the "Fruit & Veggies" checklist.
- 1. Grab your "Fruits & Veggies" checklist and take a trip to your local grocery store or co-op. As you walk through the produce section, every time you see a different variety, make a check mark next to the corresponding fruit or vegetable (for example, if you see romaine, make a checkmark next to "lettuce," and if you see Honeycrisp and SweeTango, make two checkmarks next to "apple").
- 2. After you've completed your survey, regroup to discuss your findings. Which fruit or vegetable had the most varieties? Did this surprise you? Why or why not?
- 3. Share the following infographic with the group: slowfoodusa.org/files/img/biodiversity-infogfx.jpg

4. Why do you think there are fewer varieties of fruits and vegetables than just a few decades ago? Watch The Splendid Table's interview with Simram Sethi, a journalist and educator focused on issues of food, sustainability, and social change: bit.ly/foodbiodiversity

### **Activity #2: Slow Erosion**

Award Connection: Step 1 – Identify, and dig into, a food or land issue, tapping some community experts as you go Materials Needed: "Erosion Experiment" instructions; 2-liter bottles (3); clear cups (3); plywood (12" x 12" x 1"); wood glue; string; scissors and X-Acto knife; soil (enough to fill the bottles at least halfway when laid on their sides); mulch; grass seedlings; water; watering can; (optional) phone or computer with internet access Prep Needed:

- Print the "Erosion Experiment" instructions.
- To conduct the experiment, you'll need to grow grass seedlings. Prepare these prior to your meeting and allow them enough time to sprout.
- 1. Which crops does your state produce the most of? Visit the USDA's website to find the most recent data for your state: nass.usda.gov (scroll to the bottom until you see the "Find Data and Reports" map, select your state, then click on the "[State] Agricultural Overview" under "[State] Statistics").
- 2. Most likely, you'll discover that your state makes the most money from one of three crops: corn, soy, or wheat.
- These three crops are also the most common ones used in monocropping, a technique where farms grow a single crop year after year on the same land. (Read more about monocropping on page 43 of your Journey book.)
- 4. What are the effects of monocropping? Over time, growing only one type of crop or plant leads to depletion of the soil's nutrients and contributes to soil erosion. (Read pages 58 59 of your Journey book, or search online to get the dish on dirt.)
- 5. Though soil erosion is also a naturally occurring process (water and wind also wear away top soil), modern agricultural practices have hastened the erosion of top soil—the US is losing soil 20 times faster than it can be naturally replaced. Ground cover (any material on or near the soil surface like grasses and other vegetation) protects the soil against erosion—but monocropping usually eliminates much or all of ground cover.
- Why do we need to preserve ground cover? Conduct an experiment! Build an erosion model to see the effects for yourself. Follow the steps in the Erosion Experiment sheet.

# Fruits & Veggies checklist

Apples	
Grapes	
Oranges	
Melons	
Pears	
Potatoes	
Carrots	
Kale	
Squash (e.g. kabocha, butternut, etc.)	
Lettuce	
Peppers	
Tomatoes	

## **Erosion Experiment**

#### **Materials:**

3 2-liter bottles
3 clear cups
1 piece of plywood (12" x 12" x 1")
Wood glue
String
Scissors and X-Acto knife
Soil (enough to fill the bottles at least halfway when laid on their sides)
Mulch
Grass seedlings
Water

### **Directions:**

Note: For one of the bottles, you'll need to grow grass seedlings. Prepare this bottle prior to your meeting so the grass has enough time to sprout before you conduct your experiment.

- 1. Prepare the three 2-liter bottles by cutting a rectangular hole roughly 2.5" x 10" along one side of the bottle. One of the bottles should be for the grass; fill the other two bottles halfway with soil. Add mulch or dead leaves to one of the non-grass bottles. Leave the last bottle of soil bare. Press down firmly on the soil to compact it.
- 2. Use wood glue to stick the bottles to the wood. Make sure that the necks of the bottles protrude over the edge of the board.
- 3. Now, prepare the cups. Make two small holes opposite each other at the top of the cups. Cut three pieces of string (about 10" long) and insert the ends into the holes. Tie a knot on the ends to secure them, then hang one cup over the neck of each of the three bottles on the board. These cups will be your "collection buckets."
- 4. Let your soil settle a little before you move onto the next step of your experiment. Use this time to make your predictions. Before you pour water into each bottle, predict what the water in your collection buckets will look like. Will the water be cloudy or clear? Which collection bucket do you think will have the cleanest-looking water?
- 5. Use another bottle or a watering can to pour an equal amount of water into each of the bottles. Pour the water in at the end of the bottle (away from the neck).
- 6. (Optional) Watch a video of the experiment: See a video of the experiment: bit.ly/erosionexperiment

Adapted from soils4teachers.org/files/s4t/erosion-model.pdf