



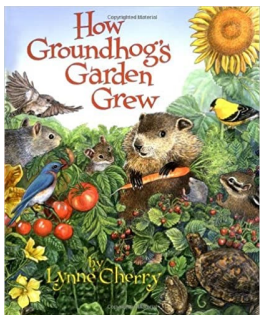
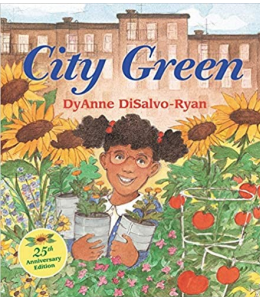
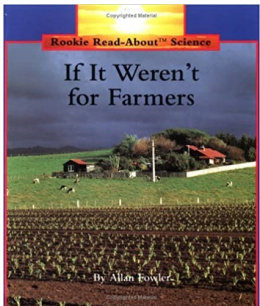
SWIFTlet

Soil and Water Information for Teachers: lessons on environmental themes



AMAZING AGRICULTURE

LITERACY CONNECTIONS



A quick search for the definition of agriculture tells us that *agriculture is the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products.* The term agriculture may bring to mind farm fields of corn or wheat, or perhaps cows grazing in large, open pastures. Today, with our many technological advances, agriculture comes in many different forms.

About [12,000 years ago](#), it is believed that humans changed from living nomadic, hunter-gatherer lifestyles to permanent settlements, that included farming. These settlements, with their more consistent supply of food, allowed for cities and civilizations to grow across the world. Over time, those not interested in growing crops and raising animals, could take on a variety of other occupations in cities and towns and purchase their food from farmers and ranchers.

Today, farming and agricultural practices are diverse. In places where large, open spaces of land are scarce (like cities), people have turned to [urban agriculture](#). These [urban farms](#) often establish gardens on unused land, such as vacant lots, and provide the local community with access to fresh, [healthy food](#), grown in their own community. Throughout Ohio, the number of urban farms has grown in recent years. In Columbus, there are over [30 urban farms](#) throughout the city including [Franklinton Farms](#) and [Highland Youth Garden](#). [Urban agriculture](#) has also increased the popularity of [Farmer's Markets](#) where fresh fruits, vegetables and other commodities such as jams, jellies and honey can be purchased.

Recently there has been a trend to return "back to the basics" with families planting gardens at home and [communities](#), providing space for neighbors to grow fruits and vegetables in a common garden. Growing your own food has many proven benefits including boosting your mood, increasing your physical activity, understanding the origins of your food and increased consumption of healthy foods like fruits and vegetables.



Franklin Soil and Water Conservation District

Creating Conservation Solutions for Over 70 Years

1404 Goodale Blvd. Suite 100
Columbus, OH 43212
franklinswcd.org

Did you Know?

- Agriculture is [Ohio's #1 industry](#), with 77,000 farms!
- Ohio is the top Swiss cheese producer in the United States!
- Ohio is ranked 3rd in U.S. egg production.
- Ohio is 6th in the production of soybeans and 9th in corn.



AMAZING AGRICULTURE

EXPLORING PLANT GROWTH

Let's explore plant growth & plant parts with simple carrot experiments!

Experiment 1: Growing a Carrot Top

Supplies:

- * Carrot
- * Small glass or jar
- * Toothpicks
- * Knife to cut the carrot (check with an adult)
- * Water

Procedures:

- * Cut a one inch segment of the carrot top.
- * Stick a toothpick into two sides of the carrot top (looks like handles on each side of the carrot).
- * Balance the carrot top on the mouth of the glass/jar.
- * Fill this container with water until it reaches the bottom of the carrot.
- * Place in a window that gets light, but not get direct sun.
- * Add water daily so that it touches the bottom of the carrot.
- * Make observations: look for leaves and roots.
- * After the roots sprout, the plant can be moved to a pot.

Check out these activities & more at the **Carrot Museum**



Experiment 2: Growing a Carrot Upside Down

Supplies:

- * The top 1.5 inches of a large carrot
- * Skewer
- * String/twine

Procedures:

- * Scoop out a 1/2 inch hole in the carrot without piercing the top.
- * Push a skewer through the carrot and attach string to the skewer to form a hanger.
- * Fill the hole with water.
- * Hang in a bright, sheltered location and be sure to keep the hole filled with water.
- * Observe the carrot for growth of the leaves—over time they will start to grow upwards.

ADDITIONAL RESOURCES

[Farmer Will Allen and the Growing Table Read Aloud](#)

[Nature Cat: The Urban Gardening Club, PBS Kids](#)

[The Journey of Milk Video](#)

[Anywhere Farm Read Aloud](#)

[Chef Roy Choi and the Street Food Remix Read Aloud](#)

[American Farm Bureau Foundation At Home Learning Resources](#)

[Farm to School @ Home Activities](#)

[Urban Farming: California Academy of Sciences](#)

GIVE IT A TRY

Taste test a new Fruit or Vegetable!

Next time you go to the produce section of the grocery store or visit a farmer's market, pick out something you have not eaten before and try a new food!

You can track your thoughts on different foods on the [Growing Great Tasters chart](#).

QUESTIONS TO EXTEND LEARNING:

1. Think of the vegetables we eat. Which ones are roots? Stems? Leaves? Flowers? Fruits? Seeds?
2. What do plants need to grow?
3. What is an example of a **Pollinator** and how is it connected to our foods?



Ohio Proud

Ohio Proud is a program that helps consumers find food and agriculture products made and grown in Ohio. Look for the logo and choose Ohio Proud products at the grocery, Farmer's Market and restaurants.

Franklin Soil and Water Conservation District and the Natural Resources Conservation Service are equal opportunity providers and employers.

