

**Why is minimizing soil erosion from water so important and how can it be done?**

**EDIBLE GARDEN PROGRAM (6-8)**  
**Soil Conservation: Erosion from Water**  
**(ILS 12A, B, and E, 13B, 15C)**

**Overview**

The key question for this activity is, "Why is minimizing soil erosion from water so important and how can it be done?" And there is no better way for students to answer that than to grow and cook their own food. Using the garden and kitchen as the facilitators, they will inspire student inquiry and teach them about Sustainable Agriculture, specifically, local food production and consumption.

For the purpose of this curriculum sustainable agriculture shall be defined as follows: "Sustainable Agriculture is a system of food production, supported by consumers, where farming operations, practices and technologies work in harmony with the natural systems that sustain life on earth."

**Suggested Grade Level**

This curriculum is designed for middle school/junior high grade levels. The topics covered can be built upon in complexity throughout that age range.

**Approximate Time**

Session one takes about 90 minutes (includes travel time); session two takes about 60 minutes.

**Objectives**

1. The students will learn that non-vegetated (bare) soil is the leading factor for erosion caused by water.
2. The students will learn that soil containing organic matter is less susceptible to soil erosion from water.
3. The students will learn that cover crops provide the necessary ground cover to prevent soil erosion, add organic matter and increase nutrient availability for plant growth.
4. The students will learn that tillage directly affects soil erosion and can reduce organic matter in soil.

**Activity Abstract**

In pairs, students will first "play in the dirt," evaluating soil collected with a soil probe. Then they will run soil erosion experiments on bare farm fields and a vegetated field, determining the degree of erosion from soil splashing on paper.