

FACT SHEET

From Soil to Snack: Grain Farming & Earth Day Fact Sheet

WHAT DO GRAIN PLANTS NEED?

Most of us eat food made from grain every day! Grain crops like corn, oats, and wheat all begin the same way - with the sun and the soil.

Sunshine

- The sun warms the soil in spring so seeds can germinate.
- Plants use sunlight to make their own food in a process called **photosynthesis**.
- During photosynthesis, plants combine:
 - Sunlight
 - Water from the soil
 - Carbon dioxide from the air to create **glucose**, the plant's food.



Plants are called **producers** because they produce their own food.

Without the sun, plants cannot grow.

Healthy Soil

- Soil provides nutrients like **nitrogen, phosphorus, and potassium**.
- Grain farmers monitor their fields to make sure their growing grain crops have the right nutrients.
- Healthy soil has tiny air spaces that allow roots to grow.
- Soil is alive! It contains:
 - Earthworms
 - Insects
 - Micro-organisms



Healthy soil = healthy plants.

These organisms are called **decomposers**. They break down dead plants and return nutrients to the soil. Decomposers are also called **consumers**. They are at work all the time.

Clean Water

- Clean water is essential because it moves nutrients through the plant.
- Farmers keep field edges wild with trees, shrubs, and grasses to prevent erosion.
- Farmers keep plants growing on the soil—crops and cover crops—to help clean the water before it goes into streams and rivers.



Clean water supports healthy ecosystems.

Farmers

- Sustainable farming begins with soil. Ontario grain farmers work hard to take care of the soil.
- Soil is a living environment containing silt, sand, clay, decaying plants, nutrients, earthworms, insects, and micro-organisms. They help nourish growing plants.
- Planting cover crops protects the soil from erosion by wind and water.
- Crop rotation helps keep nutrients in the soil and prevent pests like weeds, diseases, and insects.
- Ontario grain farmers use technology to improve their sustainable farming practices.



Farmers are environmental stewards.