What's so important about soil health?



Soil is organic matter (including decaying plants), air, water minerals and living organisms.

Healthy soil provides several benefits:

- 1. Soil with increased organic matter has:
 - more soil organisms
 - better soil structure, and
 - more nutrient availability.

This leads to increased crop production.

- 2. Healthy soil is disturbed less by tillage passes, and requires less nutrient inputs, farmers will see **increased profits** due to reduced expenses.
- 3. Healthy soil captures more water. This can **reduce runoff** and keep good top soil in place.

What could improved soil health do for your farm operation?

Linking you to helpful information...

Ontario Ministry of Agriculture, Food and Rural Affairs:

www.omafra.gov.on.ca



Ontario Soil and Crop Improvement Association:

www.ontariosoilcrop.org



Your local Conservation Authority:

www.conservation-ontario.on.ca

If you do not know your local conservation authority, please contact **Abbie Gutteridge** at the **Ausable Bayfield Conservation Authority** for more information.

519-235-2610

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Indicators of Soil Health

Crop Rotation - A diverse rotation of crops, or constant perennial cover helps to build soil structure and boost yields

Tillage - The amount of tillage determines the amount of crop residue left on the soil. Crop residue helps to prevent wind and water erosion, and builds organic matter in the soil.

Fertility - The right amount of nutrients (phosphorus, potassium, magnesium) and a balanced pH are needed for optimum crop growth.

Organic matter - Higher levels of organic matter in the soil increases nutrient and water availability to crops. Soils with increased organic matter are better able to tolerate rainfall events, and have the ability to make moisture available to plants during dry periods.

Erosion Risk - The potential for soil movement and loss is called erosion risk. Keeping your soil protected from wind and rain (with windbreaks, cover crops, and crop residue) will help keep healthy top soil on the fields, and out of the surface water.





What you can do to improve the health of your soil:

- Diversify with crop rotation and cover crops.
- Keep the soil covered throughout the year.
- Keep soil disturbance to a minimum.
- 4. Keep plants growing through the year.
- 5. Manage soil nutrients and pH through regular soil sampling.

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