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Healthy Soil Healthy Environment – an Ohio State University Extension Signature Program

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Introduction

Maintaining a healthy and productive soil is the foundation of sustainable agriculture. However, a majority of producers, youth in agriculture, educators, and master gardeners are unaware of the importance and ways to manage soil health. The OSU Healthy Soils – Healthy Environment signature program is intended to bridge this knowledge gap by providing information on tools, and curricula related to soil health, its assessment, and management under different agricultural settings.

The signature program intends to serve a variety of clientele including: All farmers (traditional, organic, no-till, sustainable or low-input), landowners, 4-H and youth, urban gardeners (youth and adults), Master Gardeners, consultants, ag retailers and salesmen, underserved population, and the general public. It also provides a source for Extension educators to access research, teaching, and outreach materials needed to deliver educational programming in soil health for producers.

Program goals

The overall goal of the program is to "Improve Ohio's Soil Health". Following specific goals are identified:

(1) To bring together researchers, educators, farmers, 4-H youth, private and public agencies, and the general public through a multi-channel network.

(2) To assimilate research-based knowledge related to soil health using short and long-term studies in Ohio and neighboring states.

(3) To develop educational material, and design curricula for dissemination of knowledge.

(4) To organize and facilitate educational and outreach activities related to soil health.

(5) To offer comprehensive soil health assessment, interpretation and management recommendations through OSU's research lab framework.

(6) To build partnership and collaboration for seeking extra-mural for innovative research, Extension and education projects related to soil health and sustainable agriculture.

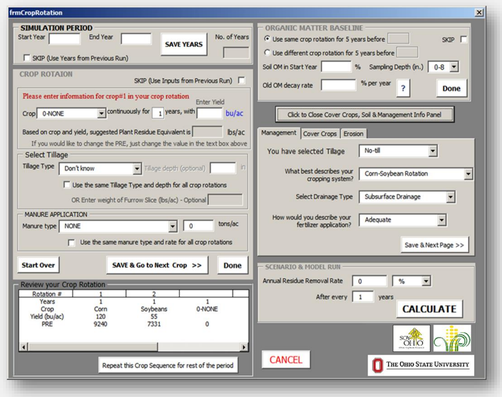
Program activities, key products, and evaluation

OSU Soil Quality Field Test Kit

SoilOne™

The SoilOne™ kit is an express soil health test developed by OSU researchers, and licensed to Demeter, Inc., Springfield OH.

OSU Soil Organic Matter Calculator

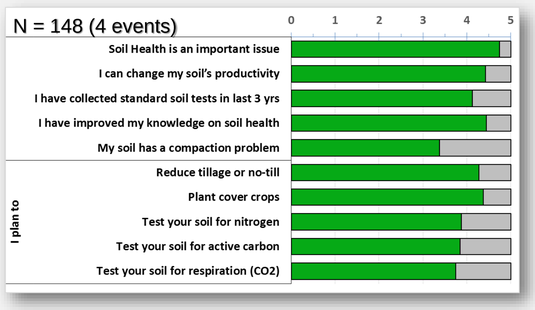


go.osu.edu/SOMcalculator

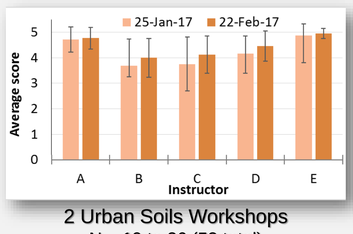
Workshops, field days & farm shows

4-H Youth Education

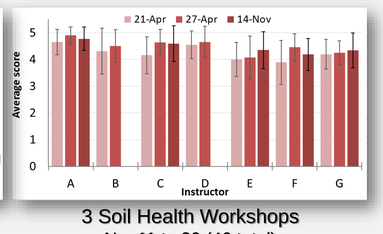
Knowledge assessment



Instructor evaluations

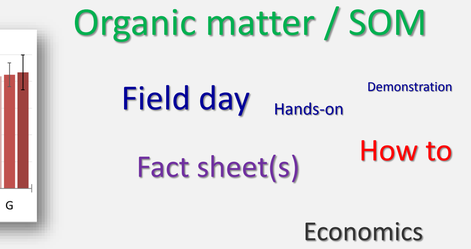


2 Urban Soils Workshops
N = 19 to 26 (52 total)



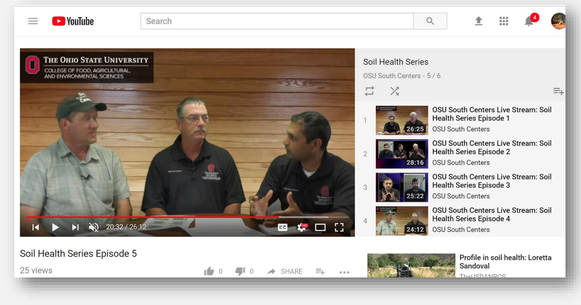
3 Soil Health Workshops
N = 11 to 20 (46 total)

Feedback infographics

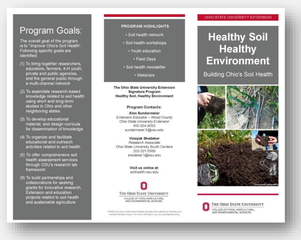


LIVE Streaming

Soil Health Series



Program promotion



Program outcomes

HEALTHY FARMS that are:

- More economically viable due to less chemical and fertilizer inputs
- More sustainable due to less water and nutrient losses

URBAN AGRICULTURE

- Promoting cover crops, soil tests for toxic contaminants, techniques for sustainable food production, etc.

YOUTH

- Increased awareness of soil health
- Increased knowledge of soil management
- 4-H youth training to improve understanding relationship among soil health, water quality, and healthy food production

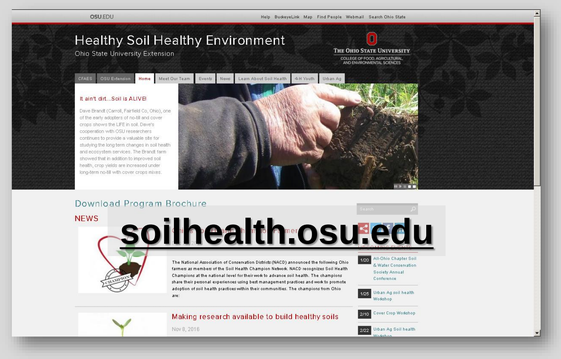
Abstract

Healthy Soil Healthy Environment is a new Ohio State University Extension signature program that will create a soil health education and outreach network comprised of Ohio State researchers and OSU Extension faculty and educators. The program's long-term goal is to help improve Ohio's soil health and environment by educating farmers, youth and the general public. The OSU Extension Healthy Soil Healthy Environment signature program is intended to bridge this knowledge gap by providing tools and curricula related to soil health, and its assessment and management in different agricultural settings. The signature program team will develop traditional and electronic educational materials for continued education on soil health. The team will conduct in-service, training and workshops, field days, and radio/TV talk shows focused on sustainable agricultural management practices. The team is also developing curriculum that could be incorporated into statewide 4-H and other youth education programs such as the Junior Master Gardener Volunteer program.

Program Highlights

- ❑ Soil health network
- ❑ Soil health workshops
- ❑ Youth education curriculum
- ❑ Field Days
- ❑ Soil health newsletter
- ❑ Webinars
- ❑ Soil health testing protocols
- ❑ Soil health test interpretations
- ❑ SH management recommendations

Program information



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