

Agroecology in Plants and Soil Health Workshop Series

A new series at MSC Southeast in agroecology with an emphasis in plants and soil health!

This series is designed to encourage and support the planning, development and production efforts of local urban gardeners and farmers. All different types of adult learners are invited to attend who are interested in applying ecological principles in the management of plants and soil.

WORKSHOP SCHEDULE

Saturday, September 10, 2022
8:30 am - 1:30 pm

Saturday, October 1, 2022
8:30 am - 1:30 pm

Saturday, October 22, 2022
8:30 am - 1:30 pm

Saturday, November 19, 2022
8:30 am - 1:30 pm

WORKSHOP TOPICS*

The Basic of Soils: Health & Fertility

Life in Soil

Gardening for Pollinators

Beekeeping Basics

*See back page for full course descriptions

FREE - OPEN TO THE PUBLIC!

All workshops held at
Minnesota State College Southeast
1250 Homer Road
Winona, MN | 507-453-2700

REGISTER:
southeastmn.edu/training

Taught by
Dr. Bruno Borsai



Workshop includes a blend of lecture, multi-media, and hands-on learning experiences.

The Basic of Soils: Health & Fertility

Saturday, September 10, 2022 (8:30-1:30)

The soil is our life supporting system, which is inhabited by a diverse community of organisms. These are decomposers that within a soil maintain the productivity and resiliency of plant communities.

By participating to this workshop, you will:

- Learn about the origin and diversity of soils, including pedogenesis and factors involved in this important process. Southeastern Minnesota and karst topography.
- Conduct an easy assessment of soil and its health by considering selected physical (texture, soil depth, compaction, structure, color, odor, water retention), agronomic (erosion, soil cover, crop residues, pH) and biological (microbial activity, invertebrates).
- Estimate the abundance of soil bacteria
- Reflect on how these soil traits combined affect the fertility of soils and the health of plants.

Electronic resources (articles, E-books, video links), will be shared with all workshop participants.

Life in the Soil

Saturday, October 1, 2022 (8:30-1:30)

The soil is a living system inhabited by a multitude of organisms, large and small. These are mainly decomposers but also predators and each one of these is part of the soil food-web. By participating to this workshop, you will:

- Observe and learn how to identify selected groups of soil invertebrates.
- Learn how to start and maintain a composting pile, or bin
- Understand the basic principles of managing a vermicomposting box with earthworms
- Reflect on the importance of the soil food-web for enhancing the fertility of soils, its overall health and ecology.

Electronic resources (articles, E-books, video links), will be shared with all workshop participants.

Gardening for Pollinators

Saturday, October 22, 2022 (8:30-1:30)

This workshop offers an introduction to the development of a landscape that attracts pollinators (mainly native bees). It will focus on the design and maintenance of gardens that attract pollinators. More specifically, by participating to this program learners will:

- Explore the diversity of pollinators (mainly native bees) and their ecological benefits to plants and the environment.
- Discover the fascinating biology of selected native bees and how their livelihood is strictly linked to specific plants species.
- Learn the characteristics and growth needs of perennial native plants that are much needed to invite pollinators in our gardens.
- Develop an appreciation and need for increasing biodiversity in your garden, or farm.

Electronic resources will be shared with all workshop participants.

Beekeeping Basics

Saturday, November 19, 2022 (8:30-1:30)

This workshop offers a general introduction to apiculture and beekeeping. Dr. Bruno Borsari will provide a practical overview of topics related to bee biology and ecology, pollination, management of the hive, bee diseases, sanitation, and honey production.

- Explore the basics of apiculture and the important ecological benefits of honey bees.
- Discover the fascinating biology of honey bees and how their unique biology drives the successful management and productivity of the hive.
- Find out how you can establish a small apiary of your own and learn what minimum equipment you will need to get started.
- Bee-come inspired to learn more about the bees and small-scale apiculture.

Electronic resources (articles, E-books, video links), will be made available to all workshop participants.

This curriculum was designed to complement existing resources and programs offered through MSC Southeast, University of Minnesota Extension and other agencies. Financial support for this program is provided by MSC Southeast and by a Special Project grant that was awarded to MNCS by the Minnesota Agricultural Education Leadership Council (MAELC) in 2022.