Organic Growers School is the premiere provider of practical and affordable organic education in the Southern Appalachians. Since 1993 we have been building a vibrant food & farming community by boosting the success of organic growers. A 501c3 non-profit, our hands-on training, workshops, conferences and partnerships inspire, educate, and support people to farm, garden, and live organically.
Thank you to our Sponsors
Please Note: April 6th is Spring Break. We will take that week off of classes!
WHY BECOME A
GARDENER?

• Cost effective
• Quality control
• Your health
• Your choices matter

“Garden as though you will live forever” - William Kent
Watering

- One inch per week
- Water deeply but infrequently
- Daily water seeds and new transplants
- Water for micro-life
Benefits of Mulch

- suppresses weeds
- maintains current soil temperature
- maintains current soil moisture
Mulch Materials

- Wheat straw
- Hay
- Pine needles
- Shredded leaves
- Cover crops
- Compost
- Coffee grounds
- Landscape fabric
- Plastic
THE DIFFERENCE BETWEEN A FLOWER AND A WEED IS A JUDGEMENT

- Dr. Wayne Dyer
Weeding

Weeds as allies and teachers
Weeds as soil coverage
Weeds as “sacrificial lambs”
Techniques for managing
Intentionally growing
Chickweed
Violets
Yellow Dock
Comfrey
Burdock
Lambs Quarters
Purslane
Feeding Your Garden
Organic Fertilization

• Crop Rotation
• Compost and vermicompost
• Cover Crops
• Animal Manures
• Amendments
Fertilize Regularly

Observe your plants

Foliar feed/ Soil Drench

Side-dress
N, P, K Supplements

Nitrogen:
• Hydrolysed Fish
• Blood Meals

Phosphorus:
• Rock Phosphate, wood ash in compost
• Mycorrhizal fungi
• Bone Meal

Potassium:
• Green Sand
• Azomite
Seaweed & Kelp

Think of liquid seaweed as a mega-vitamin you can add to every spray.
Animal Manures

- Relative nutrient content varies
- Incorporation is important for raw product
- Apply in fall to beds you want to crop in spring
- Apply anytime to fallow spaces
- Be careful about pesticides in hay
Compost Tea

For a five gallon brewer:
Time to make 1-5 days
• 4-8 cups good, aerobic, nice-smelling, fully finished organic compost
• 2 Tablespoons unsulfured blackstrap molasses
• 2 Tablespoons organic liquid kelp fertilizer
• 1 Tablespoon organic liquid fish fertilizer
• Chlorine-free water to fill bucket
for a 5 Gallon Batch:
• An aquarium pump large enough to run three bubblers or air stones
• Several feet of tubing
• A gang valve
• Three bubblers
• A stick to stir the mixture
• Unsulfured molasses (preferably organic)
• Something to strain the tea, like an old pillowcase, tea towel, or a nylon stocking
• A 5 gallon bucket

Only want to buy one bubbler?
Reduce recipe to 1 gallon & refigure ingredients (use 80% less of everything).

From Elaine Ingham
Pros

• Well-made tea is kicking with microbial activity!

• Suppresses diseases and can enhance nutrient uptake.

• A microbial inoculant to feed your soil food web.

• A broad-spectrum organic fertilizer to foliar feed your plants.

Cons

• Poorly-made tea can actually damage plants.

• Tea made with uncompleted compost can contain pathogens.

• Some sources think the benefits of compost tea are exaggerated.

• Quality of tea determined by quality of compost and brewing method.
Crop Rotation

Crop Rotation Nutrient Relationship

Light Feeder
Low Nitrogen User

Heavy Feeder

Heavy Giver
Crop Rotation
5 Year Plan
A crop you grow for your soil instead of for your plate.
• Cover crops go in whenever there is space and time.
• Combine a *small grain* with a *legume* when you are cover cropping for longer periods of time.
• Consider *green manures* when cover cropping for shorter time frames.
Seed selection:

• Days to maturity
• Method of incorporation
• Decomposition time
• Season
**Summer:** Plant buckwheat and till in to add organic matter.

**Fall/winter cover:**
Oats/Austrian Winter Peas
Winter Rye (can plant late)
Crimson Clover
Disease

Disease is caused by a pathogen such as a fungus, bacterium, virus, or nematode.
Organic Disease Control

- Site
- Water
- Species Selection
- Feed the Soil
- Sanitation & Cultural
- Protection/Control
- Crop rotation
- Species diversity
- Record keeping
- Observation
Some Organic Fungicides

**Serenade** (Bacillus subtilis)

**Actinovate** (Streptomyces Lydicus WYEC 108)

**Oxidate** (Hydrogen dioxide - Broad Spectrum Fungicide/ Bactericide)

**Bicarbonates** (Potassium bicarbonate & sodium bicarbonate)

**Neem Oil**

**Horticultural Oil** (80% petroleum Oil)

**Sulfur Copper**
A New Take on Pest Control

Integrated Pest Management
Focus on Prevention

• Plants have their own defenses.
• Healthy Soil = Resilient Plants
• Attract beneficial insects through *species diversity*, *trap crops*, and *refuges*.

https://www.insectidentification.org/insects-by-state.asp?thisState=North%20Carolina
Garden for pollinators!

1 pest insect for every 1700 beneficial species
Before You Spray

• Correct identification
• Understand the lifecycle
• Assess the population.
• Learn the impact of your spraying. Is your remedy a *broad-spectrum* insecticide?
Natural & Homemade Helpers

- Bug Juice Spray
- Garlic Oil Spray
- Hot Pepper Spray
Common Pests

Aphids

Slugs

Cabbage Loopers
Harlequin Bugs

Vine Borers
Squash Bugs

Stink Bugs
Mexican Bean Beetle

Potato Beetle

Japanese Beetle
Non-Insect Pests

- Common wild animal pests
- Deterrent plants.
- Fencing
- Natural Odors
Fall Gardening

- Cover your soil
- Remove and destroy diseased plant material
- Clean, oil, file, and store tools
Managing Weather
Harvest Regularly
EAT

STORE

PRESERVE

ENJOY
START TODAY!

• In the yard & garden

• At the store and market

• Teach others
Bottom Line...

...Everything you do has an effect.
Thank you for coming & we hope to see you again soon!
More Education…

Organic Growers School | FALL GARDENING
Mondays: July 27 & August 3, 2020

OrganicGrowersSchool.org/Gardeners/Fall-Gardening

Prepare your garden for winter: A wide range of vegetables can overwinter without much fuss, and winter months are perfect for planning your spring garden. Taught by Diana Schmitt McCall.

Garden Sessions: Mondays Jul. 27 & Aug. 3, 6:00 — 8:00 pm
Dr. John Wilson Community Garden, Black Mountain, NC
$25 each class, $40 for both classes
Organic Growers School | HARVEST CONFERENCE
Sept 11-12, 2020 • Warren Wilson College
The Harvest Conference is an educational event that offers affordable classes on organic growing and sustainable living.
Please help us understand our impact by completing the evaluation.

Thank you!!!