

*Northern Shenandoah Valley Master Gardener
Association*

Beginning Vegetable Gardening Series

Webinar 3 of 6: Maintaining your Garden

Presenter: Debbie Talley & Heather Enloe



Virginia Cooperative Extension
Virginia Tech • Virginia State University



Overview: Keeping Your Garden Going!

Water

Thinning & Weeding

Tools

Mulch

Pest Control

Plant Supports

Fertilizer



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A vintage metal watering can with a handle and a spout, resting on a bed of green foliage. The can is silver-colored with some etched designs. The background is a dense garden with various green plants and some small white and pink flowers.

Watering



Watering your Garden: Why

Regular and adequate water is crucial to plant life.



Watering your Garden: When

Established plants need one to two inches per week.

Check your forecast or consider a rain gauge.

Use a moisture probe/finger to measure moisture in the soil up to 3"



Watering your Garden: When

Morning is the best time to water

Early evening is the second-best time to water

Midday watering should be avoided during hot weather



Watering your Garden: How

Watering Cans & Wands: Your goal is to wet the ground, not the foliage. Keep the shower light on young & fragile seedlings and plants.



Watering your Garden: How

Hoses & Drip Irrigation: A good solution for a large or highly populated garden, or when your water source is some distance away.



Watering your Garden: How

Your water source location: It's easier to move your garden once than move your water every week.



Thinning Seedlings & Weeding

Thinning Seedlings & Weeding

Why?

- Healthier plants
- Stronger plants
- Maximize access to light, water, air, and nutrients



Thinning Seedlings & Weeding

When?

- Sooner is better
- When plants have 2-3 true leaves



Thinning Seedlings & Weeding

How?

- Use pruning shears or scissors
 - Avoid the pluck/pull
- Refer to seed packaging for spacing requirements



Thinning Seedlings & Weeding

How?

- In the tray:
 - One plant per cell
- In the garden:
 - Look for plants that are the
 - (1) strongest
 - (2) healthiest
 - (3) most compact





Thinning Seedlings & Weeding

Why?

- Everything competes for water, space, air & nutrients
- Kill the competition



Thinning Seedlings & Weeding

When?

- 24 hours a day
- 7 days a week

JUST KIDDING
(But not really)



Thinning Seedlings & Weeding

When?

- As soon as they begin to appear
- Throughout the growing season
- Pace yourself
- Weed when the soil is somewhat moist



Thinning Seedlings & Weeding

How?

- Hands
- Hand tools
 - Trowel
 - Hand weeder
 - Cultivators
- Garden tools



A green wheelbarrow is filled with various garden tools. Visible tools include several shovels with orange and black handles, a rake with a long wooden handle, a pair of black gloves, a green watering can, and a small black bucket. The wheelbarrow is parked on a green lawn in front of a garden with colorful flowers and rocks.

Garden Tools

Gardening Tools

Gloves

- Have one or two pairs
- Look for reinforced fingertips and padding
- Keep a heavier pair on hand for using with tools
- Function: avoids hand injury including cuts and blisters



Gardening Tools

Trowels

- Have at least one
- Assorted by width, shape & depth depending on your need
- Function: digs holes for plants & bulbs; breaks up small clumps of soil



Gardening Tools

Pruning Shears

A Must Have!

- Function: Harvesting vegetables, trimming plants (shrubs & flowers)



Gardening Tools

Pruning Shears

When selecting shears, consider your needs:

- Spring Power for ease of use
- Ratchet Mechanism for power
- Soft grip for all day use
- Hard grip for everyday use



Gardening Tools

Pruning Shears

Pruning Snips/Microtip

- Fine precision cuts
- Trimming
- Thinning
- Getting into small, tight areas



Gardening Tools

Pruning Shears

Bypass

- One sharp blade edge and one unsharpened edge “bypass” each other
- Good for thicker branches and foliage
- Keeps cuts sharp and clean for optimal plant health
- Demands hand strength



Gardening Tools

Shovel v. Spade The Shovel

- Function:
 - Digging up, breaking apart & lifting soil;
 - Scooping & moving loose materials
 - Digging holes



Gardening Tools

Shovel v. Spade The Shovel

- Look for:
 - Strong handle/blade connection
 - Long handle with no grip (since they are mostly held at an angle)
 - Flat ledge at the top of metal for stepping



Gardening Tools

Shovels v. Spades **The Spade**

- Function:
 - Cutting sod
 - Edging
 - Digging trenches



Gardening Tools

Shovels v. Spades **The Spade**

- Look for:
 - Strong handle/blade connection
 - Topped with D or T grip for easier hold
 - Flat ledge at the top of metal for stepping



Gardening Tools

Spading Fork

- Function:
 - Turning soil
 - Digging up root crops, potatoes, and large plants while minimizing root damage.



Gardening Tools

Hoes

- Warren
- Draw
 - Garden
 - Scuffle/Hula
 - 2-Prong Weeder
 - Eye



Gardening Tools

Hoes

Warren

- Function:
 - Cutting sod
 - Edging
 - Digging trenches



Gardening Tools

Hoes

Draw: Garden

- Function:
 - Cut off and uproot small weeds
 - Loosen soil to cover plant root
 - Quick digging/weeding



Gardening Tools

Hoes

Draw: Scuffle/Hula

- Function:
 - Removing small surface-growing weeds



Gardening Tools

Hoes

Draw: 2-Prong Weeder

- Function:
 - Breaking up hard clumps
 - Digging holes/wide furrows



Gardening Tools

Hoes

Draw: Eye

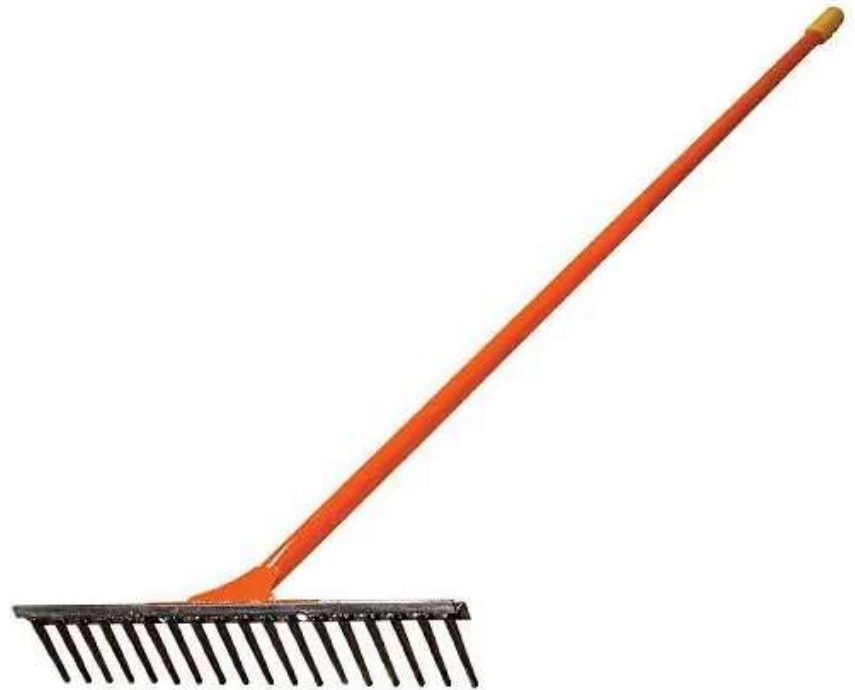
- Function:
 - Loosening large clumps of grass/soil



Gardening Tools

Dirt/Gravel Rakes

- Function
 - Leveling/Smoothing surfaces
 - Removing large weeds/dirt clods



Gardening Tools

Cultivators

- Hand
- 2-Cycle Tillers
- Rototillers



Gardening Tools

Cultivators Hand



Gardening Tools

Cultivators
2-Cycle Tillers



Gardening Tools

Cultivators
Rototillers



Gardening Tools

Gardening Knives

- Garden
- Pruning



Gardening Tools

Gardening Knives Pruning



Gardening Tools

Gardening Knives

Hori Hori Japanese Garden Knife



Gardening Tools

Wheelbarrows & Carts

- Function:
 - Hauling
 - Push v. Pull



Gardening Tools

Kneeling Pad



Gardening Tools

Kneeler & Seat



Gardening Tools

Bucket/Bag for Tools

- Canvas Tote
- 5 Gallon Bucket
- Toolbag



Gardening Tools

Watering Devices

- Watering Cans
 - Hoses
- Irrigation Hoses



Gardening Tools

Personal Protective Equipment

- Hat
- Handheld Sprayer
- Protective Clothing
- Protective Gear
 - Shoes



Gardening Tools

Maintaining Your Tools

During the Gardening Season

- Clean before & after each use
- Wipe your tools with alcohol (at least 70%) after each session
- Keep tools sharp for efficiency



Gardening Tools

Maintaining Your Tools

After the Gardening Season

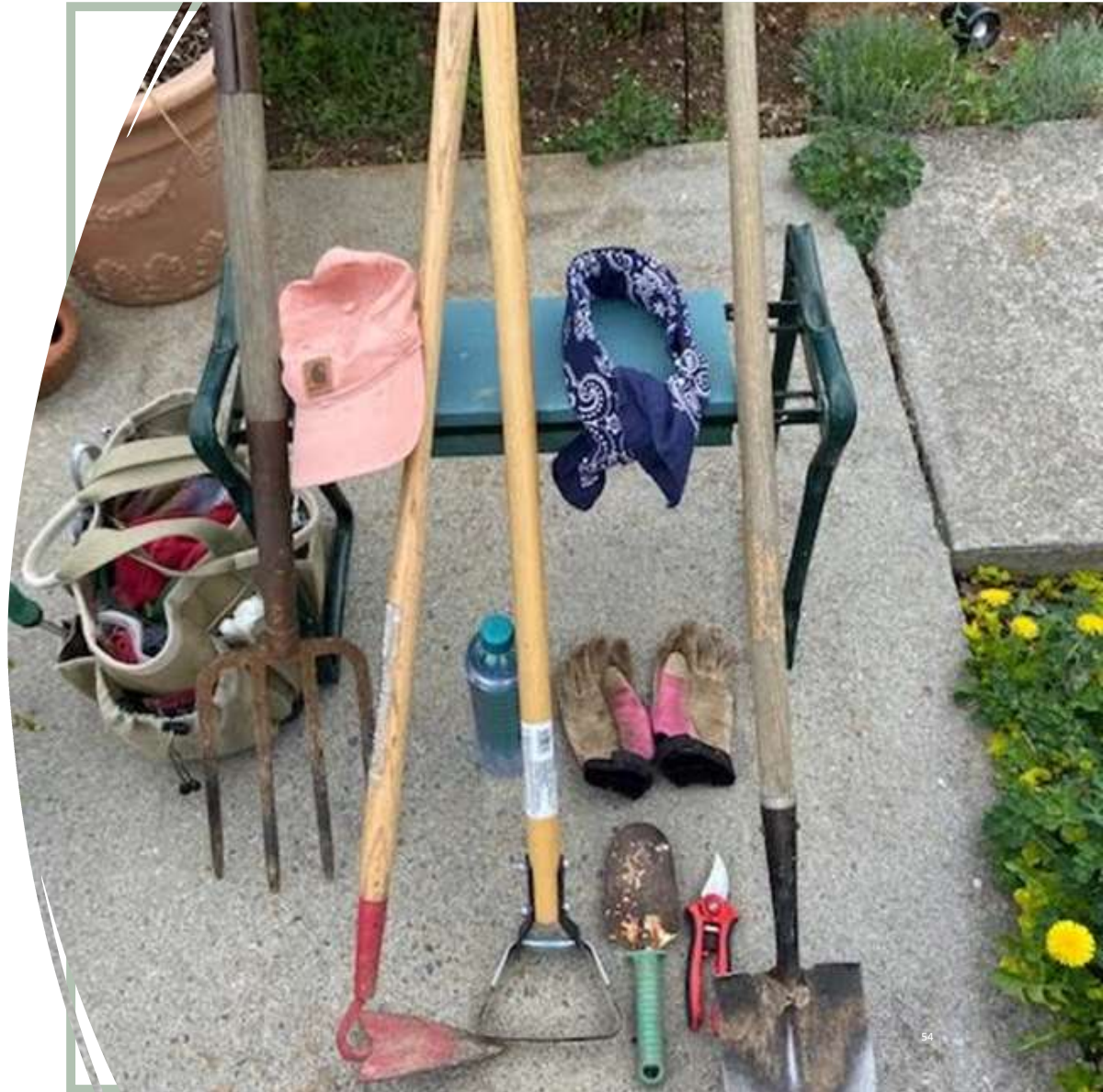
- Apply **linseed or mineral oil** to all tool parts to keep rust abated
- **Sharpen** your tools & hang them
- Store in a **dry place** to keep rust and rot away



Gardening Tools

The Top Ten

1. Gloves
2. Trowel
3. Shovel
4. Spading Fork
5. Bypass Pruners
6. Scuffle Hoe or Hand Cultivator
7. Wheelbarrow/Cart
8. Warren Hoe
9. Knife
10. Hat & H2O





Mulch

Mulch

Why?

- Maintains Moisture
- Suppresses Weeds
- Regulates Soil Temperature
- Improves Soil Health



Mulch

When?

- When Plants are a Few Inches Tall
- Before the Weeds Arrive
- Throughout the Growing Season



Mulch

How?

- Apply 2-3 Inches
- Natural Mulch
 - Compost
 - Pine Needles
 - Shredded Leaves
 - Hay/Grass



Mulch

How?

- Natural Mulch don'ts
 - Avoid tree bark
 - Avoid herbicide-treated lawn clippings
 - Avoid fresh sawdust & fresh manure
 - Avoid dyed mulches



Mulch

How?

- Synthetic Mulch (Plastic)
 - Red or black are good for tomatoes & peppers
 - Be sure you have created watering holes/slashes
 - Use food-safe (ask the dealer)



Mulch

How?

- Synthetic Mulch (Other)
 - Crushed Rock
 - Recycled Glass
 - Weighted landscaping material (remove at end of season)



Mulch

Remember:

- Keep mulch at least an inch away from plant stems
- Grass clippings should be sundried for a day or two
- Leaves should be aged nine months



A close-up photograph of a green leaf with numerous irregular holes, characteristic of insect damage. Two small, metallic blue beetles are visible on the leaf. One beetle is in the upper right, and the other is in the lower left. The background is a soft-focus green.

Pest Control

A photograph of two orange rabbits in a field of green grass and clover. The rabbits are positioned on the left side of the frame, with one in the foreground and another slightly behind it. They are both facing right, and their long ears are prominent. The background is a soft-focus field of green vegetation.

Pest Control

Why?

- Bountiful Harvest
- Pests bring disease & overpopulation, if left unchecked

A photograph of two orange rabbits in a field of green grass and clover. The rabbits are positioned on the left side of the frame, with one in the foreground and another slightly behind it. They are both facing right, and their ears are upright. The background is a soft-focus field of green vegetation. A white rectangular box with rounded corners is overlaid on the right side of the image, containing text. The box has three orange curved lines in its top right corner.

Pest Control

When?

- Before You Plant
- Inspect Purchased Plants
- During the Growing Season

A photograph of two orange rabbits in a field of green grass and clover. The rabbits are positioned on the left side of the frame, with one in the foreground and another slightly behind it. They are both facing right, and their ears are upright. The background is a soft-focus field of green plants.

Pest Control

How?

- Encourage Beneficial Insects
- Hand pick & squash bugs/insects/eggs
- Plant During Specific Times
- Rotate your Crops
- Use Protections & Barriers

THE GOOD

Lacewing Eggs
on Swamp Milkweed



Joe Boggs, OSU Extension®

Chinese Mantid



Joe Boggs, OSU Extension®



MCES

Lady bug feasting on aphids (UMD.edu)



D. Laughlin

Scoliid wasps searching for white grubs

A photograph of two small orange rabbits in a field of green grass and clover. The rabbits are positioned on the left side of the frame, with one slightly behind the other. They are both looking towards the right. The background is a soft-focus field of green vegetation. A white rectangular box with rounded corners is overlaid on the right side of the image, containing text and a list. The box has three orange curved lines in the top right corner.

Pest Control

How?

- Encourage Beneficial Insects
- Hand pick & squash bugs/insects/eggs
- Plant During Specific Times
- Rotate your Crops
- Use Protections & Barriers



Bugs Bunny

The Bad and the Ugly



A photograph of two orange rabbits in a field of green grass and clover. The rabbits are positioned on the left side of the frame, with one in the foreground and another slightly behind it. They are both looking towards the right. The background is a soft-focus field of green vegetation. A white rectangular box with rounded corners is overlaid on the right side of the image, containing text and a list. The box has three orange curved lines in its top right corner.

Pest Control

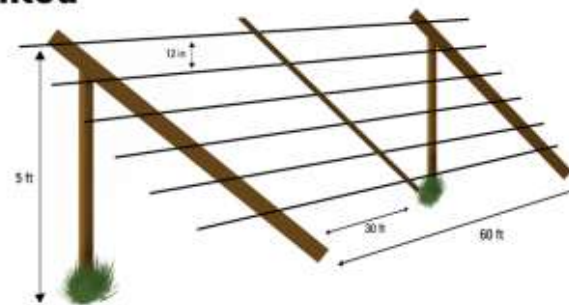
How?

- Encourage Beneficial Insects
- Hand pick & squash bugs/insects/eggs
- Plant During Specific Times
- Rotate your Crops
- Use Protections & Barriers



Fencing for deterring deer
<https://nwdistrict.ifas.ufl.edu>

Slanted



<https://naturalresources.extension.iastate.edu>

A close-up photograph of three Brood X Cicadas on a green plant stem. The cicadas have black bodies, red eyes, and large, transparent wings with a distinct yellowish-brown border. They are positioned in a cluster, with one at the top and two below it. The background is a soft, out-of-focus green.

Brood X Cicadas (17 year)



Spotted Lantern Fly





Plant Supports

Plant Supports

Why?

- Improves Yield
 - Maximizes Space
 - Prevent Disease
-



Plant Supports

When?

- As early as possible
 - As the plant grows
-



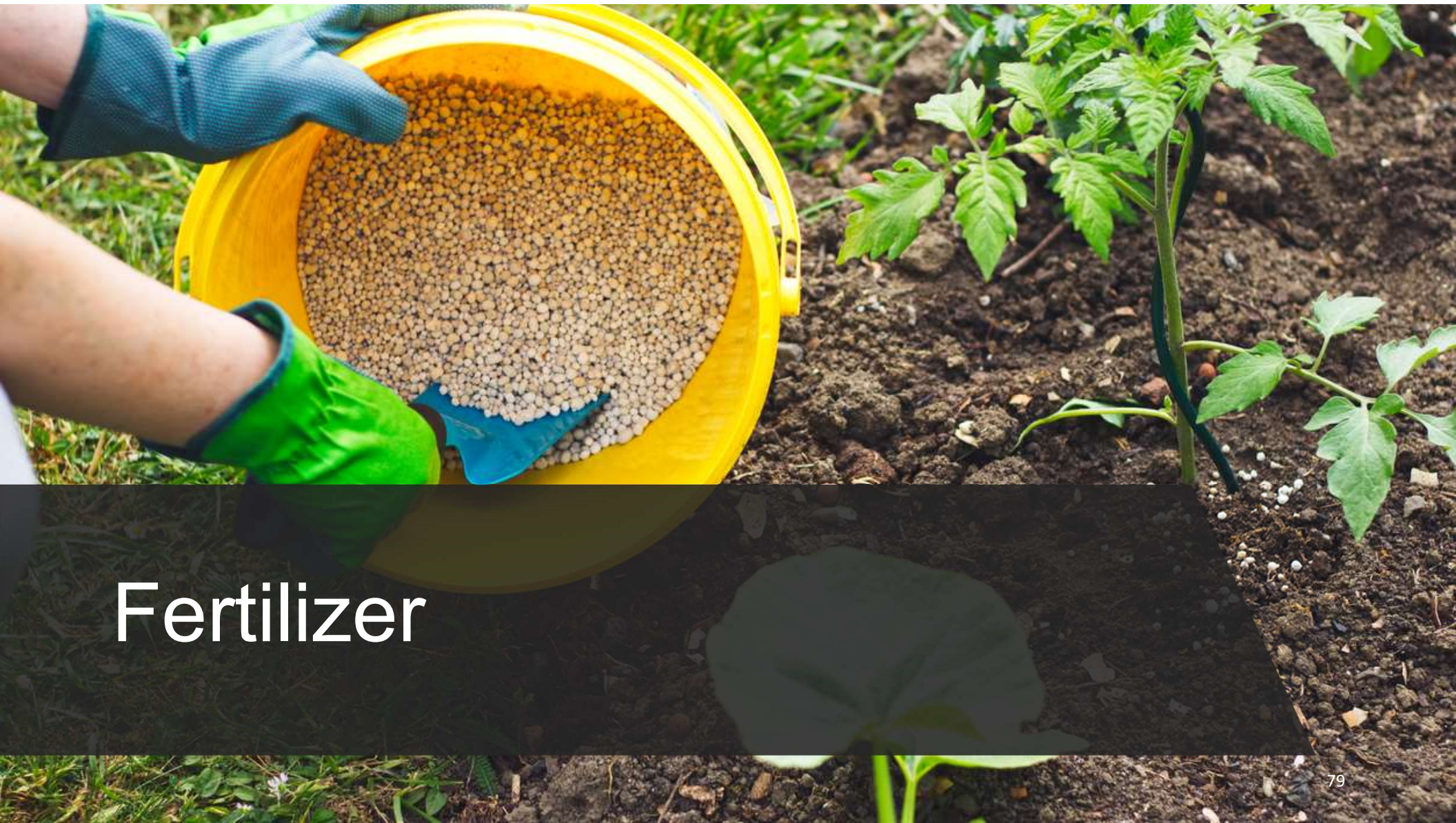
Plant Supports

How?

- Use store-bought supports
 - Make your own
 - Poles
 - Stakes
 - Fencing
 - String/rope/wire
 - Stockings
 - Fabric ties
-







Fertilizer



Fertilizer

Why?

- Improves Crop Yield



Fertilizer

When?

- Before Planting
- During the Growing Season



Fertilizer

How?

- 10-10-10; 5-10-5
 - First # is Nitrogen (N)
 - Second # is Phosphorous (P)
 - Third # is Potassium (K)
- A 100 lb bag of 10-10-10 will have 10lbs of N, 10 lbs of P and 10 lbs of K
 - The remainder is inert ingredients



Fertilizer

How?

- Use a 10-10-10
 - One pound per 100 feet of row
- Use a 5-10-5
 - Two pounds per 100 feet of row



Fertilizer

How?

- One pint = 1 pound (approx.)
- Apply to Base of Plants Extending to Drip Line
- Avoid Applying Dry Fertilizer to Foliage
- Read the Instructions Carefully
- Wear Your PPE!



Overview: Keeping Your Garden Going!

Water

Thinning & Weeding

Tools

Mulch

Pest Control

Plant Supports

Fertilizer



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Contact Our Green Help Lines

County	Phone	Email
Clarke	540-955-5164	NSVMGA.info@gmail.com (include "Clarke County Gardening Question" in the subject line)
Frederick	540-665-5699	GreenHelpLine.FrederickCo@gmail.com
Page	540-778-5794	NSVMGA.info@gmail.com (include "Page County Gardening Question" in the subject line)
Shenandoah	540-459-6140	greenhelpline@gmail.com
Warren	540-635-4549	GreenHelpLine.WarrenCo@gmail.com



Visit Our Seed Lending Libraries

- Clarke County Library, 101 Chalmers Court, Suite C, Berryville, VA 22611
- Page Public Library, 100 Zerkel Street, Luray, VA 22835
- Shenandoah County Library, 514 Stoney Creek Blvd, Edinburg, VA 22824

<http://nsvmgga.org/programs/seed-lending-library/>



Check Out Our Upcoming Events

- Future Beginning Vegetable Gardening **Webinars**
 - May 20, 7 p.m.
 - June 17, 7 p.m.
 - July 15, 7 p.m.
- **GardenFest**, June 5, starting at 8 a.m. at Belle Grove
 - Gardening in the Valley **Tour**, June 26

[NSVMGA website](#); [Facebook](#)



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QUESTIONS?



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Helpful Links for More Information

- Hand tool care and safe use

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/BSE/BSE-51/BSE-323.pdf

- Tools for people with Arthritis

<https://www.arthritissupplies.com/arthritis-gardening-tools.html>

- Adaptive Gardening Tools

<http://www.coauw.org/2017/08/27/adaptive-gardening-tools-the-new-age-gardening-tools-which-dance-to-your-tunes/>

- How to clean and sharpen your pruners

<https://extension.unh.edu/blog/how-clean-and-sharpen-your-pruners>

Helpful Links for More Information

- Fertilizing the Vegetable Garden

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/426/426-323/426-323_pdf.

- Fertilizing Vegetable Gardens

https://extension.unh.edu/resources/files/Resource000602_Rep624.pdf

- Soil Sampling for the home Gardener

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/452/452-129/SPES-176.pdf

- Organic controls for insects

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/456/456-018/ENTO-336B.pdf

- More on Cicadas

<https://www.cicadamania.com/cicadas/category/broods/brood-x/>

Helpful Links for More Information

- Insect Management in the Home Garden U. of Florida Extension

<https://edis.ifas.ufl.edu/vh036>

- Vegetable Insect -Mite Pests

<https://extension.umd.edu/hgic/topics/vegetable-insect-mite-pests>

- Living with wildlife without losing your garden (VCE)

https://www.youtube.com/watch?v=tYKtv_frJJA&t=1500s

- Identify garden pests. U. of Minnesota Extension

<http://apps.extension.umn.edu/garden/diagnose/insect/garden/>

Helpful Links for More Information

- 2020 Pest Management Guide

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/456/456-018/ENTO-336.pdf

- Fertilizing Vegetable Gardens

https://extension.unh.edu/resources/files/Resource000602_Rep624.pdf

- Virginia's Home Garden Vegetable Planting Guide: Recommended Planting Dates and Amounts to Plant

https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/426/426-331/SPES-170.pdf

- What's wrong with my plant?

<http://apps.extension.umn.edu/garden/diagnose/plant/vegetable/>

Contact

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