

Putting Your Garden to Bed



Oregon State University
Extension Service
Master Gardener



www.washingtoncountymastergardeners.org



Your Master Gardener Speakers

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Lisa Hansen

OSU Extension provides information and expertise to help meet local challenges and help every Oregonian thrive.

- Open Campus
- 4-H Youth Development
- Sustainable agriculture and gardening
- Family and Community Health
- Forestry and Natural Resources
- Aquatic Health
- Small Farms
- Farm to School and School Gardens

<https://extension.oregonstate.edu/washington>



OSU Extension Master Gardener Program



Helps Oregonians grow healthy gardens

Provides gardening information rooted in science

More than 3,000 trained volunteers provide 200,000 volunteer hours and 250,000 contacts annually

Requires annual volunteer recertification

Washington County Master Gardener Association



- Works in support of and in collaboration with the OSU Extension Service Master Gardener Program
- Volunteers to educate the public about sustainable and affordable gardening by providing relevant, research-based education



Land Acknowledgement



The Washington County Master Gardener Association acknowledges that the land occupied by our gardens rests on the ancestral lands of the Tualatin band of Kalapuyans, who once lived along the Tualatin River before the forced removal from their land prescribed by the Willamette Valley Treaty of 1855.

Members of The Confederated Tribes of the Grand Ronde and The Confederated Tribes of Siletz, the Kalapuya people continue to be purposeful stewards of their land by design. They managed a seasonal fire and harvest regimen until the 1840's and are currently involved in efforts to restore native habitat in the Willamette Valley. We seek to educate ourselves about their lifeways and collaborate with them using both traditional and scientific gardening methods.

We further express our gratitude to their descendants for carrying on the traditions and culture of their ancestors. We invite everyone to appreciate and reflect on the resilience and healing power of the land and community of their ancestors.



July 2018



July 2019



August 2026

Summary of Topics: Landscape Plants

- Care for the Soil
- Support the Garden Ecosystem
- Tasks for Fall and Winter
- Practical applications: visits to WCMGA Education Garden and PCC Rock Creek Learning Garden
- Planting demo in the garden
- **Resources** for a deeper dive-see WCMGA website www.washingtoncountymastergardeners.org

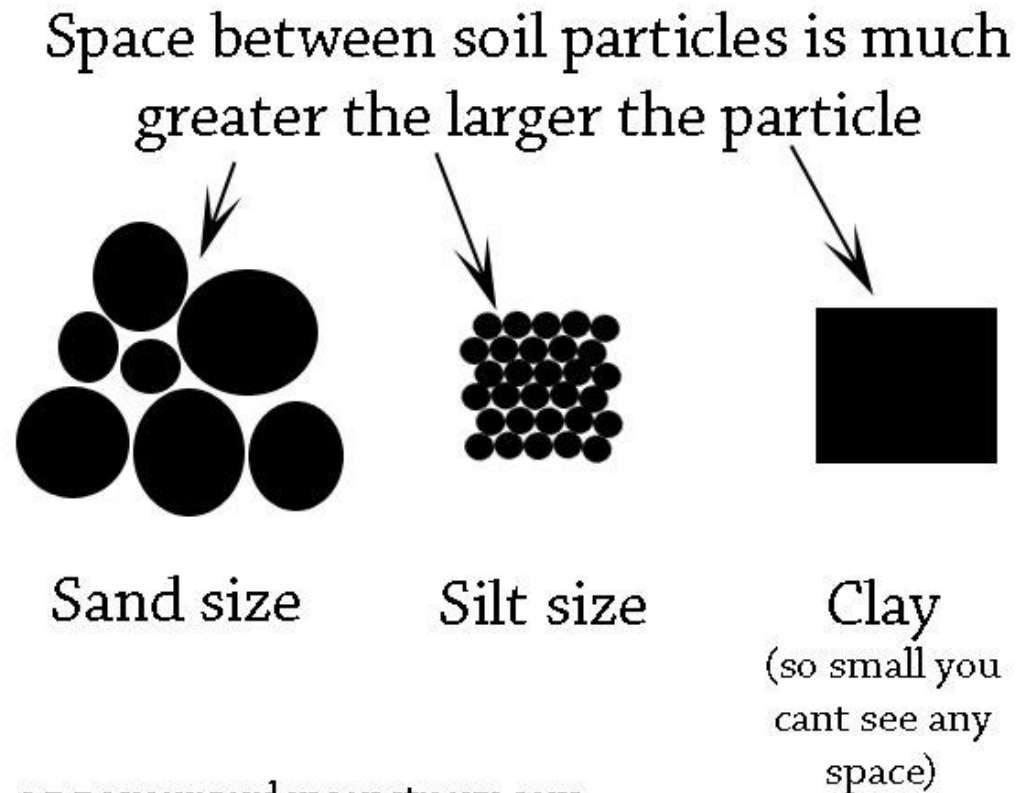
see All Things Gardening



Functions of Soil for Plants

- **Mitigates temperature swings** - absorbs heat, cold
- **Respiration** – plant roots and other soil organisms need oxygen
- **Holds water** to make it available to plants and soil organisms
- **Anchors** roots of plants.
- **Houses micro and macro-organisms** that make up the soil food web
- Medium which houses **plant nutrients**

Soil Particles and Soil Texture



www.yourgardensanctuary.com

Sand - largest, more space between particles, warms faster, releases water faster, most porous, looser.

Silt –smaller particles, holds water longer than sand, silky feel. Has best ability to hold large amounts of water that plants can use. But erodes more readily from water and wind.

Clay-smallest particles that stick to one another. Highest volume of surface area. High water holding capacity. High nutrient holding capacity.

Strategies to Manage Soil



Take soil sample(s) and send to lab for soil test results.



Adjust pH as needed using recommendations from soil test results—great fall task.



Amend soil with nutrients as needed.



Cover the soil to protect it.

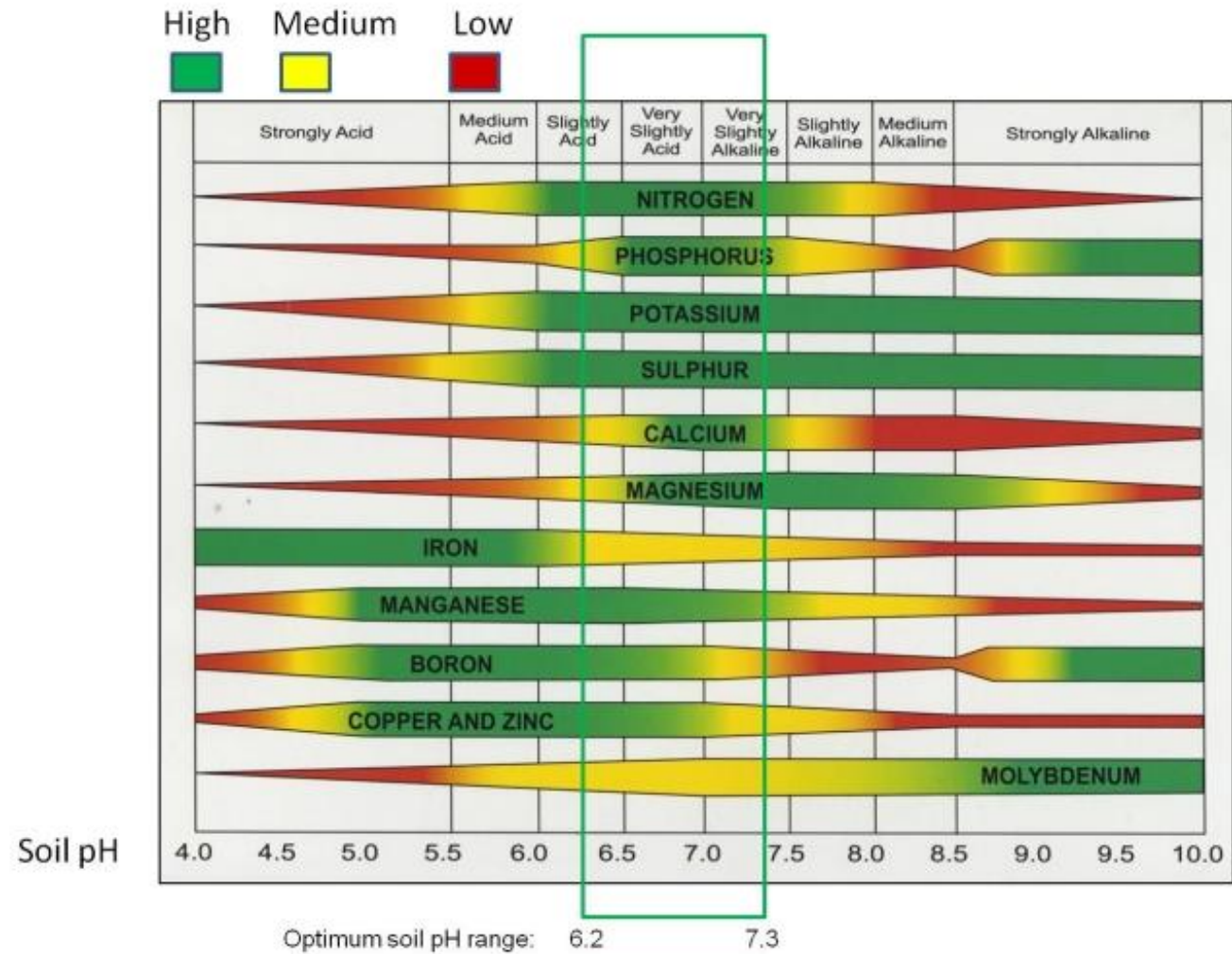


Avoid compacting the soil.



Right plant-right place. Select plants that do well in the soil type for the garden—requires fewer inputs

How soil pH affects availability of plant nutrients





Cover the Soil

Mulches

- *Arborist Chips*
- Wood Chips
- Compost
- Gravel
- *Leave the leaves*

Cover Crops

Ground Covers - especially evergreen

Plant densely

Wind breaks (combat wind erosion)

Plant understory plants



Mulches

Sits on top of the soil --Moderates temperature changes, helps controls weeds, helps reduce erosion and compaction, helps to retain soil moisture, adds nutrients to the soil and feeds organisms in soil, depending on type of mulch.

- **Wood chips-serves** as food for organisms in soil. Adds nutrients as it breaks down over time. Don't turn into soil, ties up N. Geotextile fabrics—weeds grow on top. Readily available, fairly in expensive or free. Know the source.
- **Compost**-smaller particles, higher in available nutrients---decomposition more advanced, food source for organisms in soil. Needs replenishment more frequently.
- **Gravel**-long lasting, will not break down. Does not provide food to organisms in soil. Attractive when maintained.



Soil Compaction occurs when pressure is applied to soil surface and squeezes soil aggregates together.

Negative Impacts:

- Reduces soil porosity (space between soil particles)
- Reduces air exchange capacity in soil.
- Decreases infiltration rate of water.
- Increases erosion and runoff of pollutants.
- Restricts or changes root growth.



Avoid Compacting the Soil



Leave the Leaves!

- Leave leaves in garden beds to decompose this fall into ~mid spring.
- But Leave some bare ground for ground nesting bees!
- Free nutrients for your garden.
- Adds organic matter.
- Covers the soil.
- Recycles materials on your site.
- Habitat for beneficial insects to overwinter.
- Saves you time.
- Supports the soil food web.

■ Tasks for Fall and Winter...

See OSU Resources :

[Gardening Calendar](#)

[Resources for freezing temperatures or wintry conditions](#)

Annually-- take photos of your landscape beds and organize by location and date.

Clean and sharpen tools. (see UC SanDiego video tool sharpening resource)

Place plant signs for plants that go to ground in winter.

Remove spent annuals.

Remove weeds. (see resource)

Divide and transplant---note last frost date and time to allow plants to become est.

Leave stems for invertebrate habitat, seedheads for food and winter. (see Xerces Leave the Leaves resource)

Fall --add new plants using proper planting techniques. (see Planting resources)

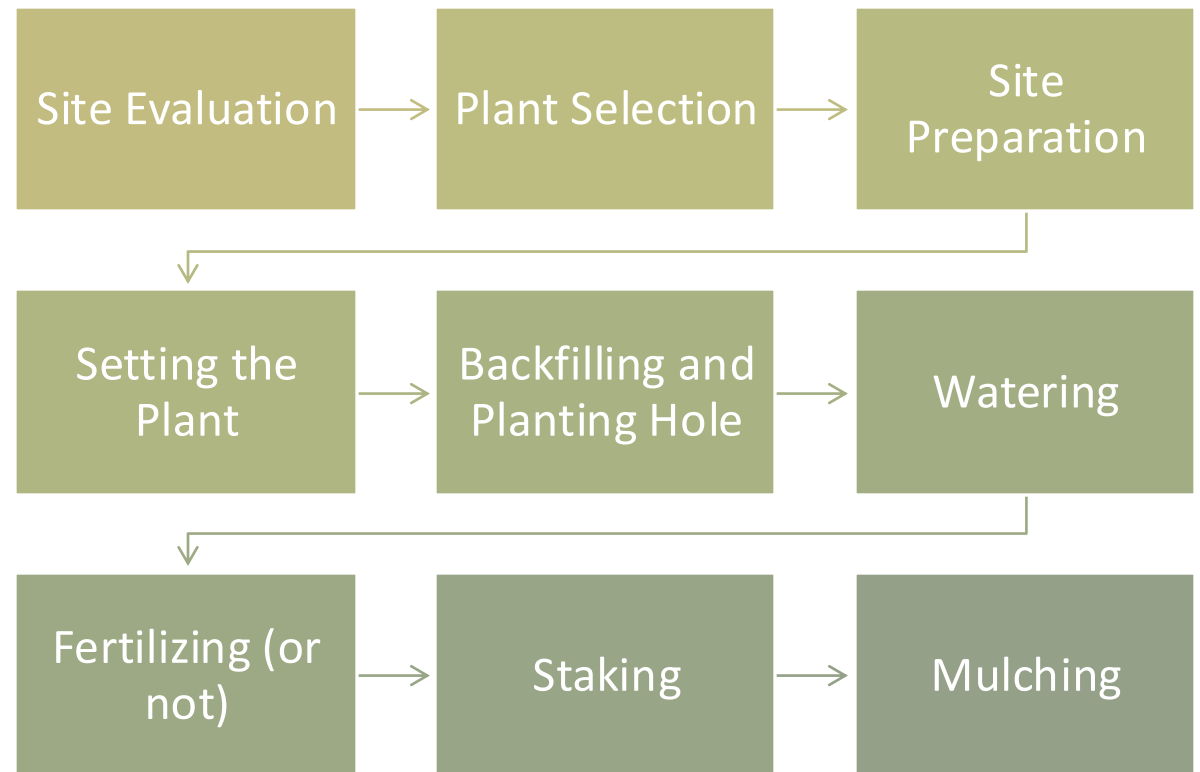
Review - Note how plants did this past year-what would you change.

Service power tools.

Bring in or drain hoses, insulate hose bibs, drain and turn off exposed faucets if possible.



Planting



Tree and Shrub Transplanting

Dig hole at least 2-3 x root diameter but only as deep as root ball.

Loosen dirt on sides but not bottom of hole.

Thoroughly water plant.

Gently remove as much planting medium as possible from roots.

Loosen and fan out roots. Remove encircling roots that cannot be fanned out.

Plant with root flare above soil surface.

Backfill with native soil only.

Water in well then add mulch

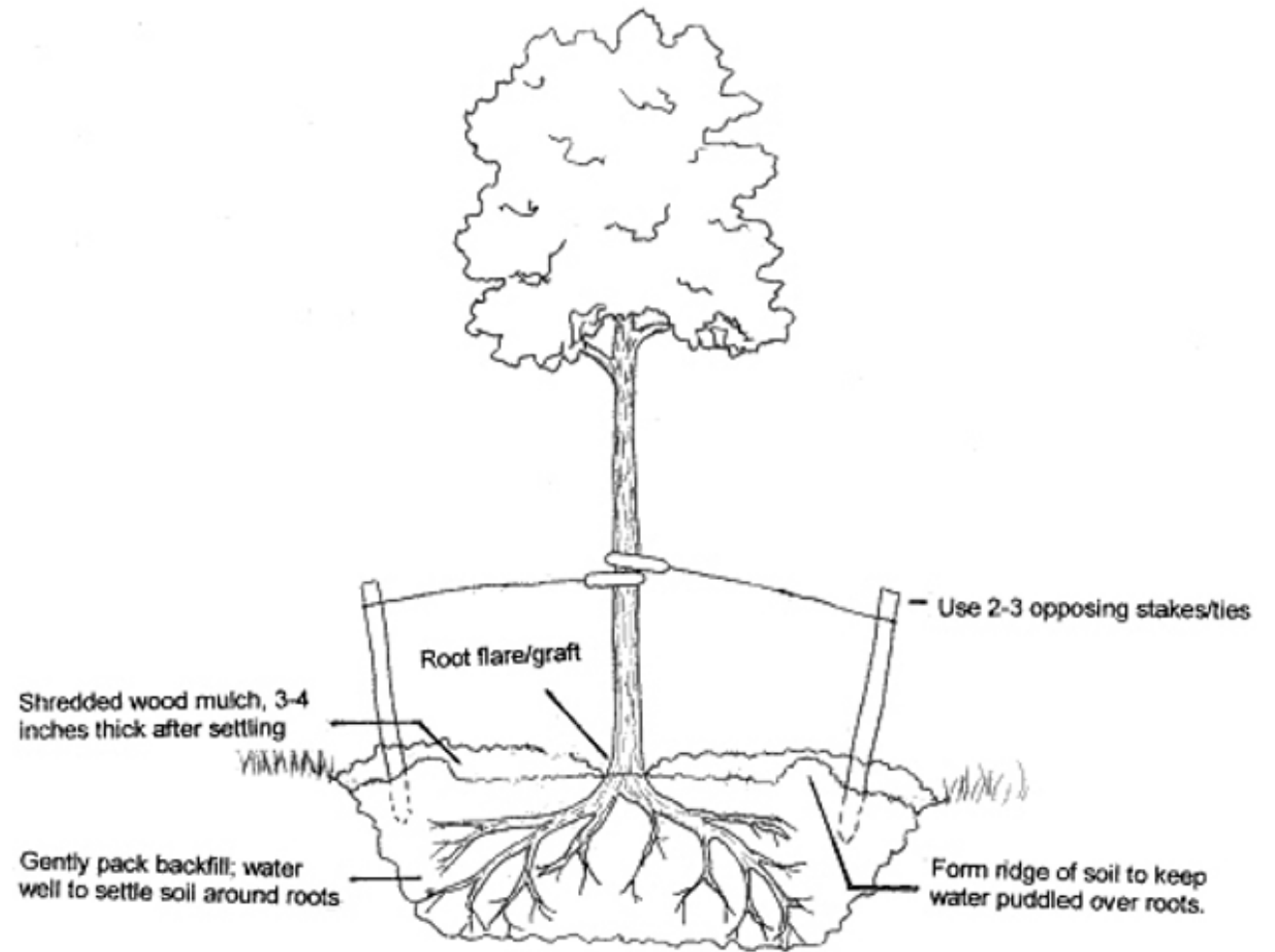


Diagram 1

Image from University of Minnesota Extension - extension.umn.edu

On to Vegetables....

WWW.WASHINGTONCOUNTYMASTERGARDENERS.ORG





Putting the Garden to Bed

The Vegetable Garden, Berry Patch, and Orchard

What we will talk about -

Vegetables to grow in fall and winter

Bringing in the harvest for storage

Prepping vegetable beds for winter

Orchard and berry patch planning

Putting away the arsenal of tools

Making a plan for next season

Vegetables that don't mind a bit of cold

Arugula – Start in August

Broccoli – Start in July

Cabbage – Start in July

Kale – Sow in August

Parsnips – Sow in late June/early July

Radishes – Sow August – early Sept



Vegetables that can tolerate some frost

Carrots – Sow in mid-July

Collards – Sow in August

Parsnips – Sow late
June/early July

Spinach – Sow August

Turnips – Sow July



Bringing in The Harvest

Tomatoes

Winter squash

Potatoes

Nuts and Seeds



Prepping Garden Beds for Next Season

Wait! Record this year's planting plan!

Take pics

Note what worked well and what did not



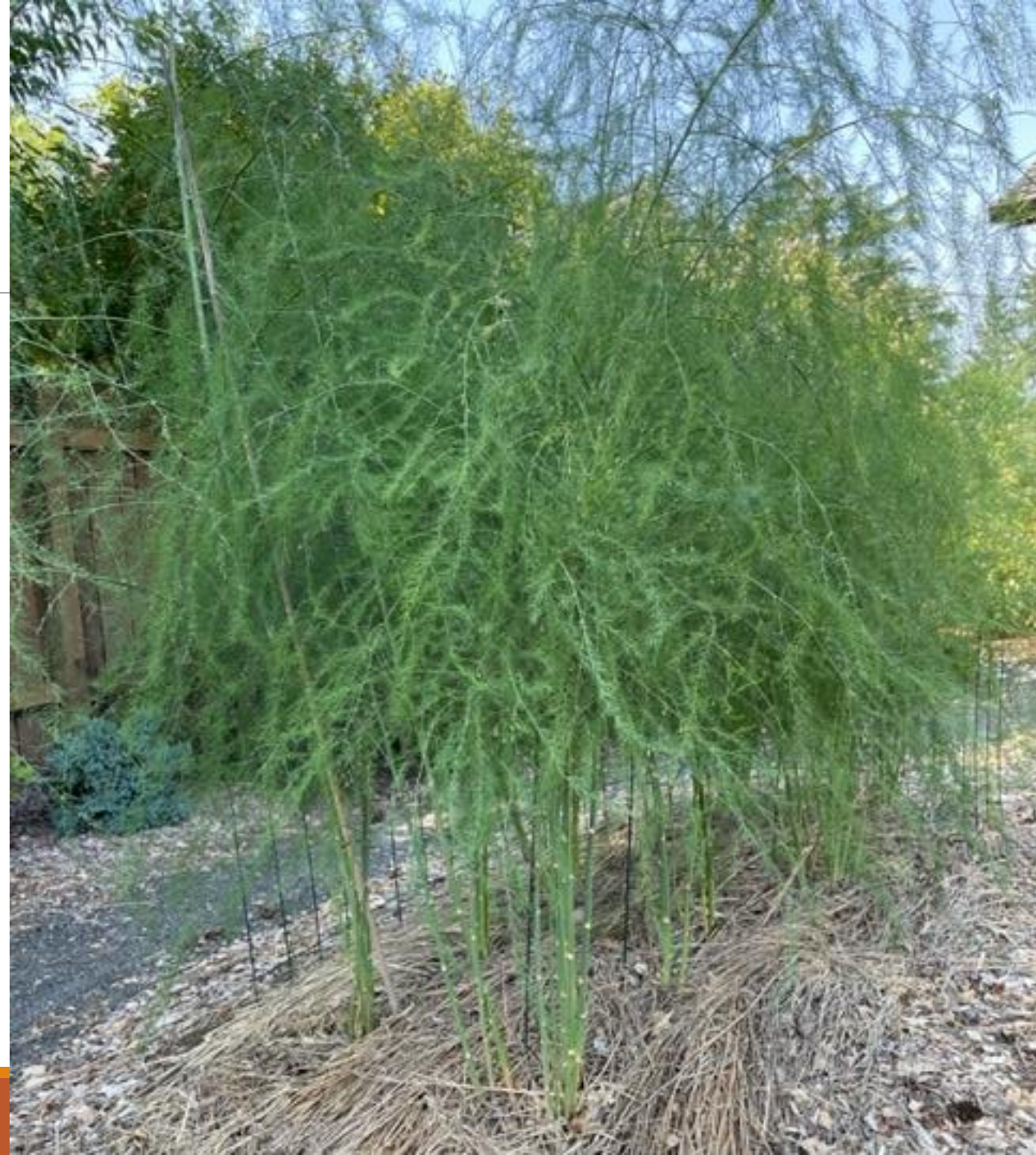
Prepping Beds for Winter

Remove annual vegetable plants when done

Remove all evidence of possibly diseased foliage

Mulch perennial and winter hardy vegetables (asparagus, artichokes, rhubarb, carrots, spinach, etc)

Consider cover crops



Cover Crop Benefits

Soil Nutrition

Pathogen Suppression

Beneficial Microbe Habitat

Improve Soil Tilth

Improve Water Holding & Infiltration

Weed Suppression

Erosion Control

Reduce Leaching of Nutrients



ThePhoto by PhotoAuthor is licensed under CCYSA

Damage Control in the Fall

Season extenders

Overwintering plan –Carrots, spinach, collards

Persephone days – Early Nov. to mid-February in Metro area

Emerging plant diseases

Erosion and poor drainage



Orchard and Berry Patch

Orchard hygiene

Plan spraying schedule for fruit trees

Remove floricanes from cane berries, tie up primocanes

Plan pruning schedule for blueberries and grapes



Tools, Equipment, and the Back 40

Tend the compost pile

Clean greenhouses and cold frames

Clean and store plant supports

Clean and store seed starting trays

Clean tools and equipment





The Season in Retrospect

What to keep growing?

What did you grow too much of?

What didn't perform well and why?

Space allotments

More flowers?

Irrigation issues?

Shade issues?

Pest or disease issues?

Example Crop Rotation

Consider the plants you like to grow to eat

Size/garden real estate

Prioritize rotating tomato, pepper, potato, eggplant family

Also rotate heavy feeders: broccoli, cabbage, cauliflower, corn

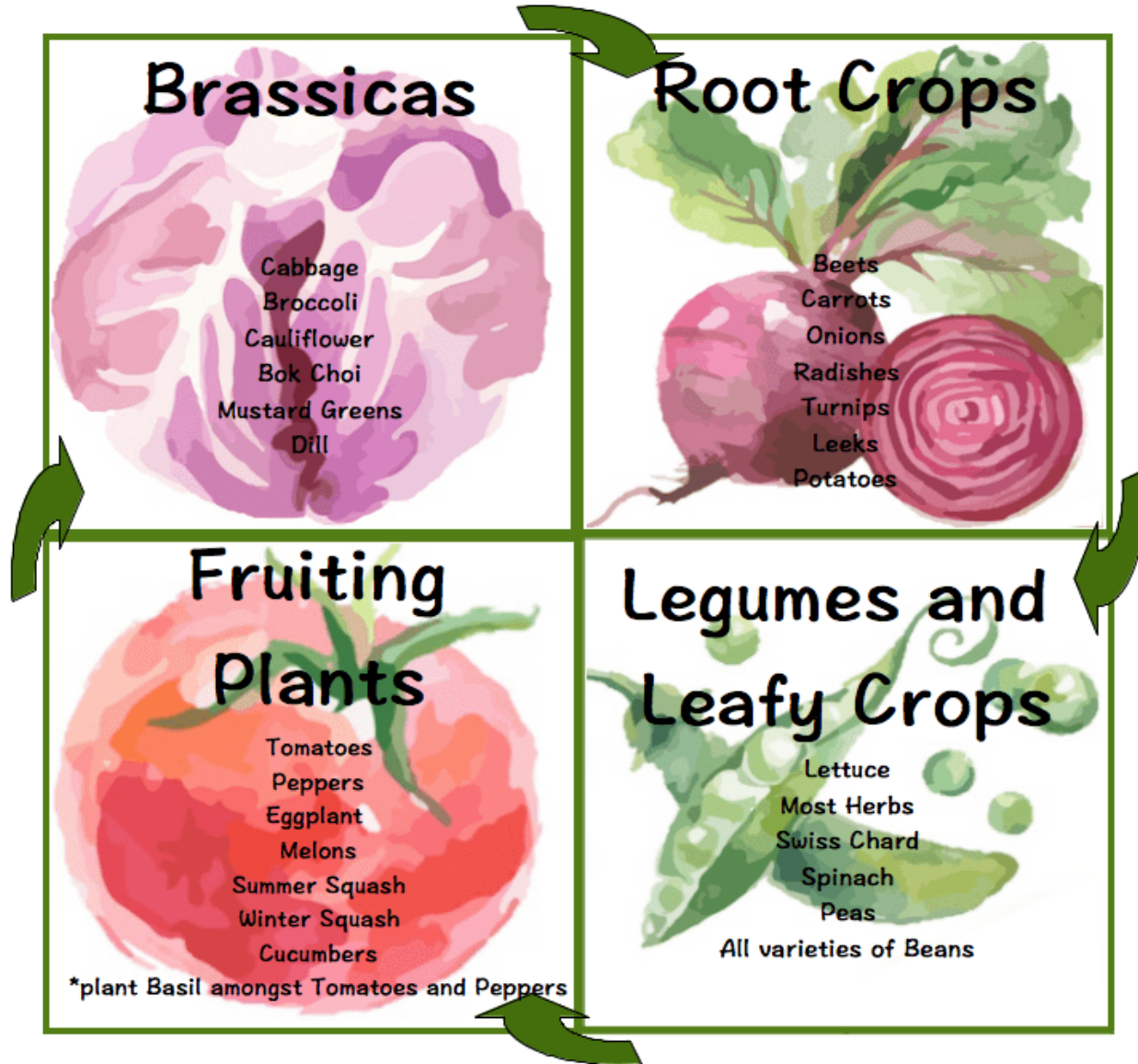
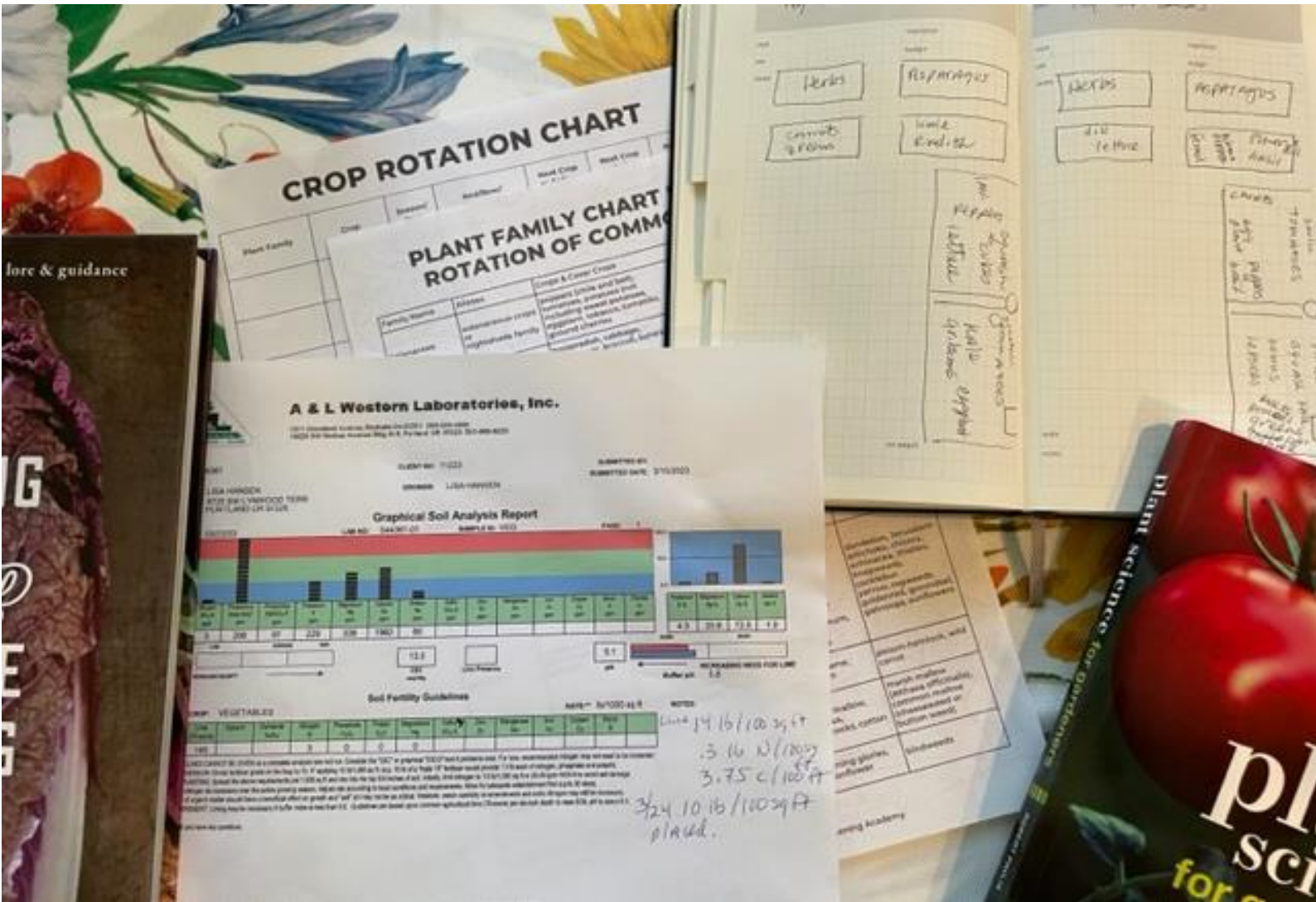


Image credit: providenthomecompanion.com



Soil test

Crop rotation

Expansion plans?

Favorite seeds

Seed starting plan

Start Next Year's Plan

Let's head out to the garden....

- See practical applications for techniques to manage the soil and support the garden ecosystem.
- Demo of proper planting technique—Fall is a great time to plant many types of plants.
- Walk and talk *Q and A* for vegetable plantings while visiting the PCC RC Learning Garden

Please take your things with you as we will be closing the classroom.

