



Designing a Northwest Garden



City of Kirkland - Natural Yard Care

Choosing the Right Plants

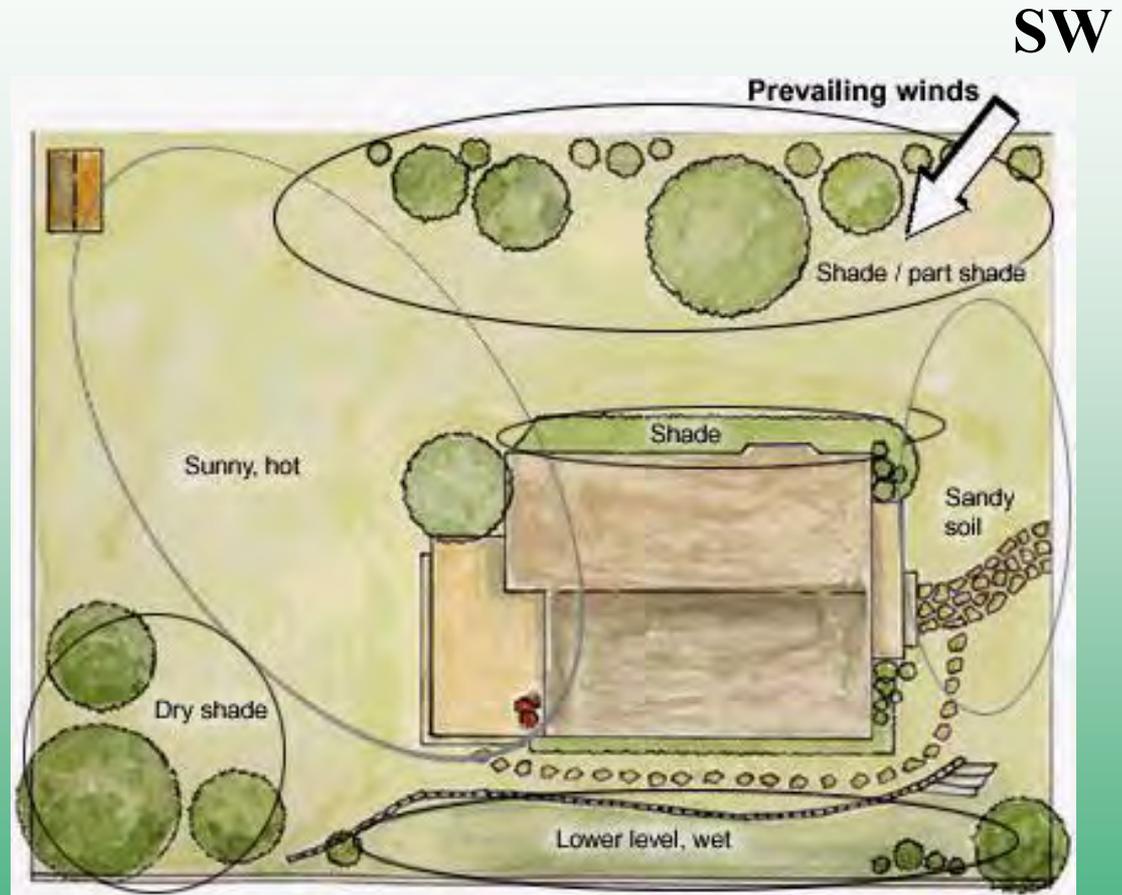
Setting up your garden to succeed

- ❖ Map Your Garden
- ❖ Imagine Your Garden
- ❖ Make a Plan
- ❖ Start Your Plants Off Right



Map Your Garden

- Soil conditions
- Sun exposure
- Aspect
- Wind Exposure
- Microclimates
- Maintenance Access



NORTH

Soil Conditions of the Northwest

- Glacial Till
- Hardpan
- Outwash Soils
- Lake/Marine Bed Soils
- Volcanic Ash
- Mudflows



These all lead to clay soil, sandy soil or loam



Where is Your Sun?



- What causes the shade?
- Is there variable exposure?
- Does the exposure change with the seasons?

Look Around!

- What buildings are nearby?
- Trees next door?
- Where are your views?
- Where are the slopes in your yard?
- Which direction do they face or drain to?



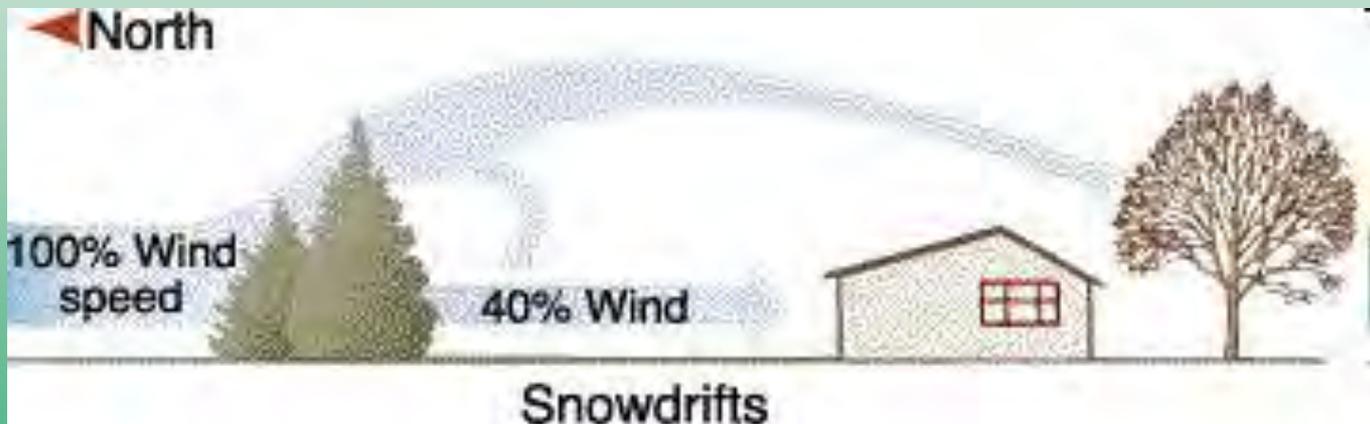
Which Way the Weather?

- Prevailing winds from southwest or north
- What is exposed and what is protected?
- Reflection from sun off light colored surfaces



Which Way the Weather?

- Large deciduous trees can shelter houses from summer heat and allow light in through the dark of winter
- Plant groupings can provide efficient windbreaks
- Evergreen plants warm up their environs, creating frost free pockets - microclimates



Courtesy University of Missouri Extension

Take Advantage of Microclimates

- Sheltered areas – tender plants
- Water features – warm the air
- Brick or rock – radiant heat



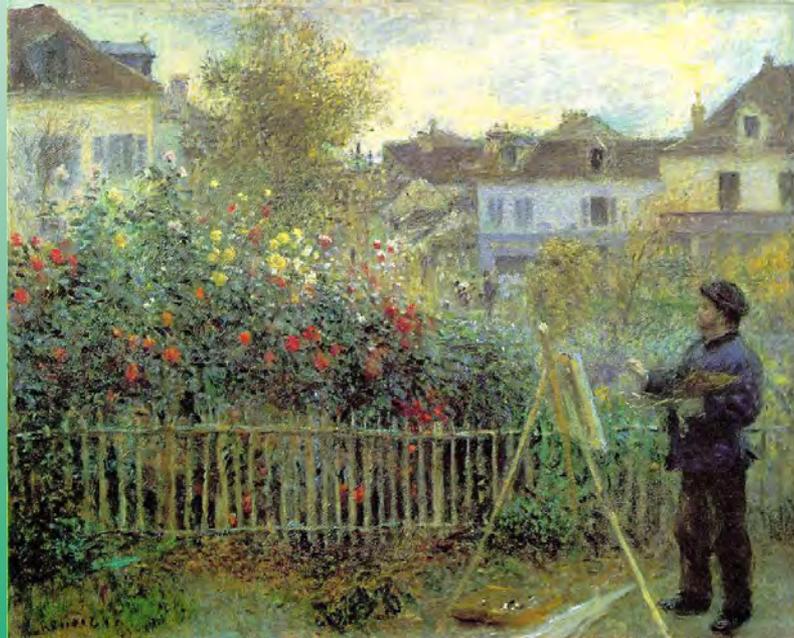
Provide Access



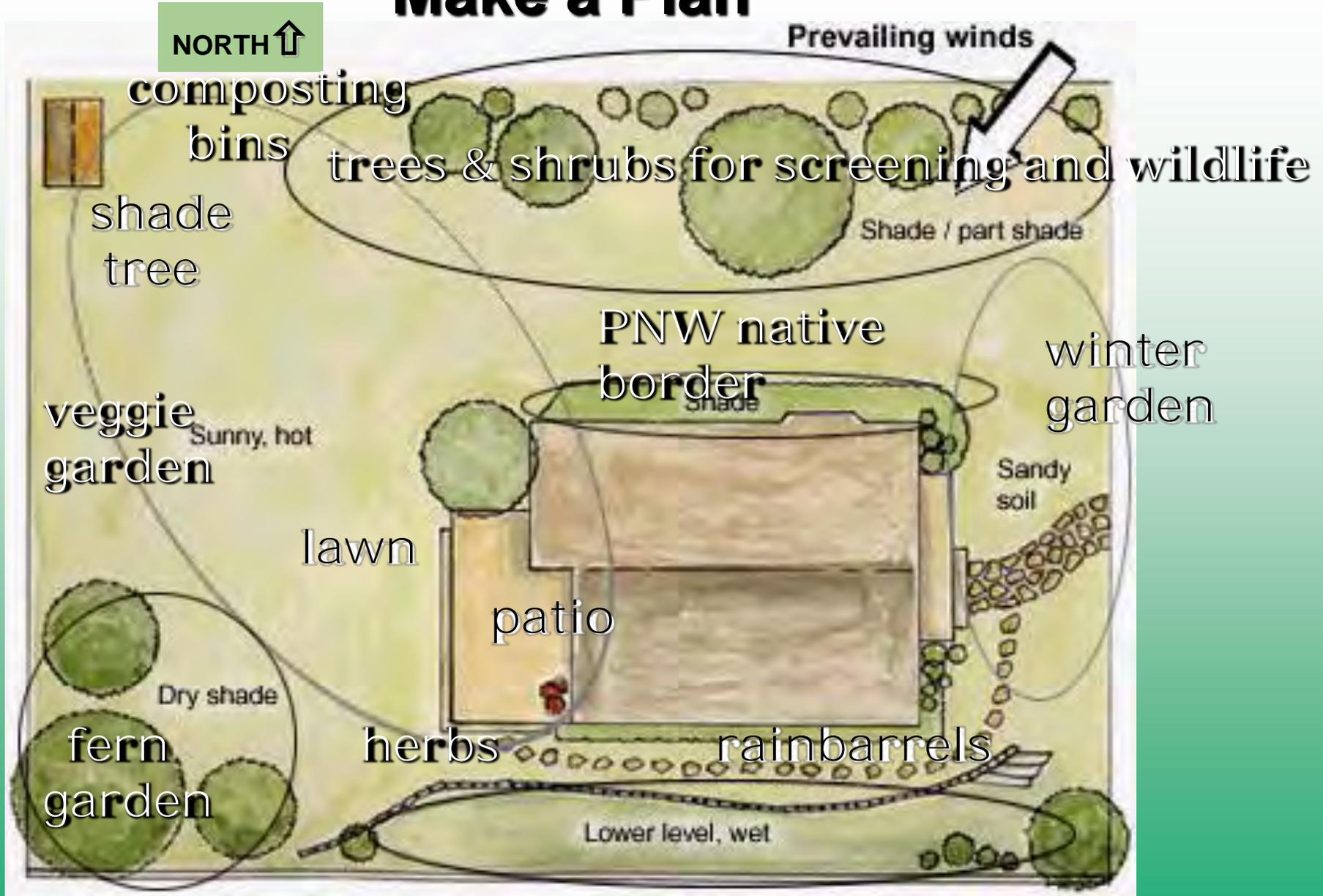
- For maintaining the garden
- For utilities – meter boxes, moving curbside cans
- For maintaining your house

Imagine Your Garden

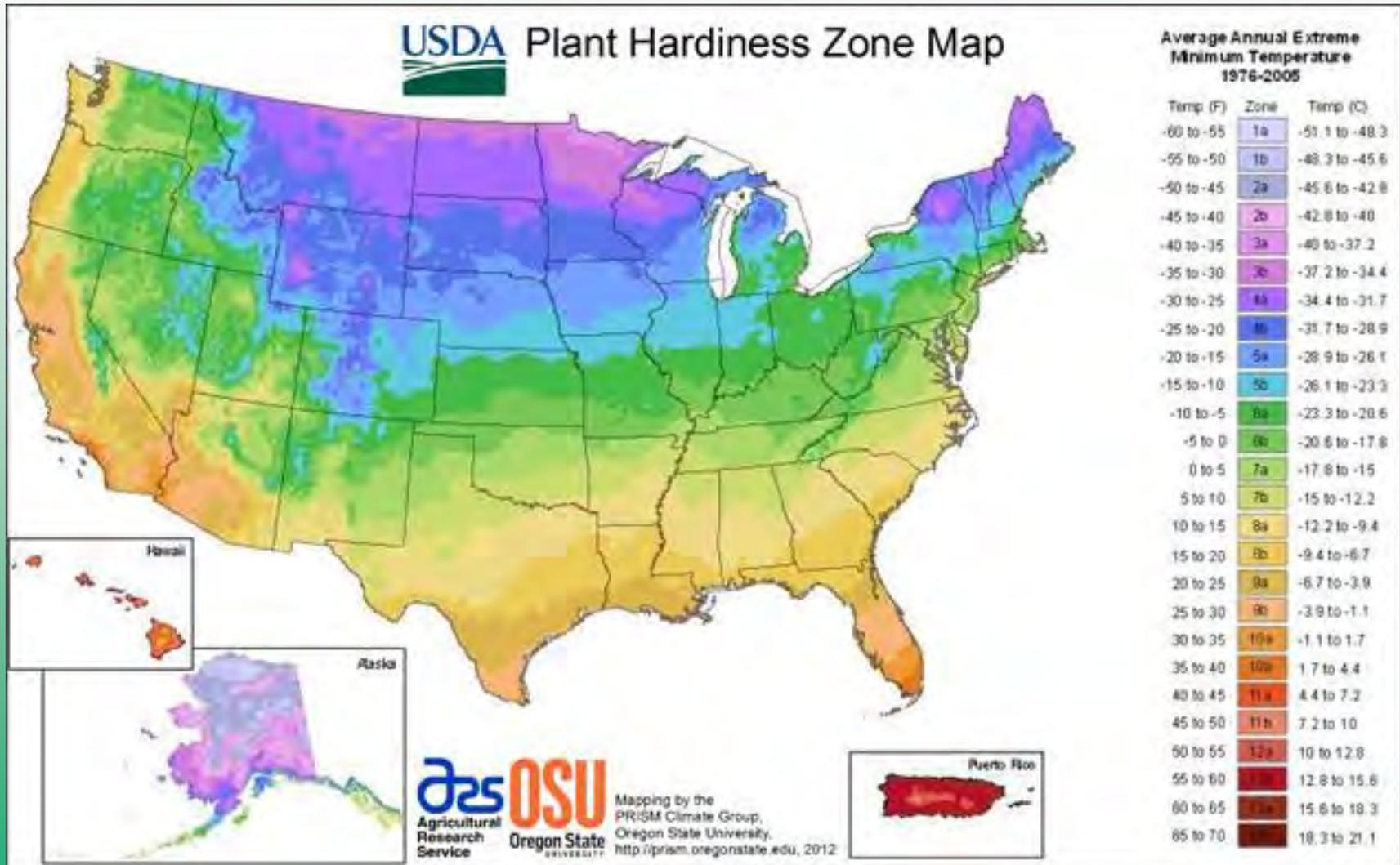
- How will you use your garden?
- How much time and money will you spend?
- What works in your neighborhood?
- Take advantage of local expertise



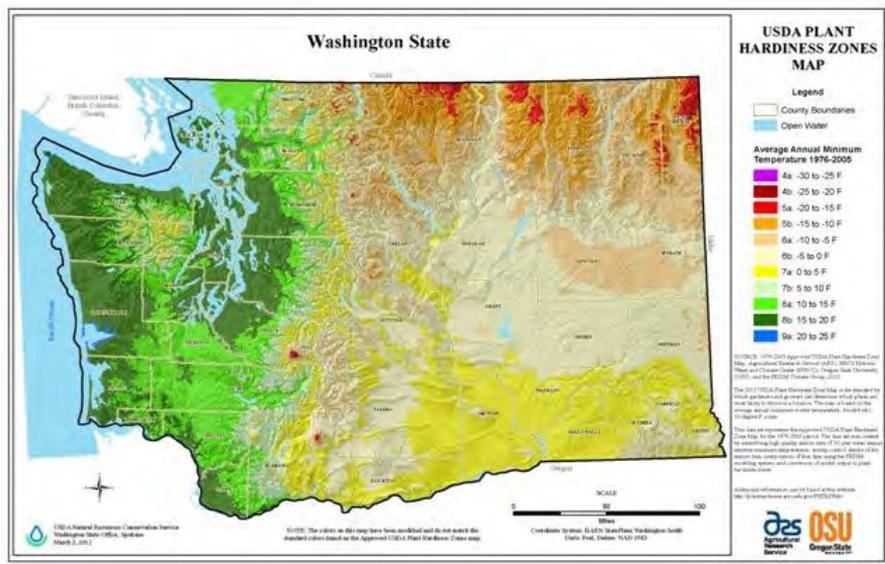
Make a Plan



USDA and SUNSET ZONES



Washington State Zone Maps



Group Plants with Like Needs

- Drought tolerant plants – Euphorbia, grasses, Sedum, Ceanothus, lavender, sea holly, Russian sage
- Bog plants – Bog rosemary, blueberry, red stemmed dogwood, Carex, Juncus



More efficient to water

Soil conditions are similar

Choose Low Water Need Plants

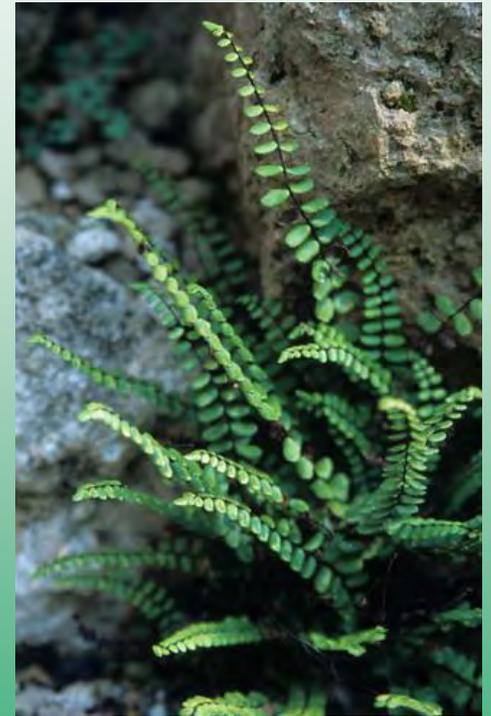
Know a plant's origin!

- Washington natives- wet winter, dry summer
- California and Mexico – dry and sunny
- Mediterranean – windy and sunny slopes
- New Zealand – small leaved plants to reduce transpiration



Washington Natives –thrive without irrigation and are pest and disease resistant

- **Groundcovers** – Wild Ginger, Sword Fern, Deer Fern, Salal, Vancouveria, Trillium, Oxalis, Low Oregon grape
- **Shrubs** - Red Stemmed Dogwood, Snowberry, Ninebark Tall Oregon Grape, Oceanspray, Evergreen Huckleberry, Mock Orange, Red Flowering Currant, Thimbleberry, Salmonberry, Rhododendron
- **Small Trees** – Serviceberry, Vine Maple, Elderberry
- **Large Trees** – Douglas Fir, Bigleaf Maple, Western Hemlock, Western Red Cedar



California and Mexico

- Salvia
- Yucca
- Ceanothus
- Manzanita
- Carex
- Fleabane



Mediterranean

- Lavender
- Rock Rose
- Santolina
- Calendula



New Zealand

- Libertia
- Euphorbia
- Hebe
- Phormium – New Zealand Flax



Plan a Diverse Garden

- Provide year round interest – fall color, winter structure, spring bloom, summer fruit
- Attract beneficial wildlife – birds, bees, bats and more!
- Include edibles – plan for water management
- Provide two functions – espalier an apple fence!



Avoid Noxious Plants!

- **Get to know your local noxious weed board and their list**
- Class A regulated weeds **MUST** be managed by law
- Class B and C are regulated at local levels depending on need
- Non- regulated Noxious Weeds not mandated for control but recognized as a nuisance
- King County Weeds of Concern – not regulated and not on the lists but recognized as being problematic
- Any weed can change status

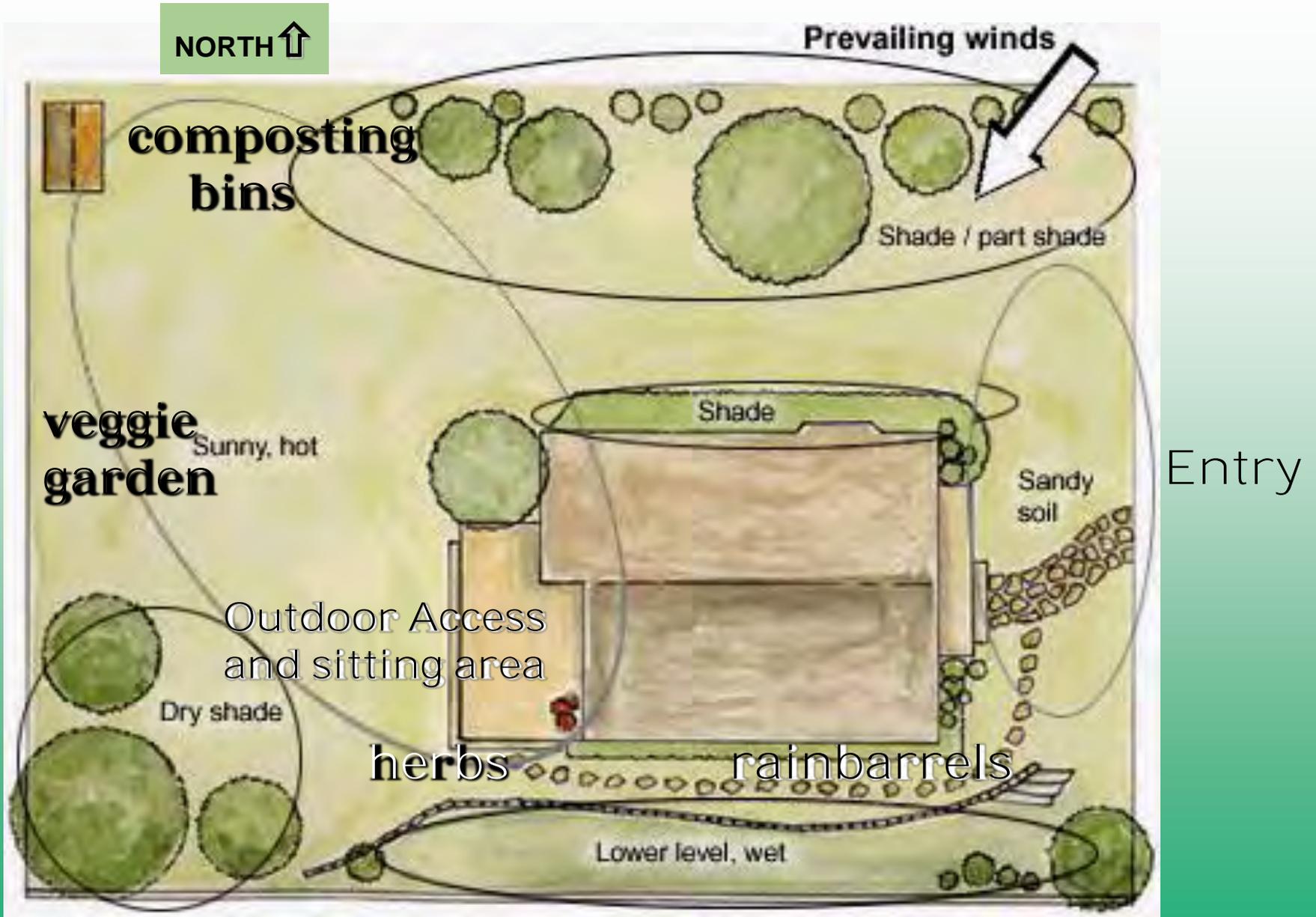


Garlic mustard, a Class A noxious weed



Bishop's Weed – Weed of Concern

Maintain Access



Start Your Plants Off Right

- Healthy Soil is key
- Learn how to plant properly
- Mulch your plants
- Establish drought tolerance



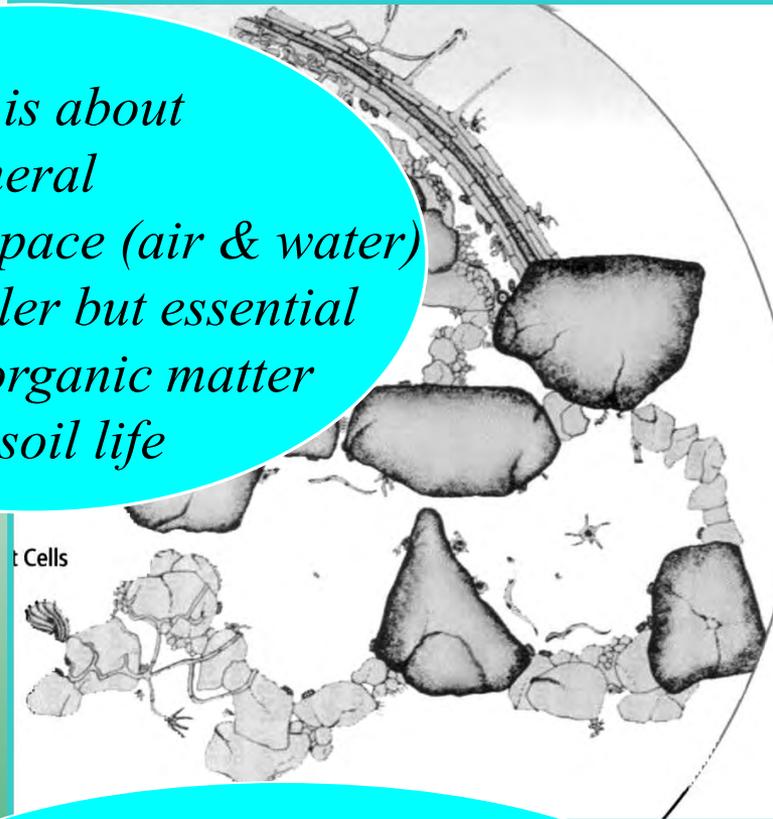
Soil Components

Soil Components

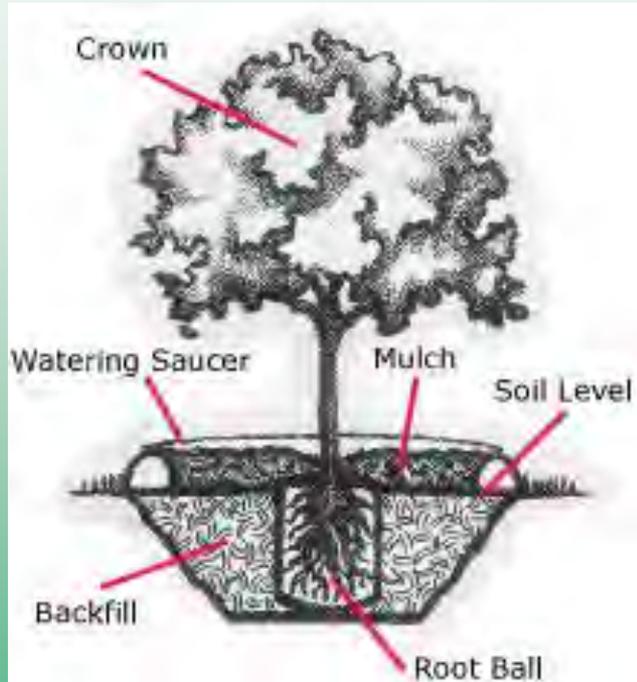
- **“The Dirt”**
(mineral particles)
 - sand (0.05 to 2 mm)
 - silt (0.002 to 0.05 mm)
 - clay (<0.002 mm)
- **Air and Water (in pore spaces)**
- **Organic Matter and Soil Life**
(create aggregates & pores)

Good soil is about
- half mineral
- half pore space (air & water)
- plus a smaller but essential
amount of organic matter
and soil life

“Loam” is a mix of
sand, silt, clay and organic,
formed over time by nature



Correct Planting Techniques



- Trees and shrubs: Minimally amend soil, watch size of planting hole, avoid girdling roots
- Perennials: Loosen root ball, watch size of planting hole, amend with compost
- Vegetables: Space correctly, amend with compost, fertilize
- Lawn: Prepare soil well, avoid compaction, fertilize, stagger ends

Choose the Right Mulch

Conserve moisture, moderate soil temperature, keep weeds down

- Wood Chips: perennials, tree and shrub beds, groundcovers, paths
- Compost: vegetable gardens, annual beds
- Leaves: All of the above!
- Straw: veggie gardens, perennials
- Commercial Mixes: manure and wood products for all areas
- Gravel: paths



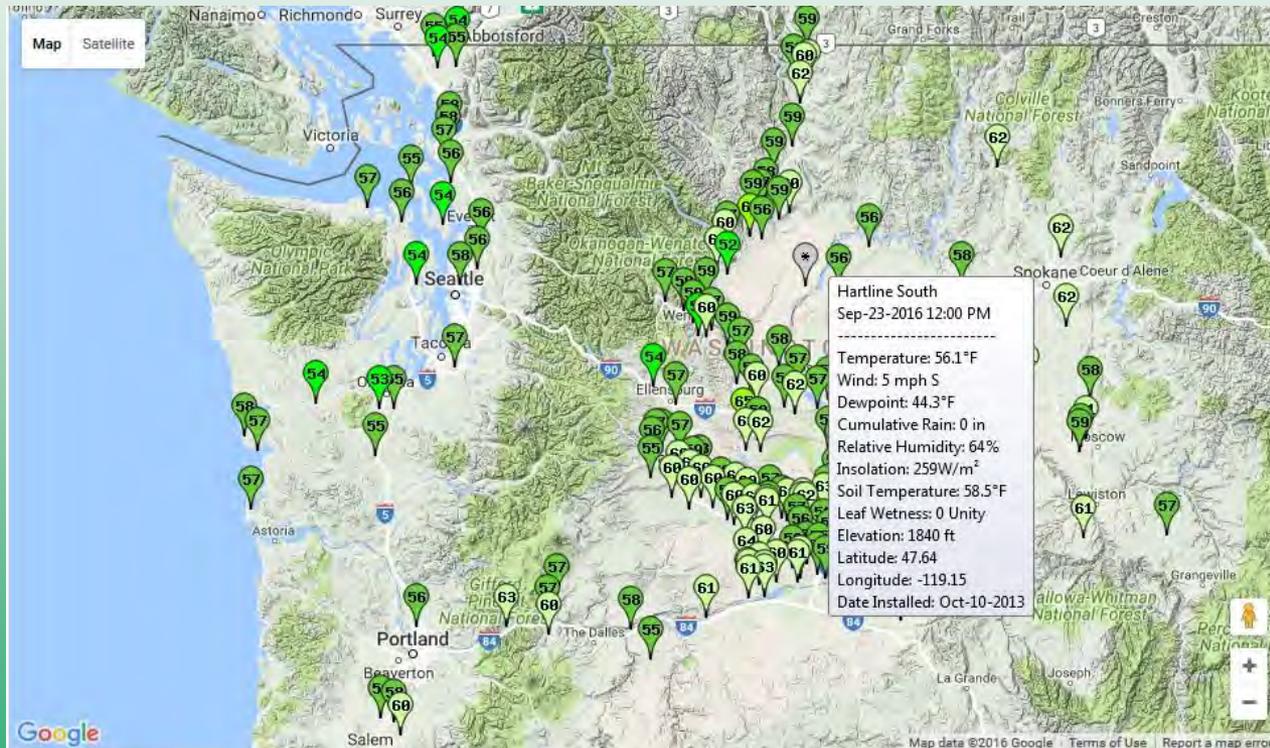
Why Plant in the Fall?

- Soil temperatures - warm enough to encourage root growth
- Plant establishment
- Winter rain will keep them watered for you!
- Spring bulbs – good time to add
- Less stress for the plants
- Comfortable working temperatures



Winter Soil Temperatures

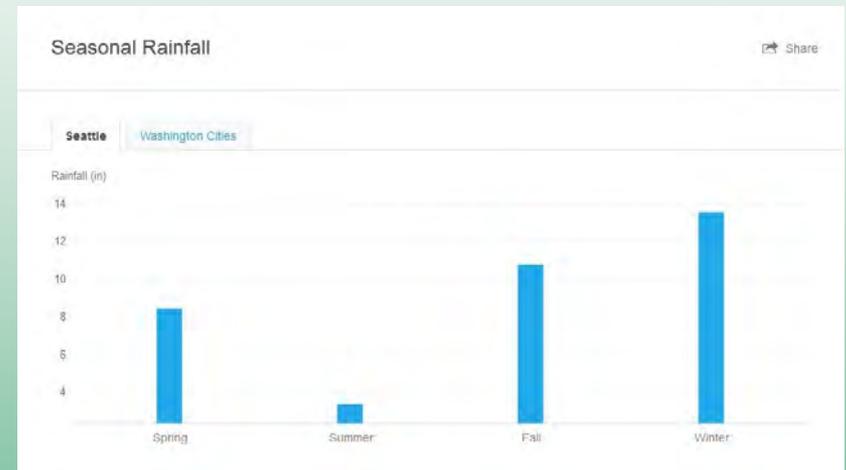
- ❖ <http://weather.wsu.edu/index.php>
- ❖ Washington State University soil temperature map



Winter Rains



Seattle Measurements



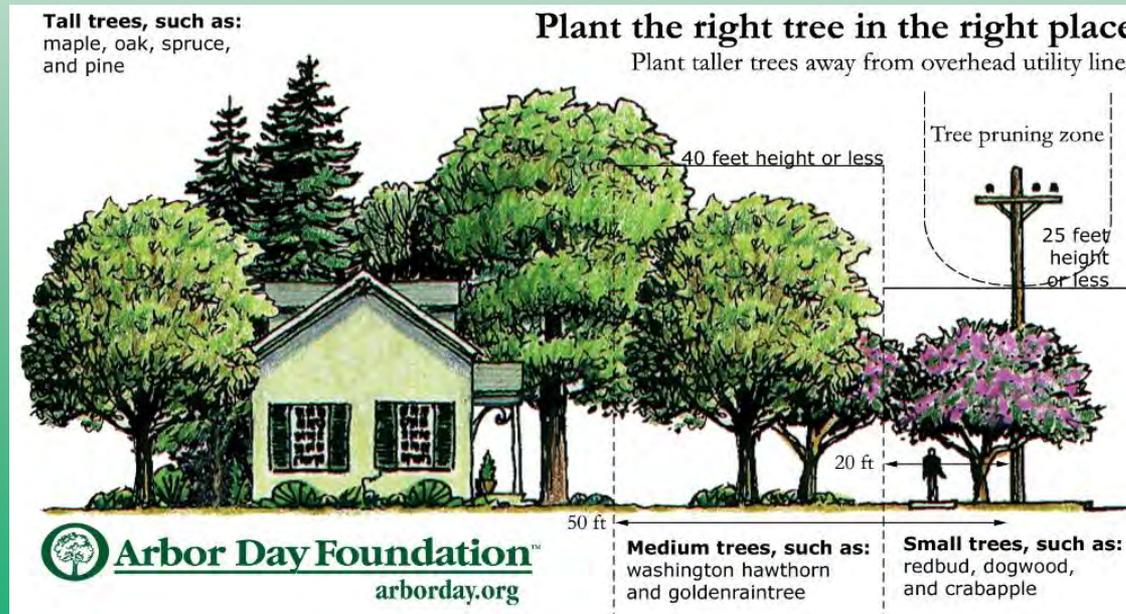
- Winter rainfall helps establish plants
- June rain helps recharge soil to get plants through July and August

Plants and Stress

- Cooler temperatures create less stress on plants when planting in the fall.
- Add mulch to the soil after planting to help moderate soil temperatures – allows plants to grow healthy roots

PLANT IN THE RIGHT PLACE

- to ensure successful establishment of your plant
- to allow for proper water management
- to allow plant to reach its potential – less pruning = less stress



Plan for Smart Watering Practices

Choose the Right Irrigation Option

- Automatic Irrigation Systems
- Drip Irrigation
- Soaker Hoses
- Hand Watering
- Rain Collection Systems



Rainwater Collection

Cisterns Versus Rainbarrels

- Cisterns are larger more permanent containers than rainbarrels
- Rainbarrels can be connected in a row to make them more useful
- All must be attached to the downspout from a roof to make them effective
- Capture and hold water for later use
- Help to slow stormwater entering storm drains
- Learn more details about roof surfaces and use of water from the Garden Hotline



Resources

- Garden Hotline – 206-633-0224 – www.gardenhotline.org
- Seattle Tilth - www.seattletilth.org
- Cascade Water Alliance - www.cascadewater.org
- Puget Sound Starts Here www.pugetsoundstartshere.org

Please join us next for:

Wildlife Gardening for Pest Control

Saturday - October 8, 2016 10 a.m. to noon

