NATURESCAPING 101

a native plant landscaping workshop

POLK SOIL & WATER CONSERVATION OREGON

Luckiamute WATERSHED COUNCIL

EARTH & SPIRIT
Native Habitat Garden Design

Introductions

Luckiamute
WATERSHED COUNCIL

POLK
SOIL & WATER
CONSERVATION
OREGON

Jessica Wright - Earth & Spirit

EARTH
&
SPIRIT
Native Habitat
Garden Design

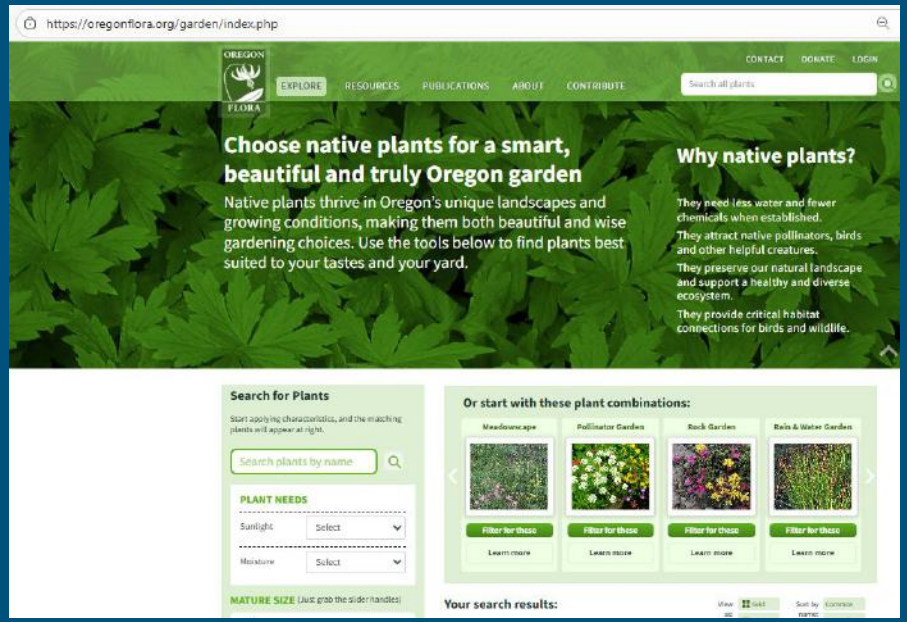
Izzy Mason- Purposeful Landscapes LLC

Goals of the Workshop

- Understand what naturescaping is and the benefits of planting native landscapes
- Recognize your garden site characteristics
- Learn steps to prepare a garden site and establish a garden
- Become familiar with native plants for your different site conditions
- See an example of a garden design process
- Feel inspired to take on your own naturescaping project


What is Naturescaping?
Native Plants
Minimal Watering
Low Maintenance
Fertilizer Free
Wildlife Habitat
Pesticide Free
Pollinator Habitat

What is an Oregon Native Plant?



Check Oregon Flora to find local natives for your garden

The 9 Ecoregions of Oregon

https://oregonconservationstrategy.org/ecoregions/

...and why should we plant native gardens?

- *Support the food web and a healthy ecosystem & planet*
- *Reduce chemical runoff from fertilizers and pesticides.*
- *Reduce CO2 emissions from mowers*
- *Reduce water bill*

Native Keystone Plants -

National Wildlife Federation's Top 30 Keystone Plant Genera

Top 30 Keystone Plant Genera for Butterfly and Moth Caterpillar

Genus	Common Plant Name	# of Caterpillar Species that use this as a Host Plant
Quercus	oak	495
Prunus	almond, apricot, cherry, peach, plum	409
Salix	willow	397
Betula	birch	385
Populus	aspen cottonwood poplar	337
Malus	apple	285
Acer	maple	276
Vaccinium	blueberry, cranberry deerberry	276
Alnus	alder	245
Pinus	pine	235
Carya	hickory	206
Ulmus	elm	187
Picea	spruce	144
Crataegus	hawthorn	156
Rubus	blackberry raspberry	153
Tilia	basswood	146
Fraxinus	ash	133
Juglans	walnut	125
Corylus	hazel	121
Solidago	goldenrod	120
Fagus	beech	127
Castanea	chestnut	121
Abies	fir	116
Rosa	rose	111
Cornus	dogwood	116
Larix	larch	113
Amelanchier	serviceberry	113
Viburnum	viburnum	102
Tsuga	hemlock	110
Symphyotrichum	aster	108

Top 30 Native Host Plants for Pollen Specialist Bees

Genus	Common Plant Name	# of Pollen Specialist Bee Species Relying on this Plant
Helianthus	sunflower	22
Solidago	goldenrod	22
Rudbeckia	Black-eyed Susan	17
Grindelia	gumweed	16
Symphyotrichum	aster	16
Salix	willow	12
Coreopsis	tickseed	9
Bidens	beggartick	7
Cirsium	thistle	7
Verbesina	wingstem	7
Euthamia	goldentop	6
Silphium	rosinweed	6
Vaccinium	blueberry, cranberry deerberry	6
Erigeron	fleabane	5
Ratibida	prairie coneflower	5
Vernonia	ironweed	5
Cornus	dogwood	4
Heterotheca	goldenaster	4
Physalis	groundcherry	4
Astragalus	milkvetch	3
Dalea	prairie clover	3
Echinacea	coneflower	3
Lotus	bird's foot trefoil, deervetch	3
Lysimachia	loosestrife	3
Eurybia	aster	2
Gaillardia	blanketflower	2
Heliopsis	heliopsis	2
Hieracium	hawkweed	2
Kalmia	laurel	2
Lupinus	lupin	2

Keystone Plants are essential for sustaining local wildlife and ecosystem health.

14% of native plants (the keystones) support 90% of butterfly and moth lepidoptera species.

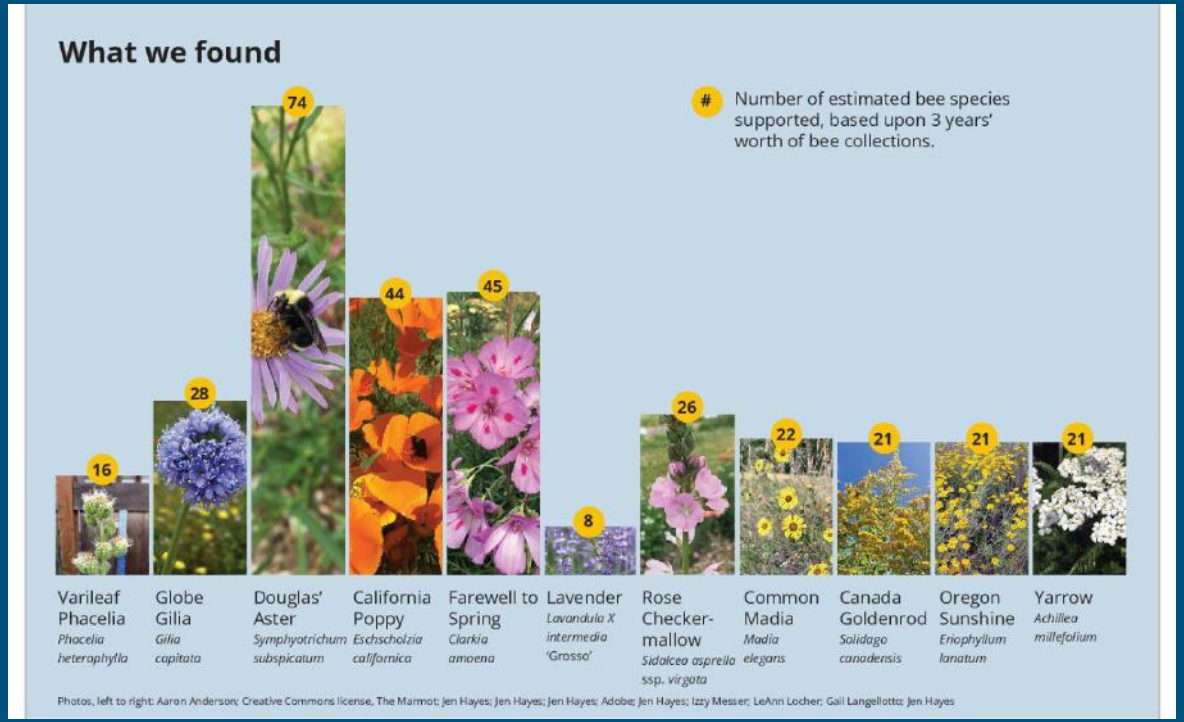
15% to 60% of North American native bee species are pollen specialists who only eat pollen from 40% of native plants.

-National Wildlife Federation

https://washingtoncountymastergardeners.org/wp-content/uploads/2024/09/2024-Getting-Wild-KeystonePlantList.pdf

OSU Garden Ecology Lab's Research Findings

Supporting Diverse Bees with Native Plants



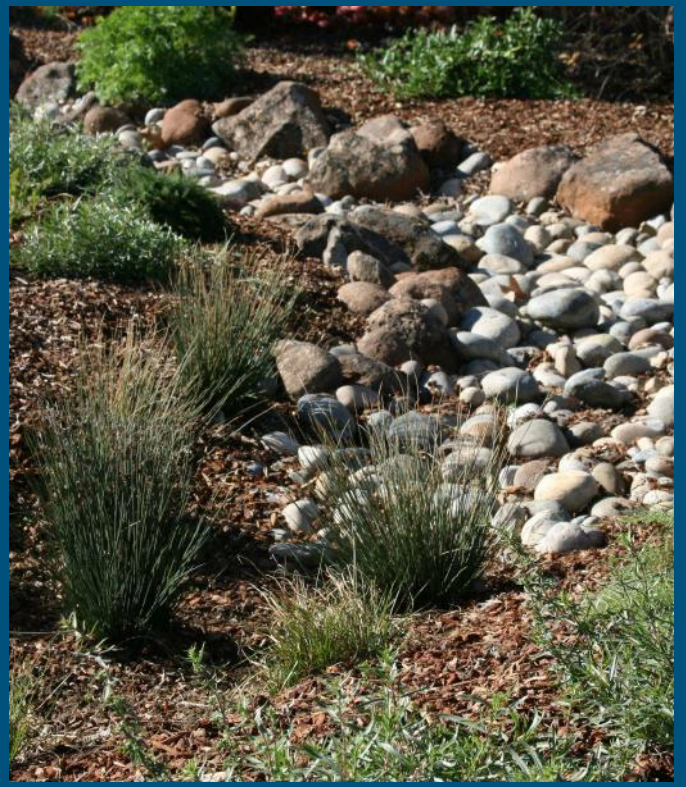
https://gardenecology.oregonstate.edu/

OSU Garden Ecology Lab's Research Findings

Some native plants that support high bee abundance and/or diversity of bee species

Other Elements That Add Value to a Habitat Garden

Leaf litter, water sources, decaying logs, rocks, homes for birds/ bats/ insects



Site Characteristics

- Soil
  - Soil texture test
  - Clay, sand, silt
- Water
  - Infiltration rate
  - >2in per hour=Slow infiltration (wet soil)
  - 1-2 in per hour=Moderate infiltration (Moist soils)
  - <2in per hour= High Infiltration (Dry soils)

Site Characteristics (cont.)

- Sun
  - Full > 6 hours
  - Part sun 4-6 hours
  - Part shade 4-6 hours- ‘morning sun’
  - Full shade < 4 hours
- Existing Vegetation
- Hardscape
- Irrigation
- Elevation/Slope
- Predation

Steps to Prepare a Site and Establish a Garden

- Remove grass/weeds in the designated area
- Test the soil
- Amendments
- Plant
  - Local native nurseries
  - Polk SWCD plant sale

Steps to Prepare a Site and Establish a Garden (cont.)

- Natural weed barrier
- Mulch planting area
  - Ex: woodchip, leaf litter, or grass cuttings
- Water
  - Establishment first 3 years after planting
  - Less frequent-longer watering sessions






Timing

- Site Prep
  - Any Season
  - Easiest to work soil in the Fall
- Planting site
  - Fall-Winter
  - Dormant season
  - Cold stratification
- Mulch
  - Best after planting
  - Anytime of the year

Getting to Know Oregon Native Plants

Select plants that meet your site conditions and needs

- ❑ Dry sites/ Wet sites (seasonal flooding)
- ❑ Sun/ Shade
- ❑ Mature Size
- ❑ Color
- ❑ Drought tolerant/ Prefers moist conditions

Right plant, right place

Getting to Know Native Plants (cont.)

Select plants that meet your site conditions and needs

- ❑ Clay/ Loam/ Sand/ Rocky Soils
- ❑ Slower growing/ Faster growing
- ❑ Evergreen/ Deciduous
- ❑ Perennial/ Annual
- ❑ Lower Maintenance/ Higher maintenance

Right plant, right place

Native Plants for Drier Sites within Willamette Valley

Habitats:

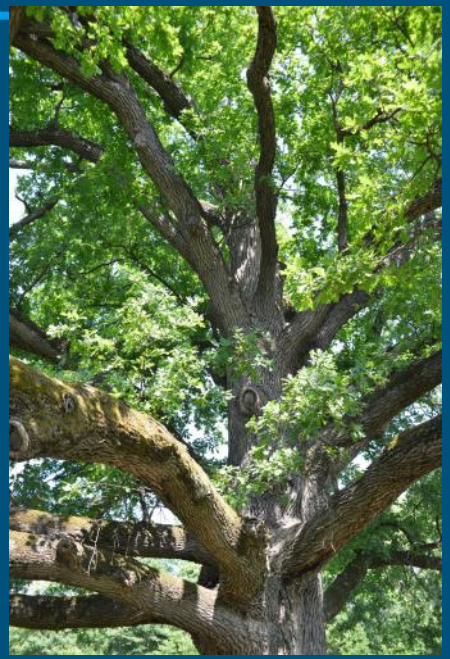
- Oak woodlands & savannas
- Upland prairies & dry meadows
- Dry brushy slopes
- Rocky outcrops

Native Plants for Drier Sites within Willamette Valley (cont.)

Wildlife supported:

- Insects/ Pollinators
- Birds/ Birds of Prey
- Reptiles
- Mammals

Large Trees



Oregon White Oak
Quercus garryana

Douglas Fir
Pseudotsuga menziesii

Incense Cedar
Calocedrus decurrens

Small Trees/ Large Shrubs

Western Chokecherry
Prunus virginiana

Blue Elderberry
Sambucus mexicana

Western Mock Orange
Philadelphus lewisii

Oceanspray
Holodiscus discolor

Thimbleberry
Rubus parviflorus

Buckbrush
Ceanothus cuneatus

Evergreen Huckleberry
Vaccinium ovatum

Tall Oregon Grape
Mahonia Aquifolium

Small & Medium Sized Perennials

Western Columbine
Aquilegia formosa

Oregon Sunshine
Eriophyllum lanatum

Showy Fleabane
Erigeron speciosus

Rose Checkermallow
Sidalcea malviflora virigata

Pearly Everlasting
Anaphalis margaritacea

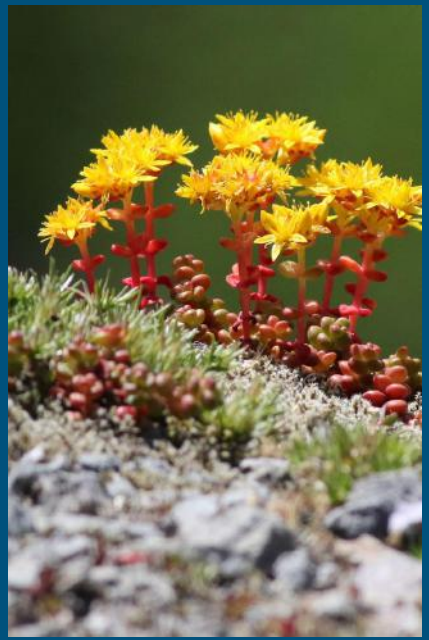
Showy Milkweed
Asclepias speciosa

Canadian Goldenrod
Solidago canadensis

Groundcovers

Kinnikinnick
Arctostaphylos uva-ursi

Woodland Strawberry
Fragaria vesca

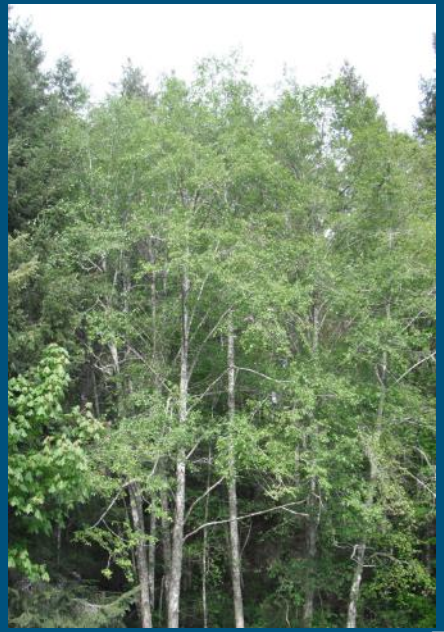


Oregon Stonecrop
Sedum oreganum

Native Plants for Wet Spaces

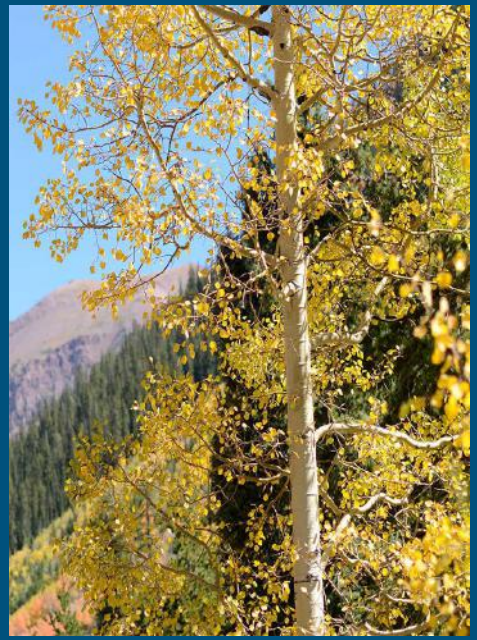
- Habitats
  - Rain gardens
  - Swales
  - Wet spots
  - Riparian areas
  - Ponds
- Wildlife Supported
  - Birds/Waterfowl
  - Insects/pollinators
  - Mammals
  - Reptiles/frogs
  - Fish

Large Trees



Red Alder
Alnus rubra

Ponderosa Pine
Pinus ponderosa var. benthamiana



Quaking Aspen
Populus tremuloides

Big Leaf Maple
Acer macrophyllum

Small Trees/Shrubs

Snowberry
Symphoricarpos albus

Redtwig Dogwood
Cornus sericea

Western Serviceberry
Amelanchier alnifolia

Scouler's willow
Salix scouleriana

Pacific Ninebark
Physocarpus capitatus

Silk-tassel, coast
Garrya elliptica

Sedges and Rushes

Common Rush
Juncus effusus

Dense sedge
Carex densa

Chamisso Sedge
Carex pachystachya

Ground covers and Flowering Plants

Yarrow
Achillea millefolium

Streambank Lupine
Lupinus rivularis

Fringecup
Tellima grandiflora

Wapato
Sagittaria latifolia

Douglas Asters
Symphyotrichum subspicatum

Coastal Strawberry
Fragaria chiloensis

Common Camas
Camassia quamash

Douglas Iris
Iris douglasiana

Naturescaping- Design Process

Case Study: Dallas Pollinator Garden at Barnard Park

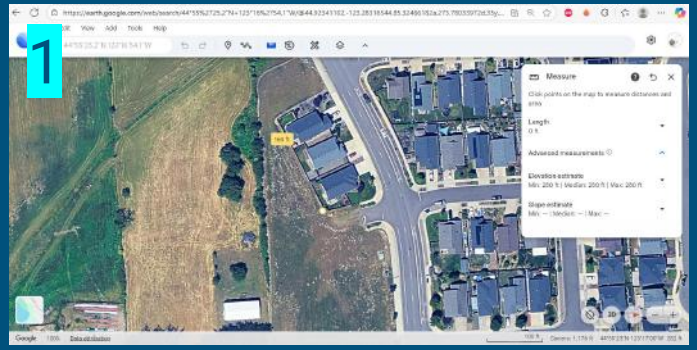
Design Goals for the Project:

- Provide **habitat for pollinators** (food, shelter, nesting/breeding sites)
- Plant a diverse set of **Willamette Valley native species**
- Include/emphasize **keystone species**
- Source plants **from Polk SWCD fall plant sale**
- Ensure **bloom times staggered** throughout year
- Create **layered plantings**

  Trees→ Shrubs→ Perennials/ Groundcovers→ Vines
- Apply **naturalistic design style**

Before Pictures of the site - Future Dallas Pollinator Garden at Barnard Park

Design Process - Dallas Pollinator Garden



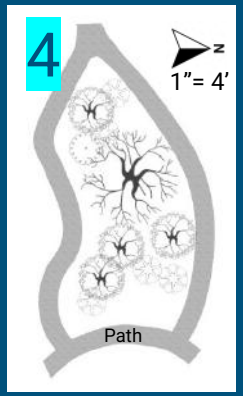
1. Visit the site and talk to project managers to <u>understand site conditions, budget & timeline.</u>

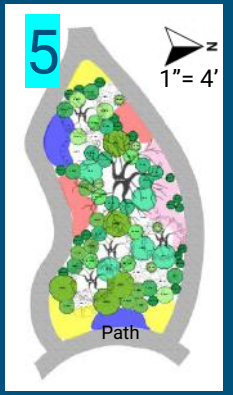
2. <u>Create a scaled basemap</u>. Map should include any existing hardscape, structures or existing trees/ plants. Also note date, scale, and direction.

3. <u>Develop a plant list</u> and note plants’ mature sizes and create a corresponding scaled symbol.

4. <u>Draw in hardscape additions and foca points</u> (including trees & largest shrubs)

5. <u>Fill in with perennials & groundcovers</u>

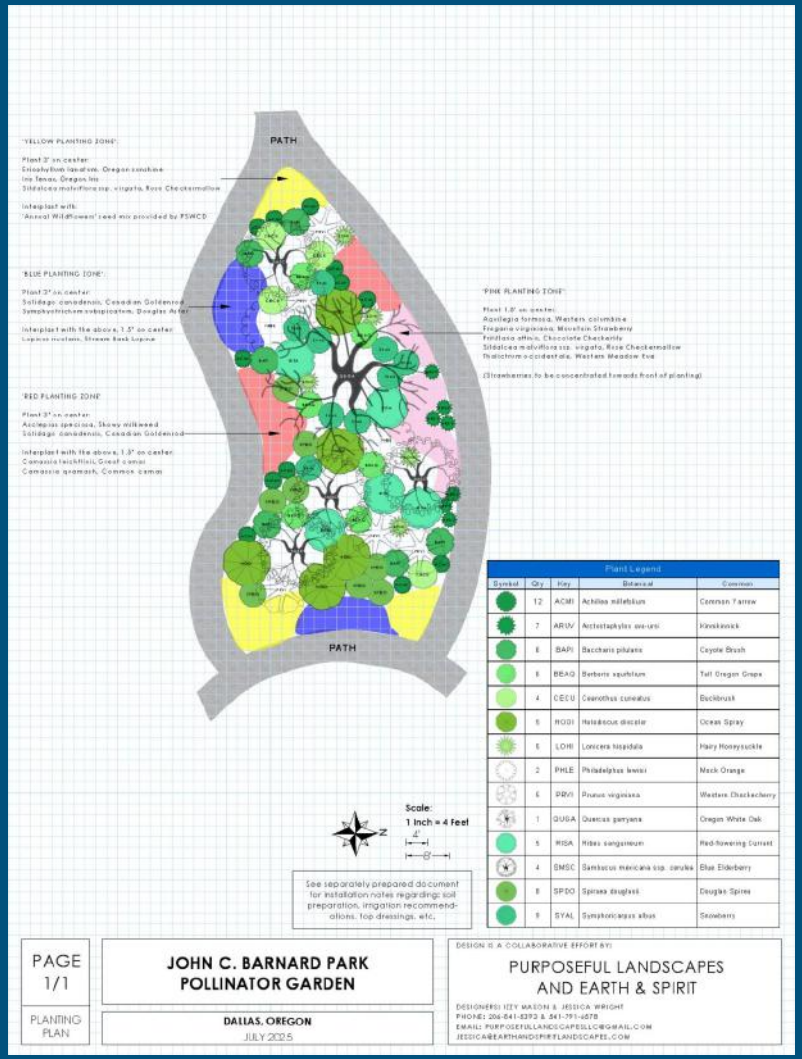




Final Design - Dallas Pollinator Garden

Design Principles Utilized:

- **Focal Points** – drawing eye to key elements
- **Balance** – visual weight evenly distributed
- **Scale/Height** – layering from small to tall
- **Repetition** – repeating plants for cohesion
- **Contrast/Texture** – mixing leaf shapes, colors, and textures



Plant Selection - Dallas Pollinator Garden

3D Renderings of the Final Design - Dallas Pollinator Garden

Volunteer to Plant- Dallas Pollinator Garden

Save the Date
Saturday October 18th

Questions?

Plugs


Pre-sales begin 8/22
Native Plant Sale
80+ species
PolkSWCD.com
POLK
SOIL & WATER
CONSERVATION
OREGON


Fall Bird Walk
at
Cornerstone
SEP 21, 9-11AM
POLK
SOIL & WATER
CONSERVATION
OREGON
GUIDE: HARRY FULLER,
SALEM AUDUBON SOCIETY

Native Plant Resources: PolkSWCD.com

Resources

LINKS:

- OSU Garden Ecology Lab- Native Plant Picks for Bees- https://extension.oregonstate.edu/sites/extd8/files/documents/12581/native-plant-picks-bees-090122.pdf
- Bloom Times and Flower Color for Native Plants of the Willamette Valley- https://www.bentonswcd.org/files/d8812e243/Bloom+Time+Table.pdf
- SymbiOp's Free Garden Designs & Plant Palettes- SymbiOp-https://symbiop.com/2022/08/20/native-yard-starter-packs-for-willamette-valley-wildlife/
- Benton SWCD Free Wildlife Garden Designs- bentonswcd.org/garden-plan-wildlife-garden
- Native Plant Finder- OregonFlora.org
- National Wildlife Federation's Tool to Find Keystone Plants for your Ecoregion- NWF.org/Native-Plant-Habitats/Plant-Native/Why-Native/Keystone-Plants-by-Ecoregion
- Oregon Native Plant Society- npsoregon.org

NURSERIES:

- Mahonia in Salem- by appointment only.
- Willamette Gardens in Corvallis- by appointment only.
- Dancing Oaks in Monmouth- by appointment only. **Not** exclusively native plants.