



Benton Soil and Water CONSERVATION DISTRICT

*The Good Guys and the
Bad Guys:*

Managing Invasive and
Native Plants in your
Garden

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What is a Soil
and Water
Conservation
District?

The American
Dust Bowl, 1930's

Example projects

- Cover Crops on farms
- Soil Health
- Erosion control
- Oregon white oak restoration
- Native plants near streams
- Pollinator habitat

And many more....

***Many projects consist of transitions from
weeds to native plants!***

What is a Weed?

A plant out of place?

A plant that is a nuisance?

**Those unwanted plants
next to your
tomatoes?**



How We Define Noxious Weeds

- From other regions of the world
- Highly competitive
- Capable of causing:
 - Health concerns
 - Economic damage to farms, forests, ranchland
 - Harm to natural ecosystems
- Displace native plants



Camas 😊



Oblong spurge ☹️



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Single weed
(oblong spurge)



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Infestation
(English ivy)



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Basic Weed Principles: Removal

- Get the entire plant
- Dispose properly



Basic Weed Principles: Reproduction

- Seeds

Basic Weed Principles: Reproduction

- Sprouting
- Rhizomes
- Layering
- Plant parts / cuttings



Basic Weed Principles: Shade tolerance

- A lot of plants will give up if you shade them out...
- Blackberry
- Scotch broom
- Reed canary grass
- HOWEVER, Many will persist forever in the shade ☹️





A photograph of a residential yard. In the center is a large, dense, green shrub. To the left, a white speed limit sign with black text reads "SPEED 25". The sign is on a metal post. To the right, a portion of a house is visible, with a brick wall and a window. The yard is surrounded by trees and a sidewalk. The text "Invasives in yards" is overlaid at the bottom.

SPEED
25

Invasives in yards



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Oblong spurge (*Euphorbia oblongata*)





Oblong spurge
(*Euphorbia*
oblongata)

Oblong spurge

HABITAT

- Sun loving
- Forest edges
- Moist well drained to dry soils
- Planted in yards around Benton County

WHY IS IT A PROBLEM?

- Moves into oak woodlands, infests the understory
- Difficult to remove once established
- Not palatable to wildlife





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Spurge laurel (*Daphne laureola*)



Spurge laurel

REMOVAL

- Hand pull
- Cut and treat stump with herbicide
- Don't treat leaves with herbicide



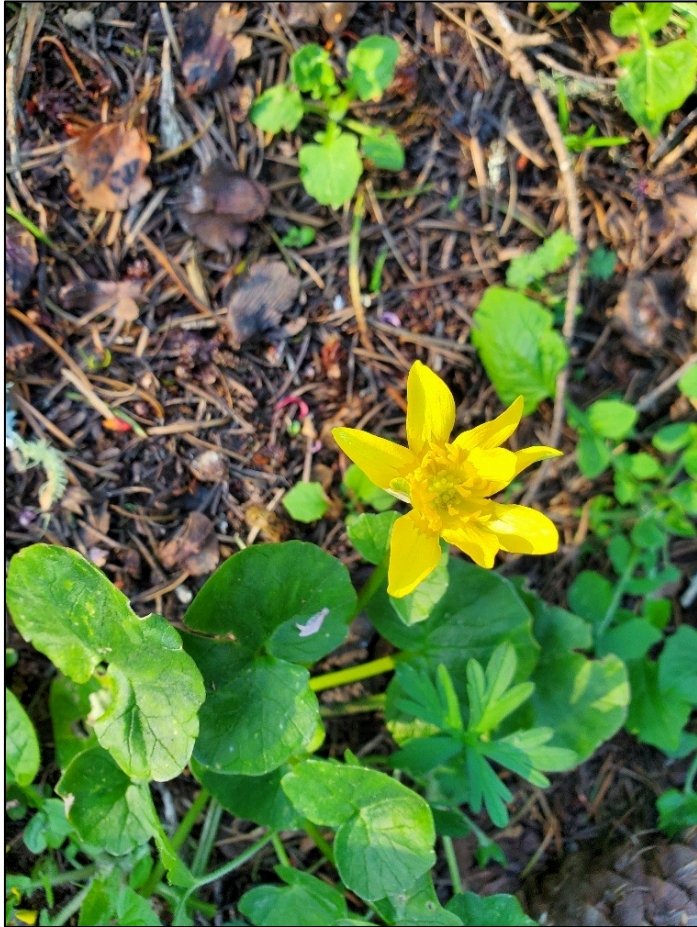
Italian arum (*Arum italicum*)



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Lesser celandine (*Ranunculus ficaria*)



Italian arum and lesser celandine

REMOVAL

- Dig it up
- Throw away entire shovel full of dirt
- Garbage, not compost



English or Irish ivy (*Hedera helix* or *hibernica*)



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Ivy – growing on trees

REMOVAL

- Prioritize tree ivy over ground ivy
- Cut a ring around tree
- Pull ivy downward from eye level, then a few feet from tree base
- Don't tug on the ivy trying to pull it from tree canopy



Ivy – growing on trees

REMOVAL

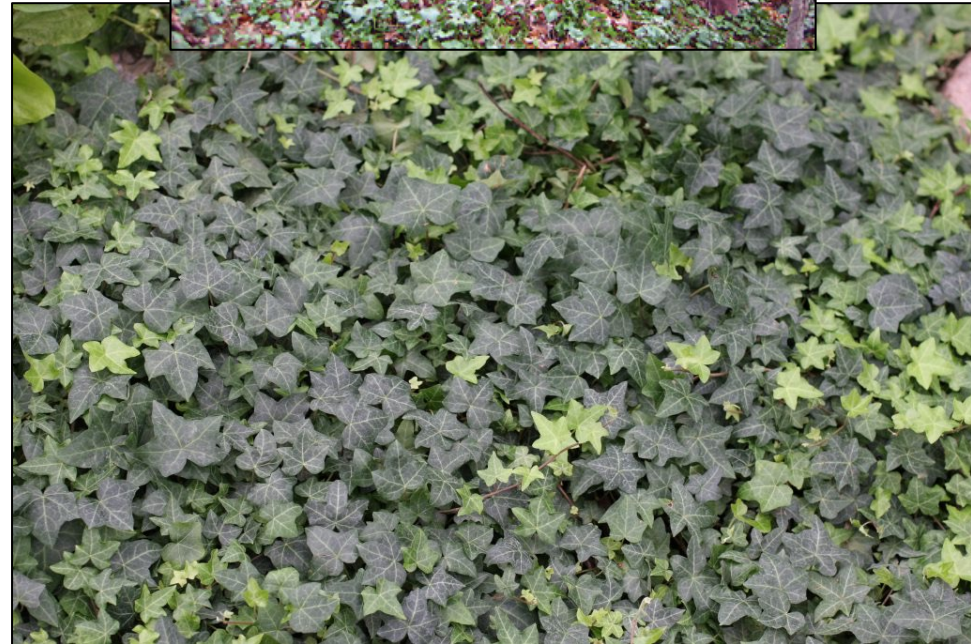
- Stump treat with herbicide
- Might cut with machete



Ivy – growing on the ground

REMOVAL

- Pull it
- Concentrate efforts starting in one area and strategically move along
- Herbicide can work, but a very specific mix is needed. **DO NOT** just spray with hardware store weed killer



Herb robert (*Geranium robertianum*) shiny geranium (*Geranium lucidum*)



Reporting weeds



<https://oregoninvasiveshotline.org/>

Send 3 photos to michael@bentonswcd.org

- Photo 1: whole population
- Photo 2: zoom in to the flower
- Photo 3: anything else characteristic, i.e. hairy leaf or stem, seed heads

Give details on location and date you saw it



Native plants:

Your best allies for soil and water health, wildlife,
and landscape resilience!



What exactly is a native species?

An organism that was present in the region before the arrival of European settlers.

Includes species that are now rare, threatened, or extinct.

DOES NOT include plants that are native to other eco-regions in the U.S. or elsewhere.

“Naturalized” species are those that were introduced by humans, but have become a *harmless* part of the landscape (versus invasive)



How “native” should it be?

Hyper-local vs regional...

***Erigeron decumbens* Nutt.**
Willamette fleabane



Distribution

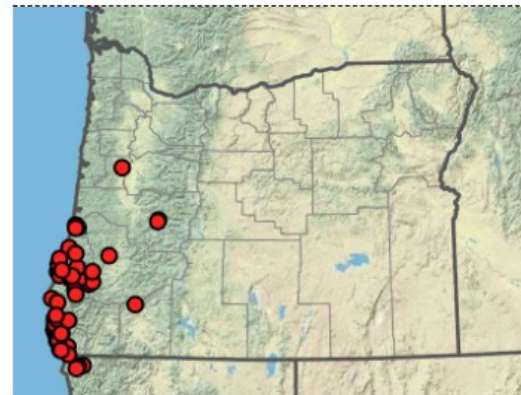


Click/tap to launch

***Ceanothus thyrsiflorus* Eschsch.**
blue blossom



Distribution



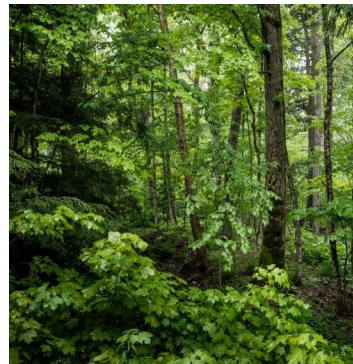
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Oregon's native plants

- Oregon has over 3600 species of native plants
- These inhabit a number of diverse plant communities including:
 - Evergreen forests, Mixed Deciduous Forest, Steep Dry Slopes, Dry Prairie/Oak Savannah, Wet Prairie, and more.
 - Something to consider when choosing plants...



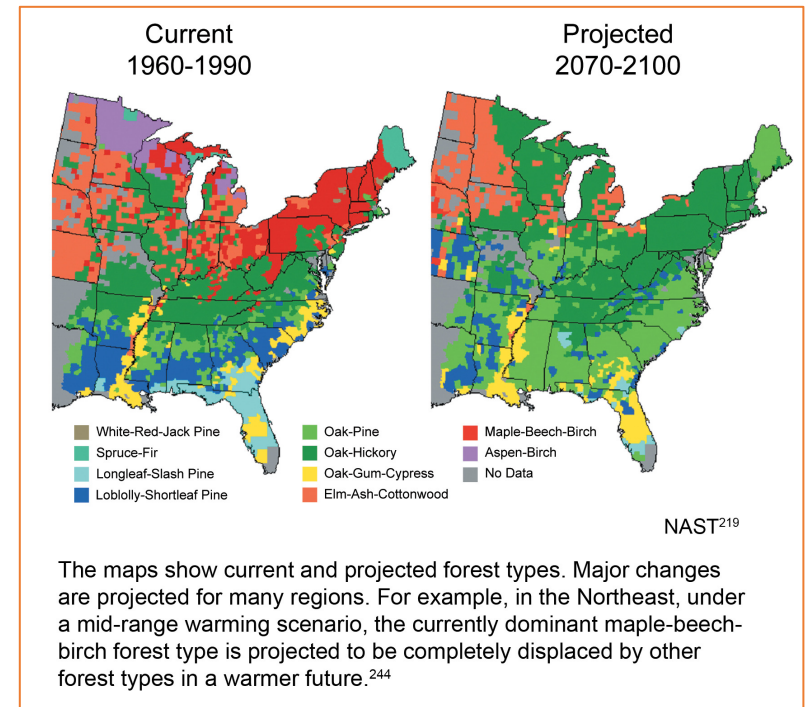
What does your garden WANT to be?



Why choose native plants?

They need our help

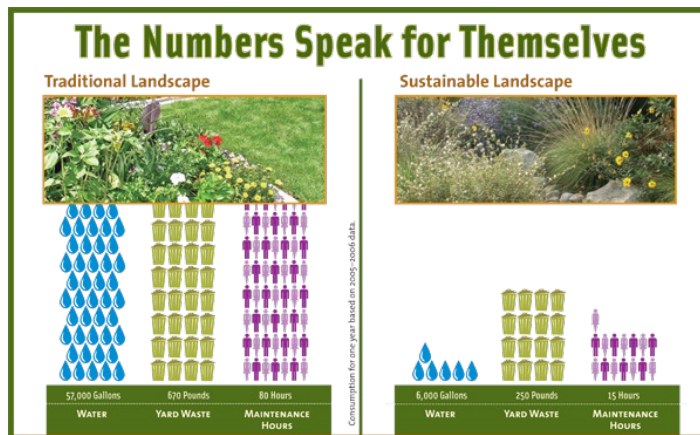
- Over 450 of our native plant species are listed as threatened or endangered
- Oak woodlands and savannas have been reduced by 80%, wetlands by 87%, bottomland hardwood forests by 70%, and native prairie by over 98%
- Climate change threatens to shift or destroy entire plant communities



Why choose native plants?

They help us

- Drought resistant
- Improve soil health
- Can help prevent flooding
- More resistant to pests and diseases
- Save you time and money
- no irrigation, fertilizing, or pesticides needed!



WHY CHOOSE NATIVE PLANTS?



support wildlife
native plants provide shelter and food for everything from bugs to bears, and are essential for the survival of many threatened species

help soil
native plants have deep root systems that prevent erosion, capture nutrients, and support important soil microbes





adapted to survive
native plants are adapted to local soils and climate, which can challenge non-native plants

low maintenance
native plants need less water, don't need to be fertilized, and are resistant to pests and disease



Choose wisely.
Choose natives!



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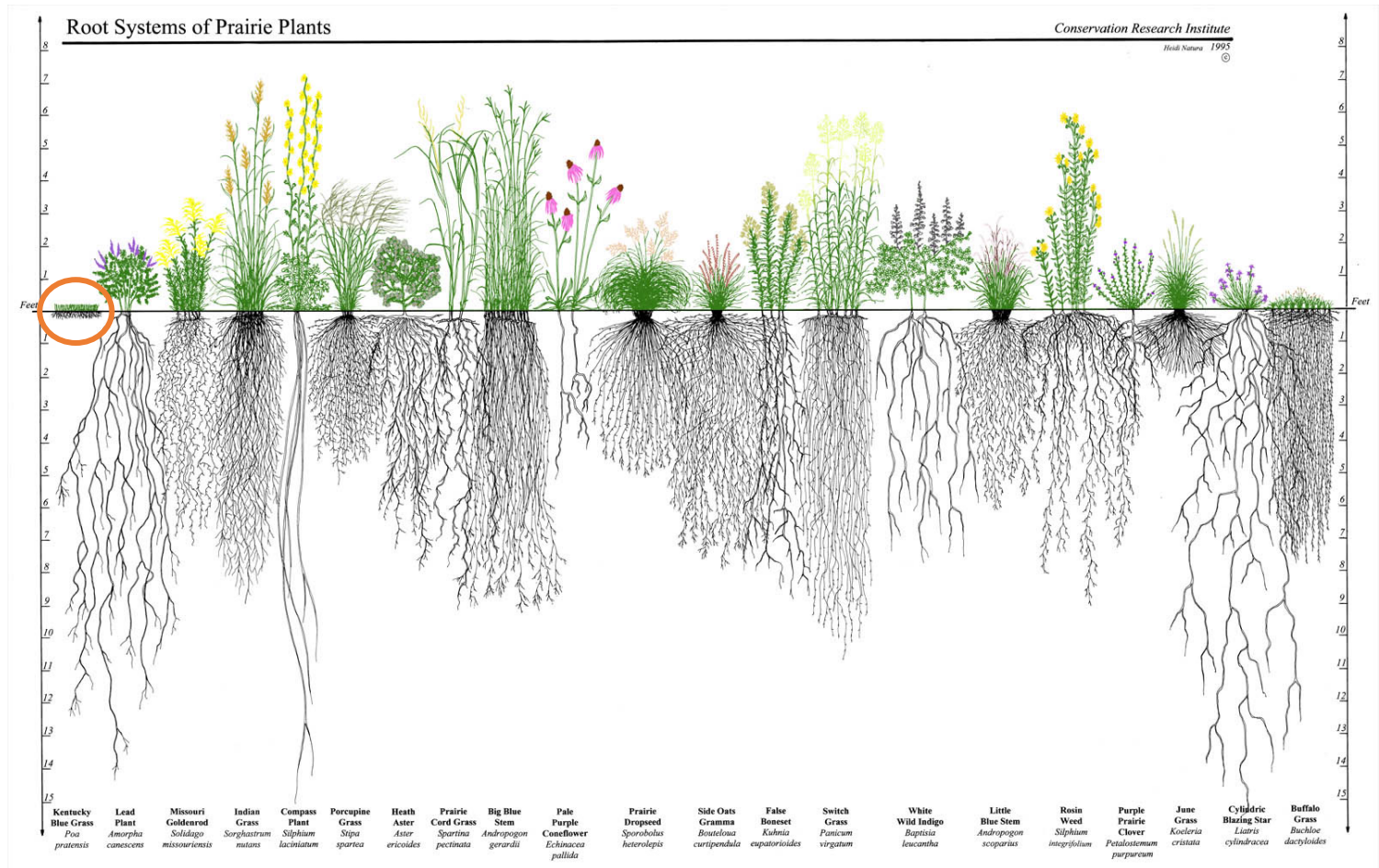
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Deep and complex roots

Turf
Grass

Vs

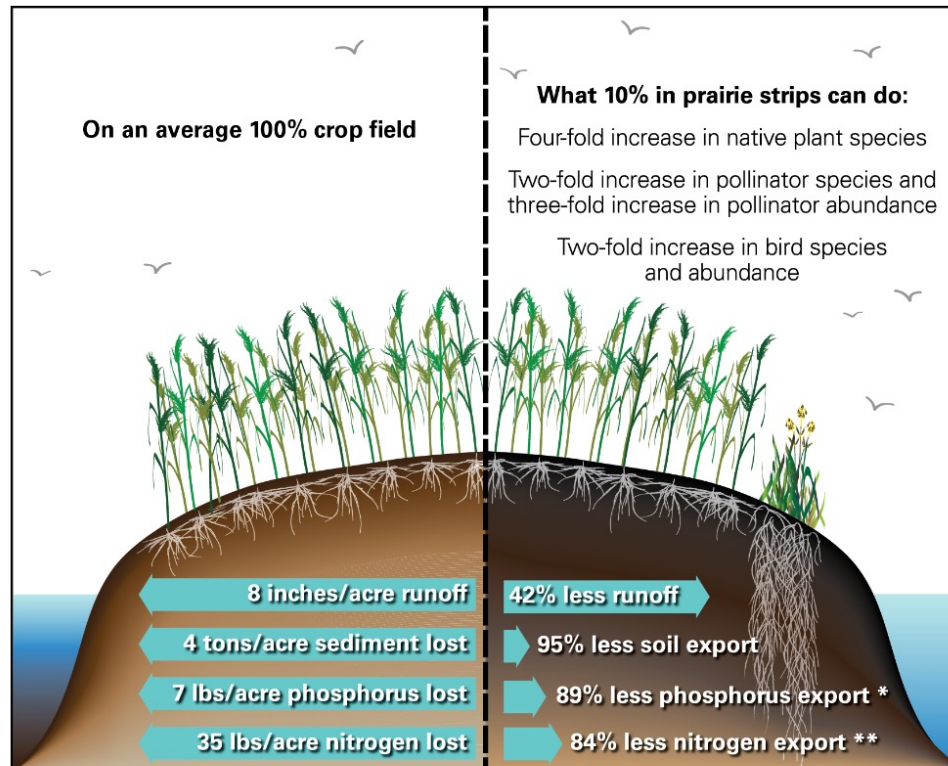
Native
plants



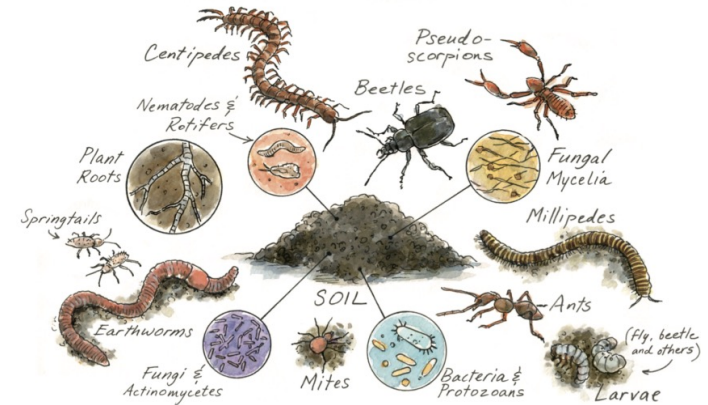
Soil and stream health



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Source: STRIPS Research Team and Leopold Center for Sustainable Agriculture

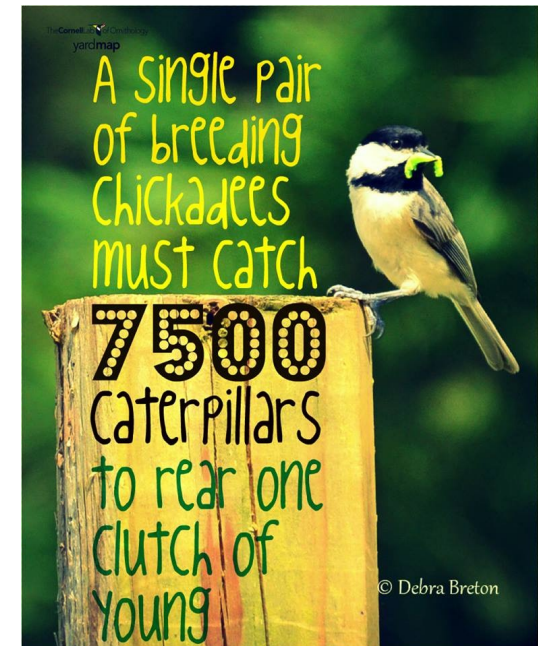


biodiversity

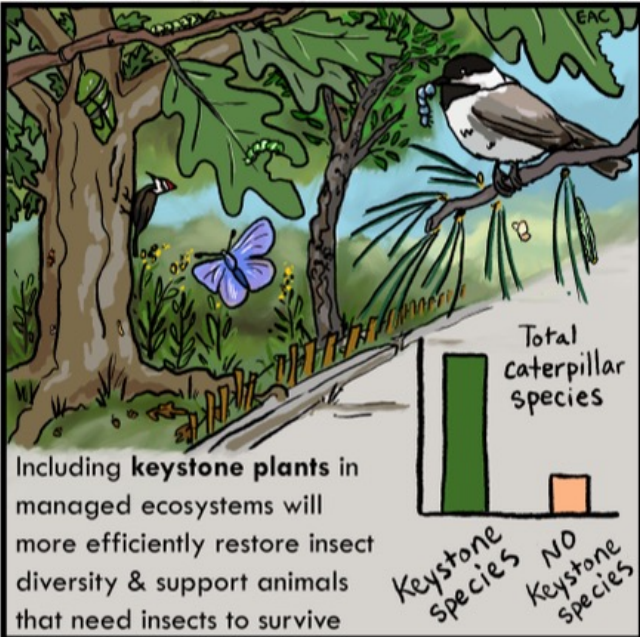
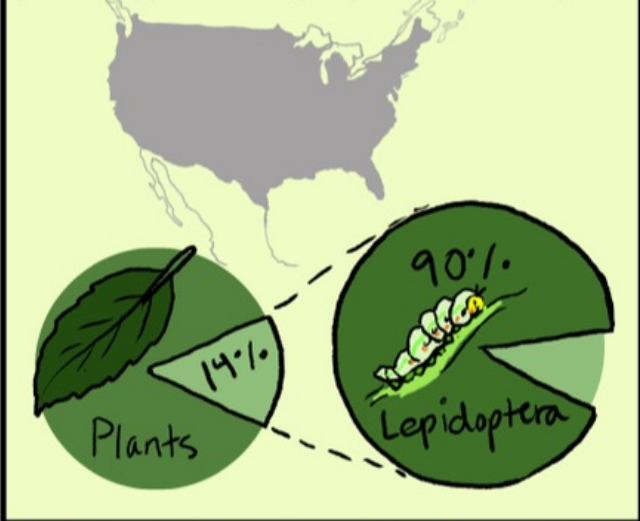
- Native plants provide food and shelter for 10-15 times more species of birds, butterflies and other local wildlife than non-native plants
- 90% of insects can only develop and reproduce on the plants with which they share an evolutionary history (i.e. native species)
- Native plants supply food for the insects that most baby birds require



Fender's blue butterfly (endangered) + Kincaid's Lupine (threatened)



By reviewing past data on insects and their host plants, we found that across the contiguous US, **few plants support the majority of caterpillar species**



NATIVE
CHERRY



NATIVE
OAK



NATIVE
WILLOW

IF YOU PLANT THESE TREES

NATIVE TO YOUR SPECIFIC AREA

THEY CAN HOST BETWEEN

300-500 SPECIES

OF BUTTERFLIES AND BEAUTIFUL MOTHS



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Audubon

Native Plants

Yards With Non-Native Plants Create 'Food Deserts' for Bugs and Birds

New research finds that Carolina Chickadees require a landscape with 70 percent native plants to keep their population steady.

By Lexi Krupp
Reporter, Audubon Magazine
October 22, 2018

Birds in This Story

Carolina Chickadee
Latin: *Parus carolinensis*

Popular Stories

How to Tell a Raven From a Crow

How to Make Hummingbird Nectar

A meeting Carolina Chickadee will collect more than 400 caterpillars each day. The bugs are packed with nutrients like carotenoids that growing chicks need to thrive. Photo: Douglas Tallamy



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Oregon Grape

Mahonia aquifolium or
Berberis aquifolium

Oregon state flower

hardy and versatile! Tolerates almost all sun and soil conditions.

Evergreen foliage. Blue berries are tart but make great jelly or jam. Provides important early blooms for pollinators





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Red flowering currant

Ribes sanguineum



Early spring nectar for hummingbirds and butterflies, forage for the larvae of more than two dozen species of moths and butterflies, and nesting cover for songbirds and small mammals.

Berries, although very tart, are considered suitable by some for jam, jelly, pie, juice or syrup. Native Americans ate the berries fresh or dried.



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Osoberry/Indian plum

Oemleria cerasiformis

First deciduous native shrub to flower in late Winter. an important early season nectar source for hummingbirds, moths and butterflies, native bees and other pollinator species.



Indian plum fruit is edible for humans but is often bitter, even when fully ripe. A traditional Native American food eaten fresh, dried, or cooked. The bark was used as a tuberculosis remedy and a mild laxative. Strips of bark were used to bind harpoon tips.



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Fringe cup *Tellima grandiflora*

Fuzzy heart-shaped flowers. Spreading perennial for moist shady sites. Reseeds generously.

Slug resistant. Evergreen during mild winters.

can create thick patches of ground cover, establishing well in disturbed and shady areas (especially along trails), outcompeting invasive weeds.





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Vine maple *Acer circinatum*

Considered to be the most useful native tree for the landscape in the Pacific Northwest. Grant and Grant (1990) point out that it has an upright character in sunny locations and "in shade developing an ethereal horizontal grace that few maples achieve". Stunning fall foliage.

Found in moist woods and along stream banks from British Columbia south to northern California.

Summer foliage is a preferred food for deer and elk. Seeds, buds and flowers provide food for many birds and rodents. Squirrels and chipmunks will cache the seeds.





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Red osier dogwood

Cornus sericea

A beautiful and bee-loved large shrub for part-shade. Easy to grow, easy to care for, and deer-resistant. Give it space to spread.

all-season interest! Abundant spring flowers, white berries in summer, Colorful fall foliage, and showy red branches in winter

for centuries humans have used hard wood of dogwood for basketry, wicker, farm implements, and weaving shuttles. The inner bark of young stems was split and scraped into threads and toasted over a fire before being mixed with real tobacco.



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Salmonberry *Rubus spectabilis*

Perennial species in the Rose family.
Edible fruit, matures in late summer to early autumn and resembles a large yellow to orange raspberry. Delicious raw or in jellies and jams!

Useful for bank stabilization. Can spread.

Many birds and mammals are attracted to the berries. Hummingbirds are attracted to the flowers.





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Mariposa Tulip or Cat's ear *Calochortus tolmiei*

Bulbs we sell in the fall!

Drought tolerant; prefers ample winter rainfall with sparse summer irrigation.

Key nectar species for Fenders Blue Butterfly and Taylor's Checkerspot.

Naturally sweet! It was considered a candy-like treat by native peoples and was often hidden in the rafters from the children





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Showy Milkweed *Asclepias speciosa*

Abundant nectar attracts hummingbirds, butterflies, bees, and other beneficial insects. Larval host for monarch butterflies.

People have used milkweed plants for fiber, food, and medicine.

Spreads happily in dry, sunny locations. May become weedy. A big, charismatic addition!

Toxic to livestock.





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Checker mallows

Sidalcea sp.

Several different species available at nurseries for different habitats, from shady and moist to dry and sunny.

Beautiful, hollyhock-like pink flowers. Easy to grow and care for. Spreads readily by seed.

Checker-mallows attract a variety of pollinators, including bumblebees, honey bees, and a wide variety of wasps, flies, beetles, and solitary bees (including the *Sidalcea* specialist, *Diadasia nigrafrons*)

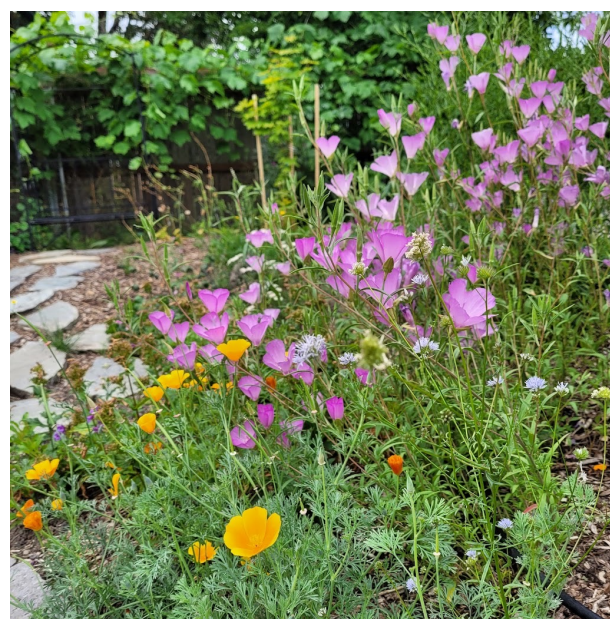
Long-lived foliage. Will bloom multiple times throughout summer if given supplemental water



Nick Cavagnaro's backyard haven, Corvallis



Tom Hagen's native plant hedgerow, Eugene



Sara's Philomath back yard conversion, 1.5 years post-planting



Native Plant Sale

Online shop now open!



Trees



Shrubs



Flowers



Groundcover

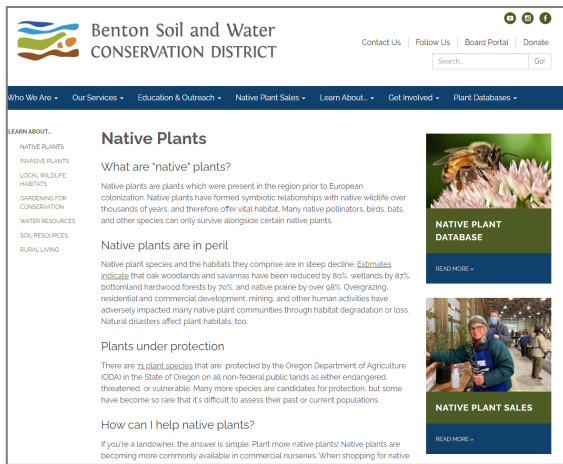
AND MORE!

Buy Online September-February

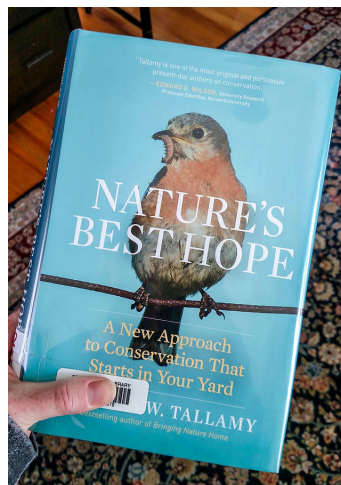
Pick up orders Feb. 24, 2024 at Benton Co. Fairgrounds

Shop and find more information at:
bentonswcd.org/native-plant-sales

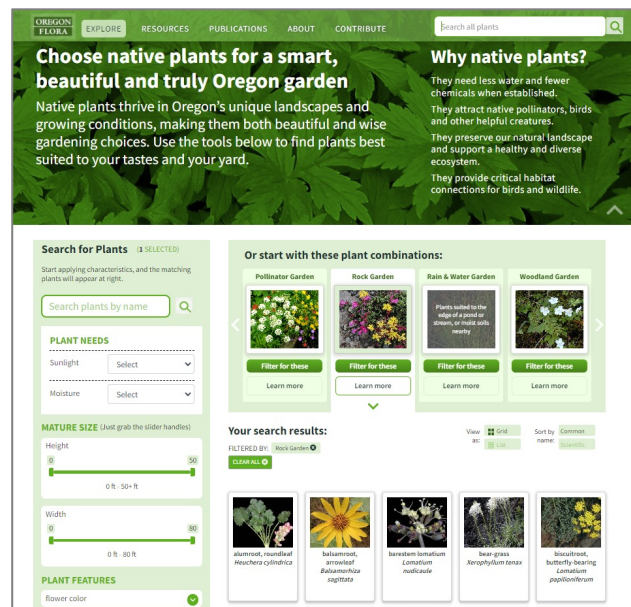
RESOURCES



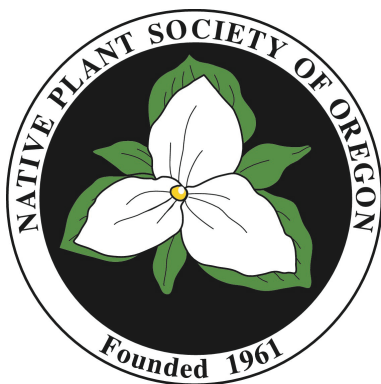
bentonswcd.org



homegrownnationalpark.org



Oregonflora.org



npsoregon.org

