

# Vanishing Landscapes

## Saving Our Native Plants and Habitats

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Heritage Seedlings & Liners

*For a copy of the talk, email*

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*Many resources available at:*

[www.heritageseedlings.com](http://www.heritageseedlings.com)

Powerful video about the human-caused  
extinction happening right now

<http://www.cnn.com/interactive/2016/12/specials/vanishing/>

**Rather than feel helpless - there is a lot we can do  
and resources to help us in our  
*call to action***

*Planting in a Post-Wild World – Rainer and West*

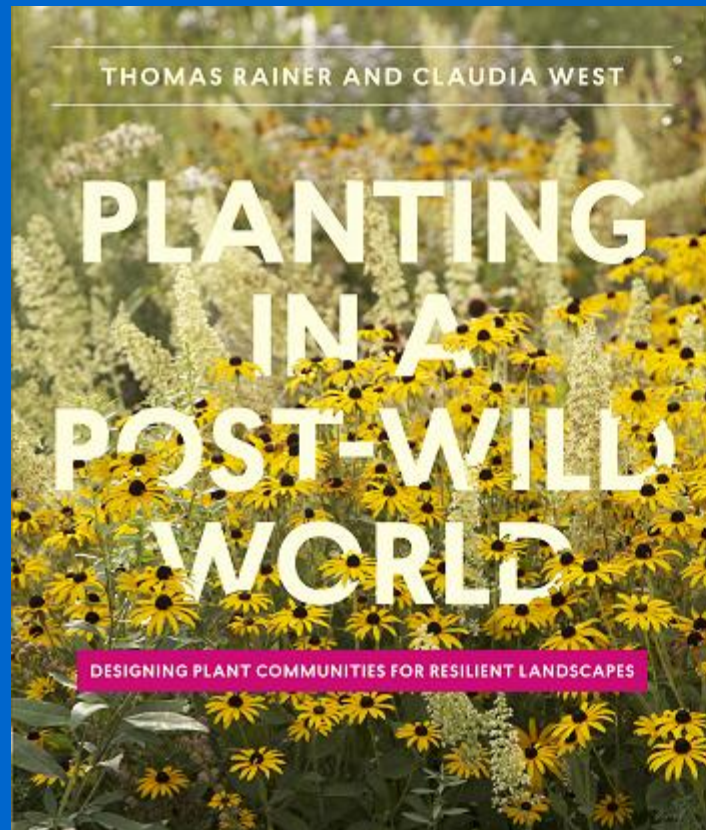
We may not be able to save the mega-fauna in our life-time

AND

We can't take back the wild places we have lost

BUT

We can ride the wave of increasingly vocal number of voices  
calling for action at the local level to enhance our landscapes to  
fill ecological niches we have lost or are losing



Claudia West



Thomas Rainer

# WHAT YOU CAN DO

## ECOLOGICAL CANVASES

- Wild lands
- Pastures & Meadows
- Woodlots & Back-40
- Our yards!!!!
- Roadsides
- Office parks & Malls
- City and County Parks
- City side walks and greenspaces

## ECOLOGICAL WARRIORS

- Restoration Professionals & Land Managers
- Landowners
- Gardeners!!!!
- Horticulturalists
- Landscapers
- Transportation Depts.
- Teachers
- Community Associations



# But - you cannot take care of what you cannot see

*Dr. Gerould Wilhelm  
North American Prairie Conference 2002*



Cow parsnip – attracts a  
diversity of insects

# Important Role for People Who Love Plants 😊

## *Education and Advocacy*

Gain an awareness of the role  
your *regional native plants* play  
in our gardens, the  
suburban/rural interface,  
agriculture lands, and remnant  
habitats

# What is a Native Plant?

- Plant species that occur naturally (evolved) in a particular region, state, ecosystem, and habitat without direct or indirect human action

(Federal Native Plant Conservation Committee, 1994)



Willamette Valley Larkspur –  
WV, Oregon native species

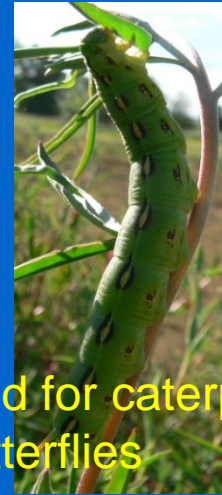


Common Dandelion –

Eurasian native species naturalized in U.S. and Canada



# Most Compelling Value of Native Plants is BIODIVERSITY!



Plants provide food for bugs

Plants provide food for caterpillar stage of moths and butterflies



Plants attract bugs which are food for birds

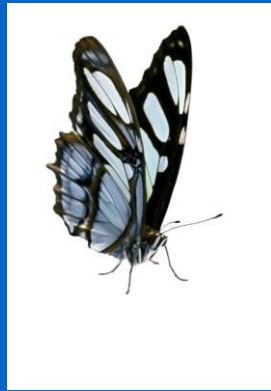
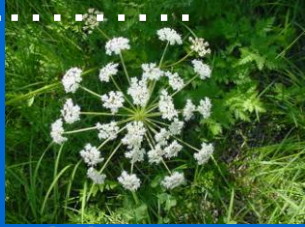


Plants offer great views for bug whoopee 😊

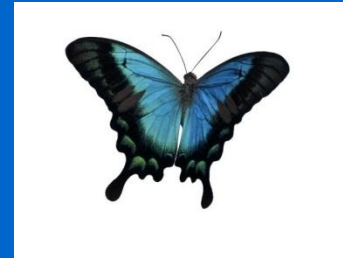


# NATIVE PLANTS PROVIDE . . . . .

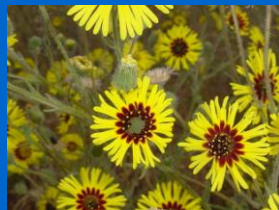
FOOD:  
INSECTS,  
NECTAR, HOST  
PLANTS



NESTING  
SITES

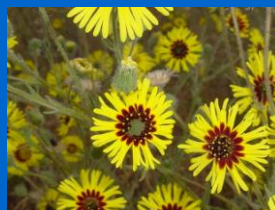
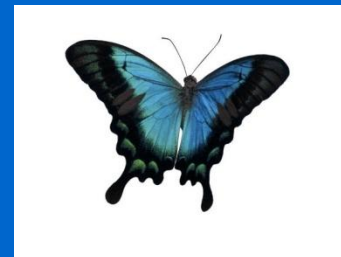
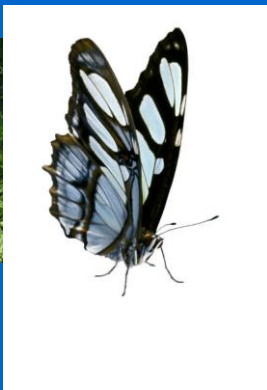


COVER FROM  
PREDATORS



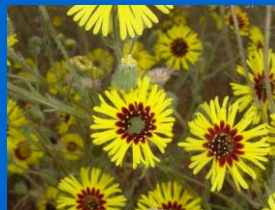
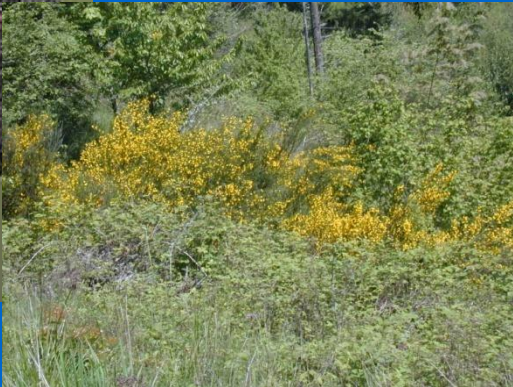
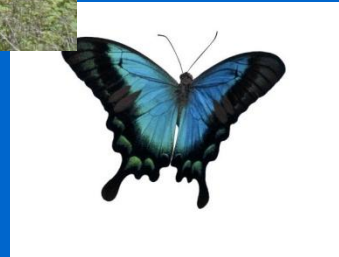


INVASIVE  
SPECIES DO  
NOT PROVIDE  
THESE  
RESOURCES



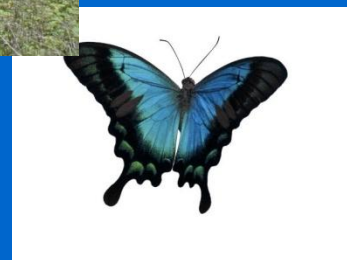


INVASIVE  
SPECIES DO  
NOT PROVIDE  
THESE  
RESOURCES





INVASIVE  
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## RESULT

LOSS OF NATIVE PLANT HABITAT CAN HAVE  
*ENOURMOUS* IMPACTS ON BIODIVERSITY





# Non-native plants, especially invasive species are STATUES!



Studies by entomologist Dr. Douglass Tallamy have shown; non-native plants DO NOT host the diversity of insects (some don't host any) that native plants do!!!

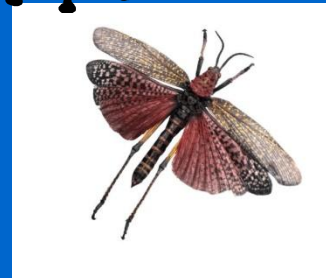
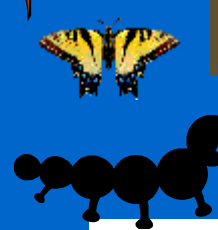
# 96% of terrestrial birds rear young on

## BUGS

Native Plant Diversity

Insect Diversity

Bird Diversity



U.S. Fish and Wildlife



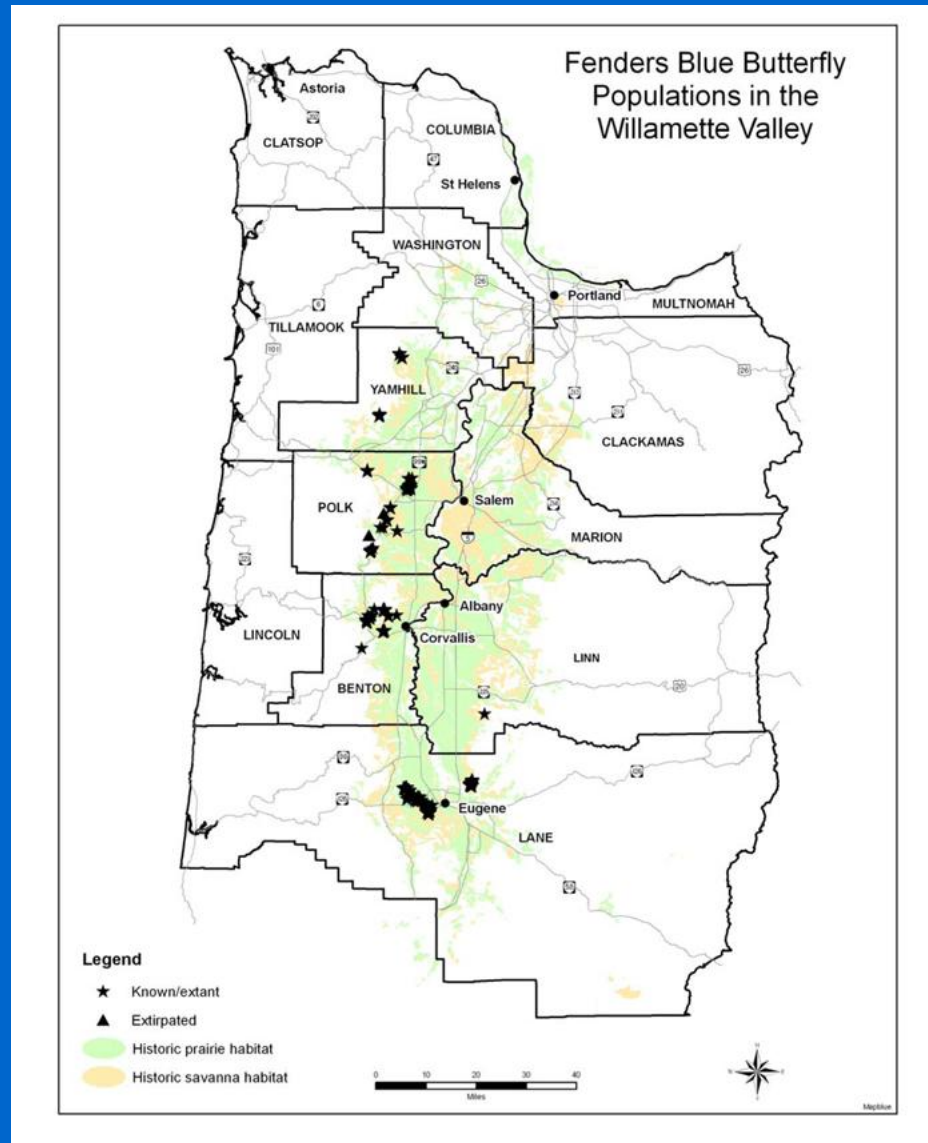
# PLANT LOSS CAN LEAD TO CRITTER LOSS IF A CO-EVOLVED SPECIALIST



Narrow endemics Kincaid's Lupine & Fenders Blue Butterfly  
– both listed as Endangered



# DOUBLE WHAMMY – NARROW DISTRIBUTION AND PICKY EATER



# Suburbia and Urban/Rural interface— potential haven for biodiversity!

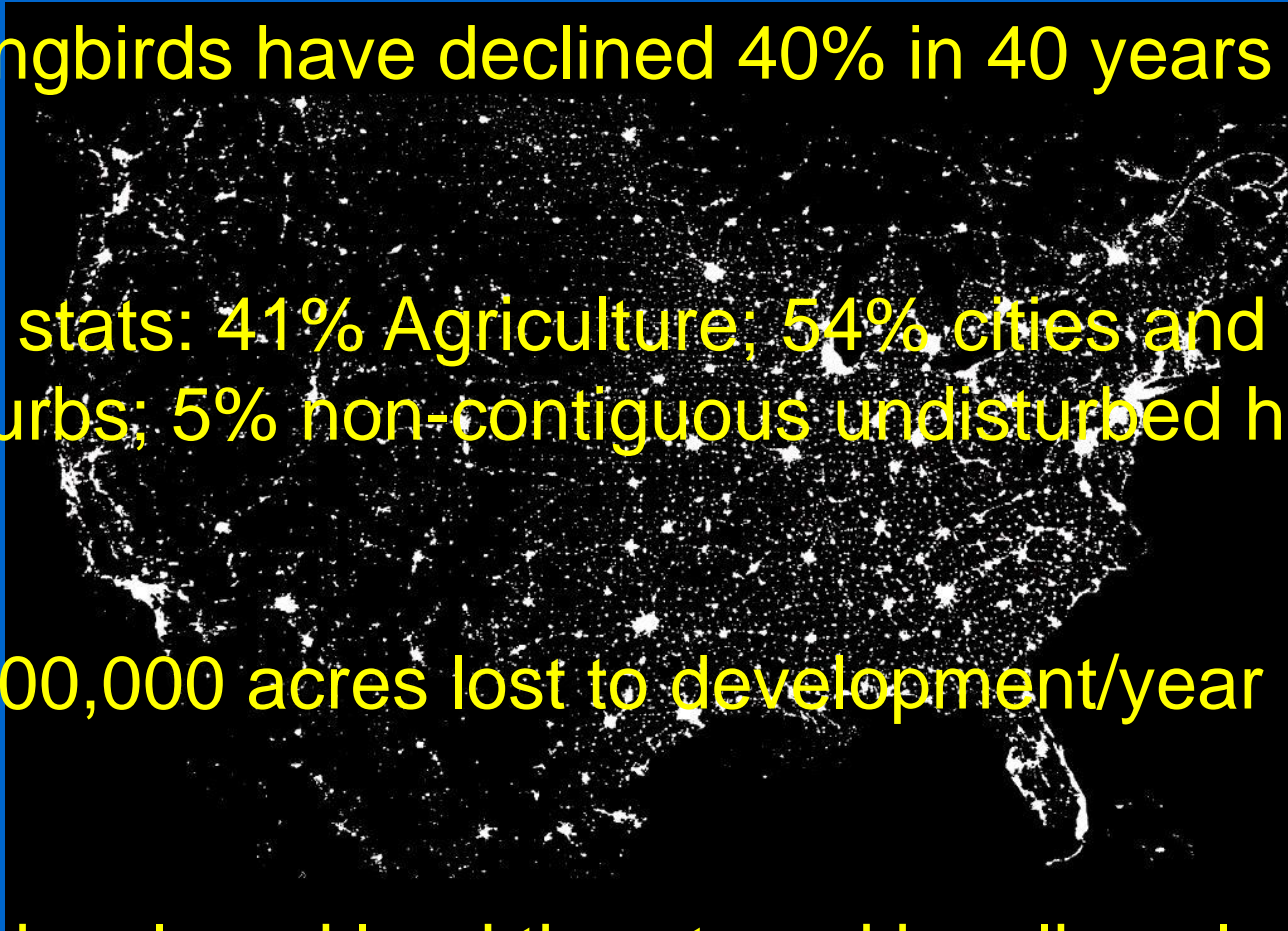
## FACTS

\*Songbirds have declined 40% in 40 years

\*US stats: 41% Agriculture; 54% cities and suburbs; 5% non-contiguous undisturbed habitat

\*2,000,000 acres lost to development/year

\*Undeveloped land threatened by alien plants

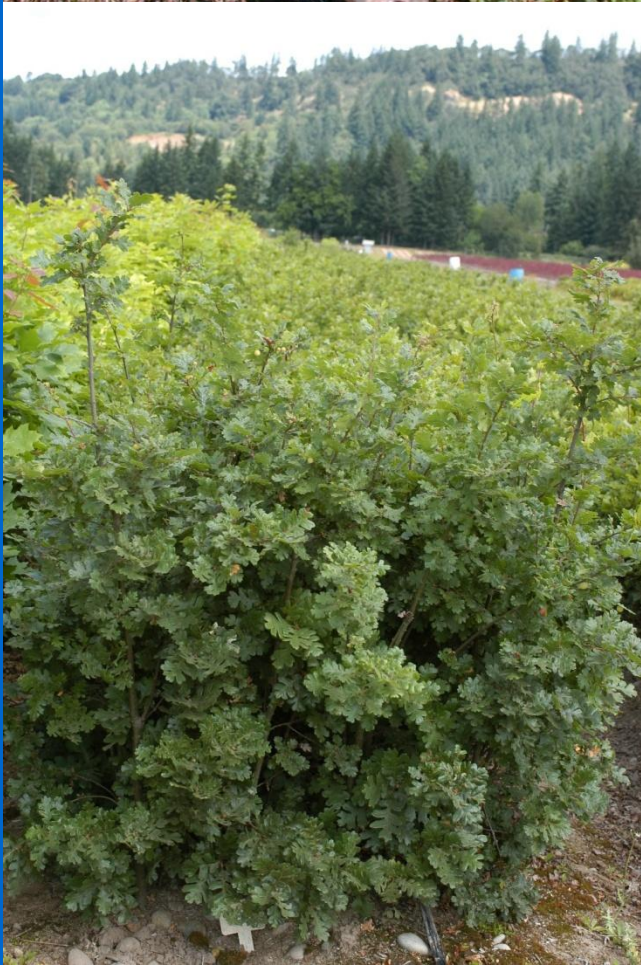




## One small action such as planting native oak trees

You may not think the **ecological value** will be realized until they are old and producing acorns, lichen, and mistletoe - and you are long-gone

But even young trees are magnets for insects and caterpillars and help songbirds fuel up for migration



# Willamette Valley Historic Vegetation

Green =  
woodland

Prior to  
1850 the  
Willamette  
Valley  
eco-region  
was  
mostly  
open  
prairie and  
savanna



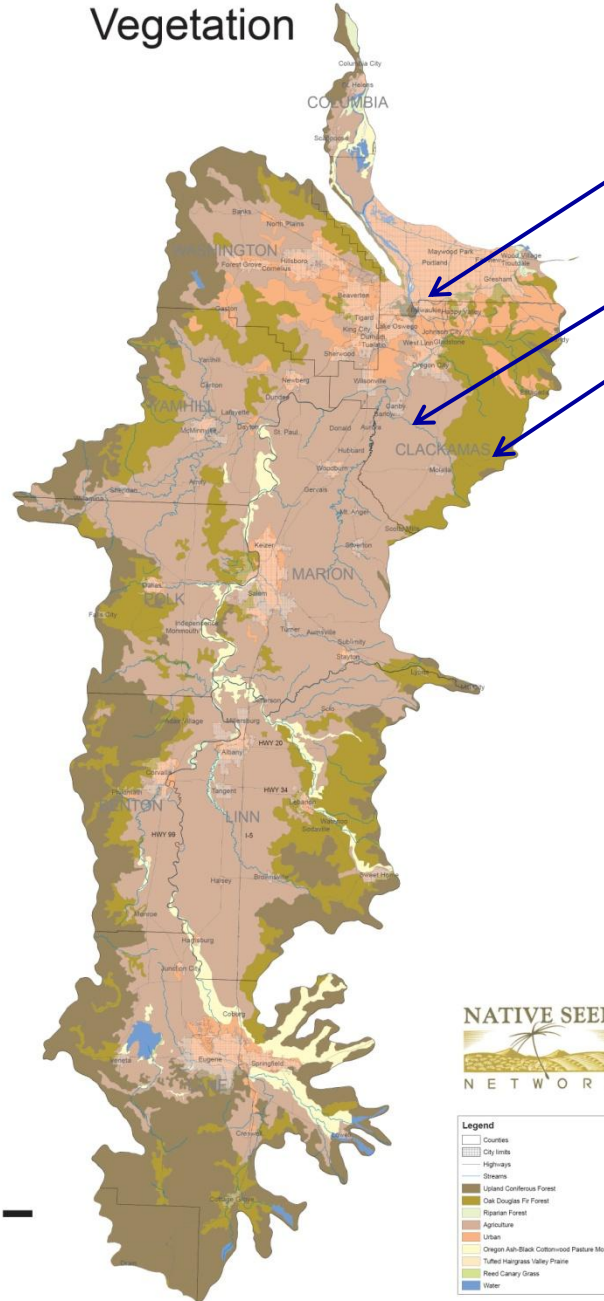
Light peach =  
open prairie

Dark peach =  
oak savanna  
(large oaks in  
open prairie)

Map created by Brent Hargrove and Bob Ferguson, August 2005.  
Map data: U.S. Geological Survey, National Wetlands Inventory, 2001.  
City limits: U.S. Census Bureau, Census of Population and Housing, 2000.  
Highways: U.S. Department of Transportation, National Highway Inventory, 2000.  
Streams: U.S. Geological Survey, National Hydrography Dataset, 2000.  
Emergent Wetlands: U.S. Geological Survey, National Wetlands Inventory, 2001.  
Water: U.S. Geological Survey, National Hydrography Dataset, 2000.



# Willamette Valley Current Vegetation



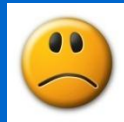
Pink=Urban

Mauve =Agriculture

Green =Forest

*Where's the Peach????*

There is less than 1% Willamette Valley Prairie left!



What prairie is left is degraded with lots of non-native species and noxious weeds

NATIVE SEED NETWORK

Legend

□	Counties
□	City limits
—	Highways
—	Streams
■	Lupine Coniferous Forest
■	Oak Douglas Fir Forest
■	Riparian Forest
■	Agriculture
■	Urban
■	Oregon Ash-Black Cottonwood Pasture Mosaic
■	Tufted Hairgrass Valley Prairie
■	Reed Canary Grass
■	Water

0 5 10 20 30 40 Miles



# Loss of Prairie Species

Devastating to our Willamette Valley Ecoregion Diversity



# Native Plant and Habitat Work at Heritage Seedlings

- Restoration of over 250 acres of upland prairie and oak habitat on two farms
- Restoration of over 50 acres of riparian habitat on three farms
- Native Seed Production of over 120 species [including 8 T&E species] for use on restoration projects throughout the Willamette Valley
- Native plug production for various agencies



# Seed Production

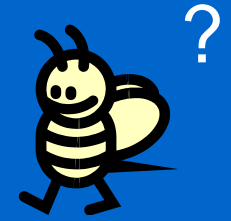


4,000 lbs/year  
on 30 acres



# Our Choice -

*We can have this...*

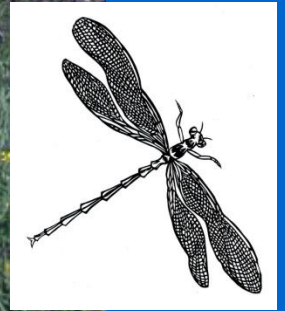


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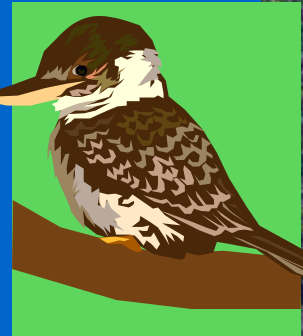


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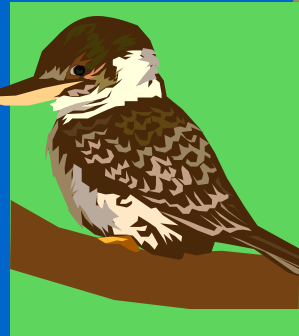
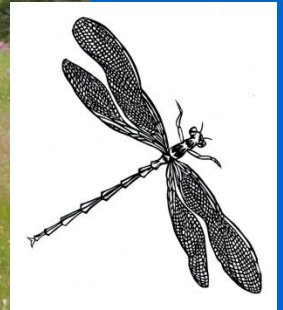
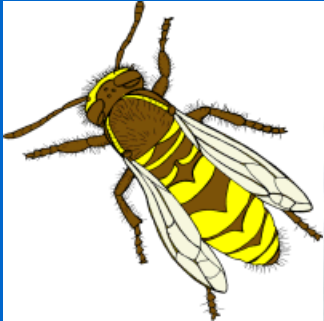
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Agricultural land with low diversity habitat and often infested with invasive species



*Or this!*



Agricultural land converted to native, high diversity habitat



# Our Choice - *We can have this...*



Roadsides with low diversity habitat and often infested with  
invasive species



*Or this!*



Roadsides seeded with native grasses and wildflowers  
providing high diversity habitat

# Our Choice - *We can have this...*



Landscapes and parks with NO DIVERSITY and high input, water & chemical sucking lawn



*Or this!*



Landscapes and parks with high habitat diversity and low in-put native plants



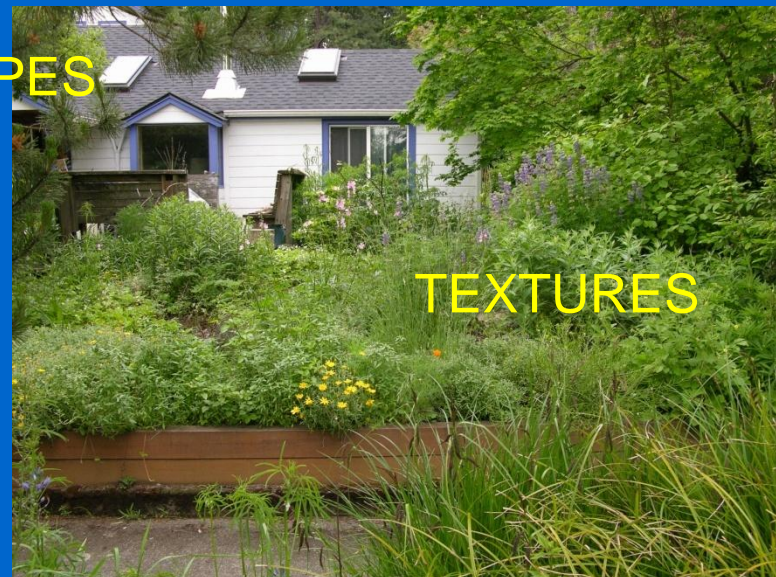
# Native Landscapes are Better Habitat for Humans Too!!!



Traditional landscapes are often BORING and STERILE to the soul!



SHAPES





Plants sustain our lives. Whether they are filtering the air we breathe or surrounding us in the beauty that is nature, plants nourish and **heal our souls** and our bodies. *San Francisco Garden Show 2015*







<http://oregonexplorer.info/willamette/>

# Our choice

Will we grow up or out?????



**Keeping and Creating**  
room for wild nature –  
for many (including me)  
it's a moral imperative



# Building Awareness and Support for Native Plants

- Encourage local governments to support the protection and use of native plants in new developments, park lands, open spaces where appropriate
- Don't just use them, but educate the everyone you know as to their role in the landscape
- WV Cities and Counties currently using and protecting native plants:
  - Portland, Lake Oswego, McMinnville, Eugene, Corvallis, Benton Co, Lane Co, Washington Co



# Roadsides are particularly vulnerable -



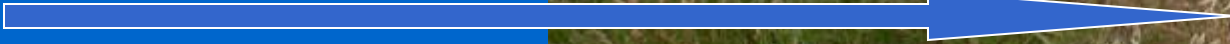
Roadside near Aumsville

*Sidalcea campestris*  
(tall checkerbloom)



Farmer sprays edge of grass field

County sprays wider than usual band (typically 2 ft from edge in gravel)



# Dept. of Transportations

## Increasingly Adopting Protection and Use of Native Plants on Roadsides

- Reduce maintenance costs
- Increase bird and pollinator habitat
- Improve erosion control
  - use of hardy perennials key!
- Enhance aesthetics
- Develop partnerships with natural resource professionals and volunteers
- Demonstrate commitment to environment



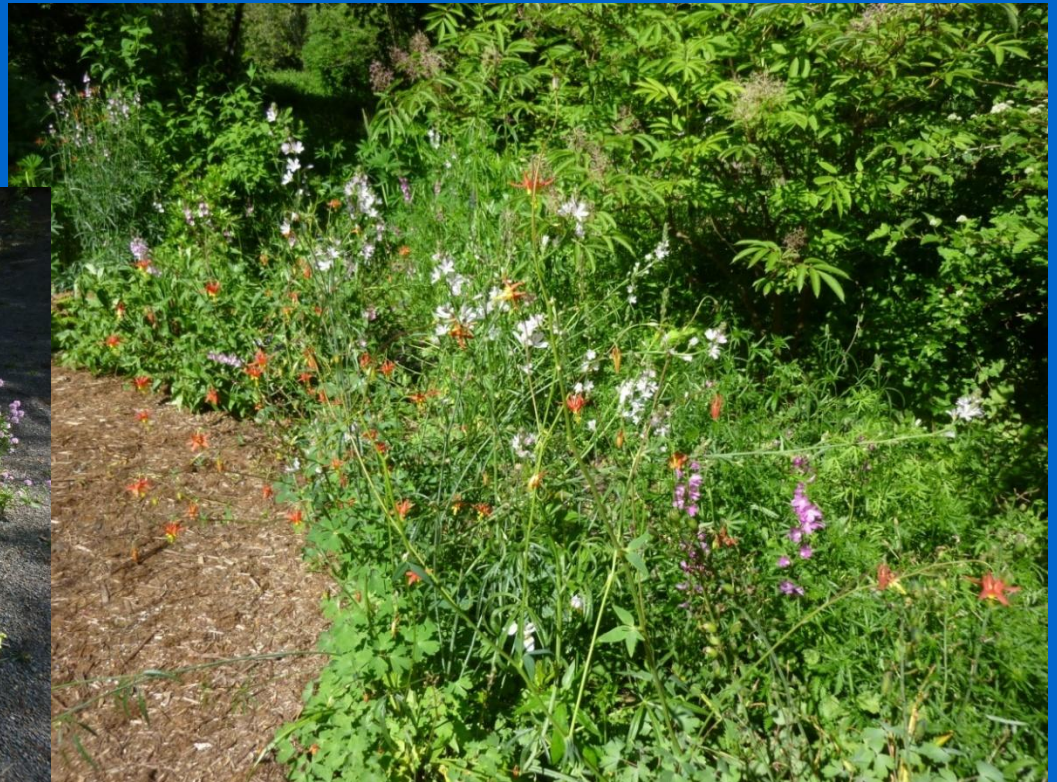
# Increasing Involvement by Private Landowners

- Landowner's Guides and Programs for Restoring Oregon's endangered habitats
  - Most endangered habitats are on private land
  - Soil and Water Conservation Districts, Watershed Councils, NRCS, ODWF, USFW, Defenders of Wildlife
- Biodiversity Partnerships
  - Conservation priority areas
  - Defenders of Wildlife, TNC, Oregon Natural Heritage Program
- Willamette Partnership
  - Development mitigation at the ecosystem level
  - Leaders in conservation, urban planning, business, industry, agriculture

# Great Resources for Learning

- *Bringing Nature Home*, by Douglass Tallamy
- Metro Backyard Habitat Program
- Columbia Land Trust Backyard Habitat Program (really helpful!)

Native Plant Garden  
Deepwood Estate, Salem





# Great Resources for Learning

- Oregon Flora Project
  - Wildflower app (1,250 sp!)
  - Photo Gallery
  - Plant Atlas (can search by common name)
  - New Project!! *Native Plants: Connecting Growers with Gardeners and Landscape Professionals*
    - Inform gardeners and landscapers about native plants
    - Further develop the native plant market



# Great Resources for Learning

- *Native Plants of the Southern Willamette Valley: a Resource List for Homeowners and Professionals* [Salix Associates – “resources page”]



Bruce Newhouse's home  
(Salix Director) 😊





# Education is vital BUT ACTIONS SPEAK LOUDER THAN WORDS

**Install a native plant component to your project area**

Your BACKYARD HABITAT may not attract Western Meadowlark BUT BY.....

- Including educational signage
- Getting people involved with the upkeep
- Connecting your site to the habitat needs of your region (in this example prairie) AND
- Advocating for its protection and restoration.....

You can help bring the Oregon State Bird back to the Willamette Valley in meaningful numbers!!!!

# Great Resources for Buying

## OREGON FLORA WEBSITE GARDENING WITH NATIVES PLANTS PAGE

<http://www.oregonflora.org/gardening.php>

- Native Plant Vendor List
- Native Plants by Vendor Table and Contact Info
- Sortable Table by Vendor Showing Plants they Carry
- Future Information: search by plant characteristics (plants type, flower color, height, water needs etc) so you can plan your landscape



# Great Resources for Buying

- Plantnative.org [lists vendors by state and city]
- Native Seed Network [list of seed vendors and ecoregion specific plant lists]
- Soil and Water Conservation District plant sales

Vendors will often donate to public space projects!

# Using Native Plants builds support for protection of special places



TNC Yellow Island  
Reserve



Bufford Park, Eugene



Have I listed all values or are there others????

Thank you.

