Keepin' it Clean:

Best Practices for Noxious Weed Management in Forestry

OREGON
DEPARTMENT OF
AGRICULTURE

Plan for the Hour

- Noxious Weed Program Overview
- The Problem
- How You Can Help #1 (Prevention)
- How You Can Help #2 (EDRR, Identification & Reporting)

OREGON DEPARTMENT OF AGRICULTURE

ODA Noxious Weed Program Overview

OREGON
DEPARTMENT OF
AGRICULTURE

First Things First

Noxious Weed Staff

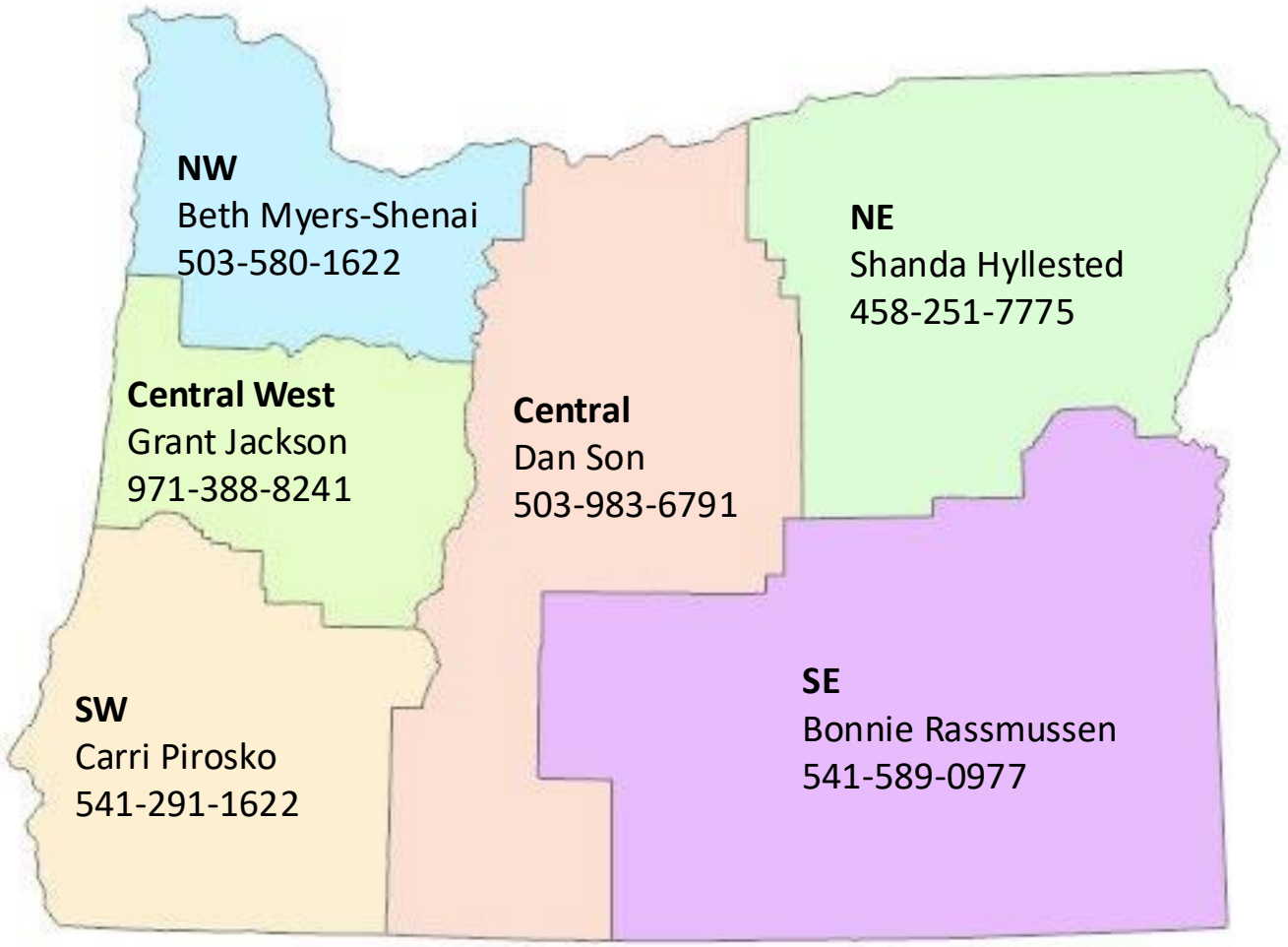
Program Manager
Troy Abercrombie
503-983-4065

Projects Coordinator
Tom Forney
971-345-1756

Biocontrol Entomologist
Ashley Toland
503-881-5198

Rangeland Health Specialist
Mark Porter
541-215-3912

Grants Coordinator
Tristen Berg
541-604-6580



Biocontrol Technician
Jordan Donaghy
503-983-8607

Seasonals:
Rob Banks
503-986-4644

Mitch Lex
503-508-4951

Admin Support
Vacant
503-986-4621

OREGON DEPARTMENT OF AGRICULTURE

Our Mission:

Protect Oregon’s natural resources from the invasion and proliferation of exotic noxious weeds

OREGON DEPARTMENT OF AGRICULTURE

Survey & Detection

Cordgrass

Hawkweeds

Yellowtuft

Giant Hogweed

OREGON DEPARTMENT OF AGRICULTURE

Rapid Response

Garden Yellow Loosestrife Willamette River

Kudzu Portland

Cape Ivy Retail Nursery

OREGON DEPARTMENT OF AGRICULTURE

Biological Control

Purple loosestrife at Oaks Bottom

Top 2007

Bottom 2015

OREGON DEPARTMENT OF AGRICULTURE

Outreach & Education

Noxious Weed Forums

Invasives Education Station

State Fair Booth

Interagency Noxious Weed Symposium

OREGON DEPARTMENT OF AGRICULTURE

Oregon State Weed Board

- Helps guide ODA program
- Designates weed ratings
- Funded 374 grants totaling
- $5.1 million since 2000
- Represents stakeholders

OREGON
DEPARTMENT OF
AGRICULTURE

The Problem

OREGON
DEPARTMENT OF
AGRICULTURE

A weed is……

Any plant growing where you don’t want it!

OREGON DEPARTMENT OF AGRICULTURE

An invasive plant is…

A non-native species that spreads aggressively and displaces more diverse plant communities

OREGON DEPARTMENT OF AGRICULTURE

A *noxious* weed is…

Any plant designated by the Oregon State Weed Board (or local regulating body) to be injurious to public health, agriculture, recreation, wildlife or any public or private property

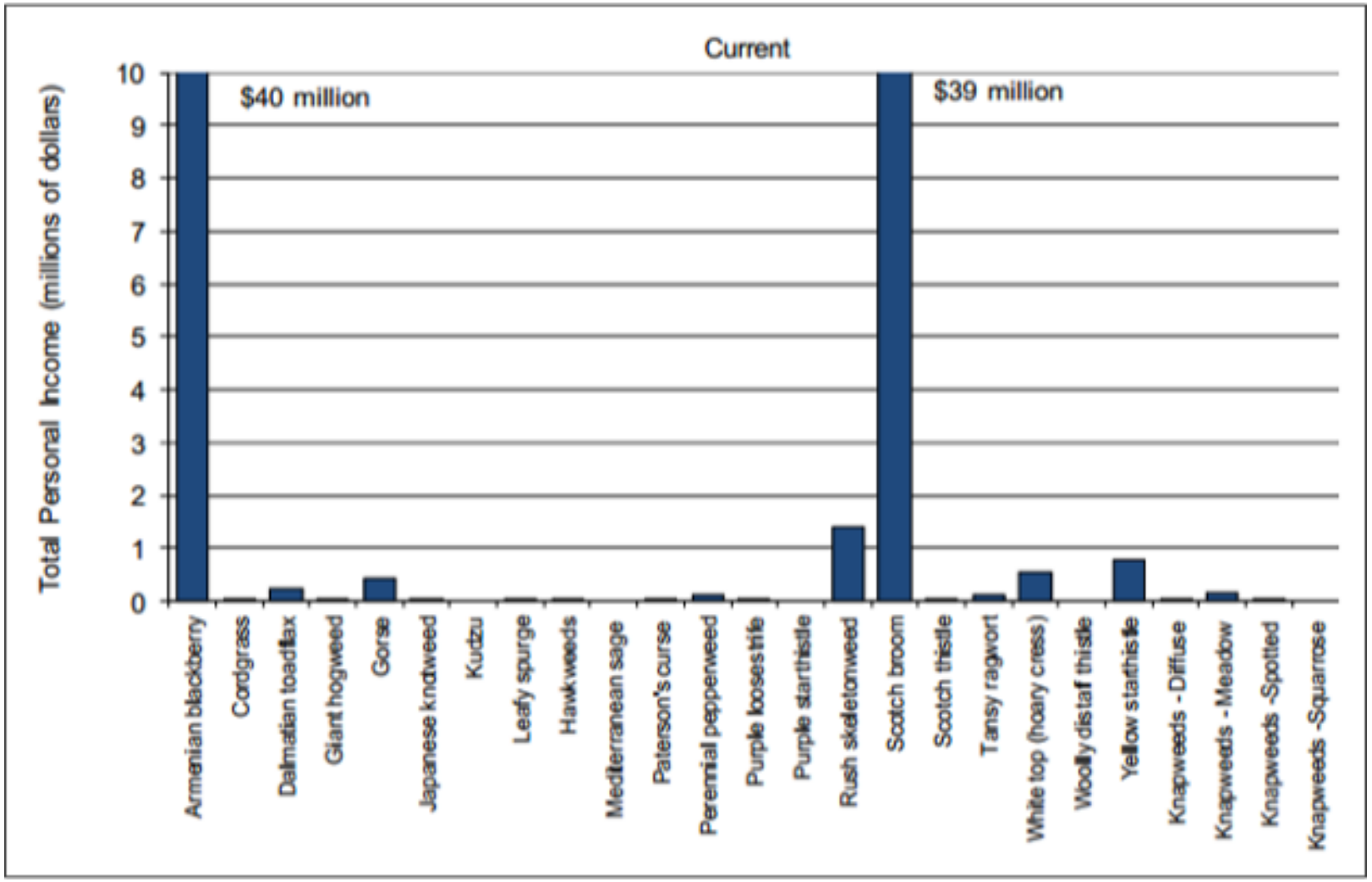
OREGON DEPARTMENT OF AGRICULTURE

Noxious weeds …

- Cause over $83 million in economic damage annually in Oregon & have the potential to cause over $1.8 billion.
- Have caused over $27 billion in damage nationally.
- Are one of the leading causes in losses of biodiversity.
- Degrade watershed health and water quality.
- Negatively impact recreation and agricultural production.
- Can be wildfire drivers and post fire eco-disruptors

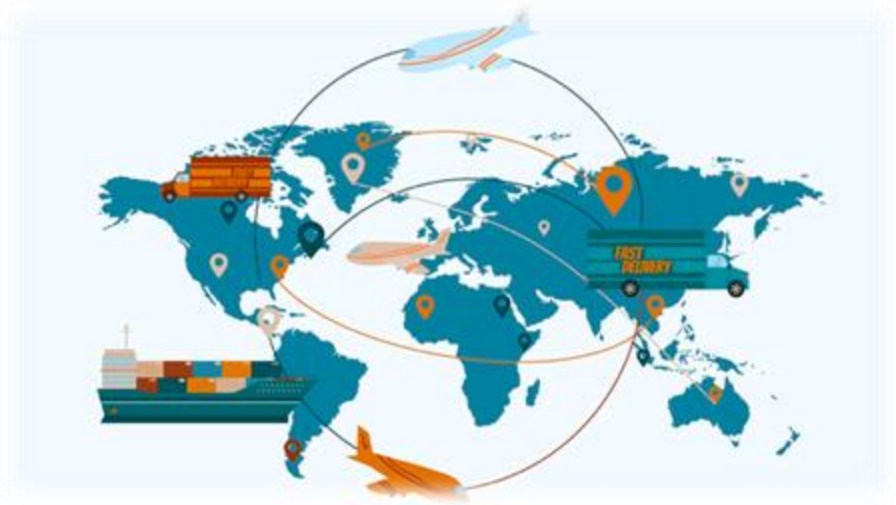
OREGON DEPARTMENT OF AGRICULTURE

Current(ish) Economic Impacts in OR



OREGON DEPARTMENT OF AGRICULTURE

Where do they come from?



- Most come from other parts of the world, many from Eurasia with few to no natural enemies.
- Some are brought here intentionally before their harmful effects were known – which can sometimes occur decades later!
- Some accidentally brought in with shipments of goods.
- Some come in wildflower seed mixes – often with no list of species

OREGON DEPARTMENT OF AGRICULTURE

How do they spread?

They have aggressive reproductive strategies!

- Prolific seed
- Tillering/ daughter plants
- Allelopathy/ chemical repellant
- Stem/root fragment regeneration

Move from site to site through:

- Dirty equipment
- Recreation
- Debris dumping
- Wildlife

OREGON DEPARTMENT OF AGRICULTURE

2001

Case Study

Mt. Hood N.F. Meadow and Orange Hawkweed at Lolo Pass BPA Corridor

OREGON DEPARTMENT OF AGRICULTURE

History

- Found in 1998
- Less than .10 Acre
- Assumed to be brought in on equipment
- Limited treatment options due to lack of EA
- Used manual and mechanical treatment and made it worse!
- Population Increased to more then 150 net/1000 gross acres - 5 years period
- 2003 BPA completed required EA (Tordon 22K & Garlon 3A)
- Increased options with USFS EA in 2006 then aminopyralid added a few years later
- Continued treatment and monitoring to date with *significant* reduction (27 years later!!), but it's a forever project to keep it contained.

OREGON DEPARTMENT OF AGRICULTURE

How You Can Help #1

Prevention!!

OREGON
DEPARTMENT OF
AGRICULTURE

PREVENTION: Our first line of defense!

- Your tools
- Your trucks
- Your equipment
- Your knowledge
- Your help
- Your best management practices!

OREGON DEPARTMENT OF AGRICULTURE

We can’t do it without YOUR help!

- Your boots on the ground are our “citizen soldiers”!
- You see every inch of the land you work every day!
- Your expertise is just as valuable as ours in every way!

OREGON DEPARTMENT OF AGRICULTURE

Let’s talk BMPs (Best Management Practices)

OREGON
DEPARTMENT OF
AGRICULTURE

BMP: Arrive on the job with clean equipment

OREGON
DEPARTMENT OF
AGRICULTURE

BMP: Think before you move!

OREGON
DEPARTMENT OF
AGRICULTURE

Is this mud loaded with weed seed? Where are you headed next?

Me

Your truck

OREGON DEPARTMENT OF AGRICULTURE

What else moves invasive plant seeds and parts?

- Soil caked on tools
- Equipment tracks
- Boot treads
- ATVs
- Truck tires
- Lowboy/utility trailers
- Flails, tillers
- ROW grinders
- Yarders/de-limbers
- Riding/push mowers
- Excavators/skid steers
- Brush piles

OREGON DEPARTMENT OF AGRICULTURE

BMP: Work “clean” areas first!

OREGON
DEPARTMENT OF
AGRICULTURE

BMP: Choose where you clean!

Gravel/paved Pad?

OR

Field by creek?

OREGON
DEPARTMENT OF
AGRICULTURE

Best BMPs on cleaning location:

- If you can, clean where the weed already exists. Don't move equipment out = Dirty on Dirty
- If you can, set aside one place at a staging area, or your equipment shed that is used regularly then monitored and treated frequently = Wash station
- If you can, keep it close to the work site, but away from water.
- GPS cleaning locations to help with future monitoring by land managers

OREGON DEPARTMENT OF AGRICULTURE

BMP: Choose HOW you clean!

Air or brush first

then water

OREGON
DEPARTMENT OF
AGRICULTURE

BMP: Don’t forget your boots!

OREGON
DEPARTMENT OF
AGRICULTURE

“

Wouldn’t this be nice…..

YES!!

OREGON DEPARTMENT OF AGRICULTURE

Remember! Water is a “highway” for weeds!

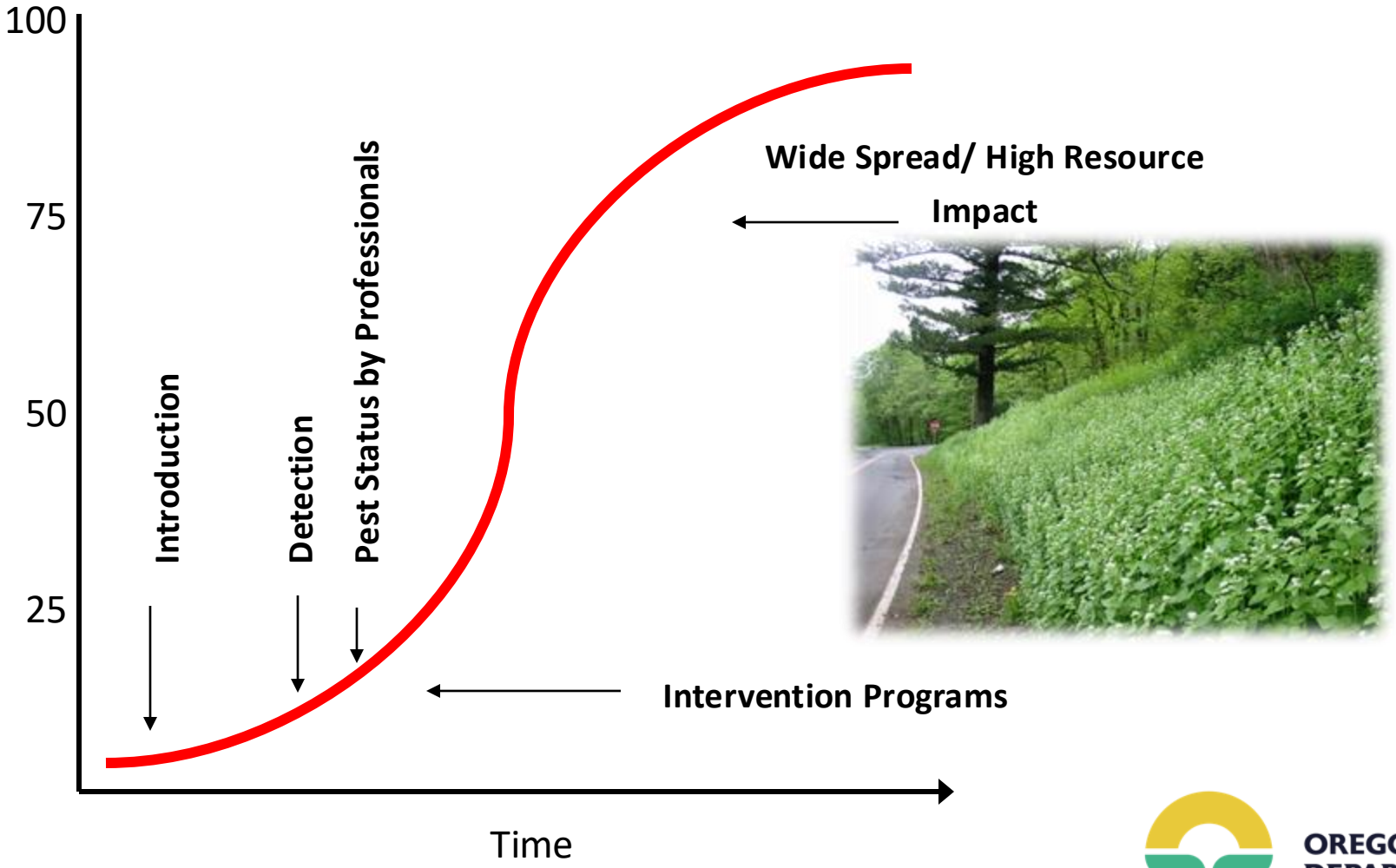
OREGON
DEPARTMENT OF
AGRICULTURE

How You Can Help #2:

EDRR!

OREGON
DEPARTMENT OF
AGRICULTURE

Early Detection and Rapid Response

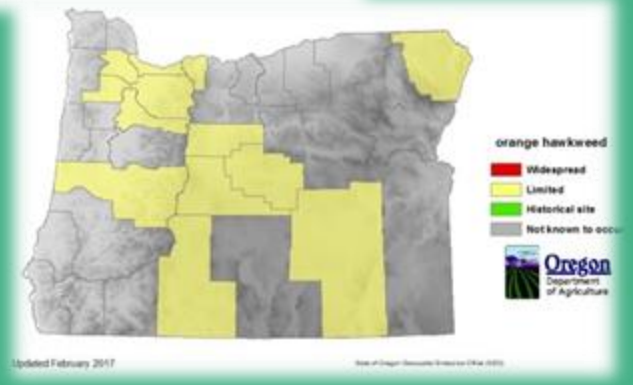


OREGON DEPARTMENT OF AGRICULTURE

EDRR Species for Forestry

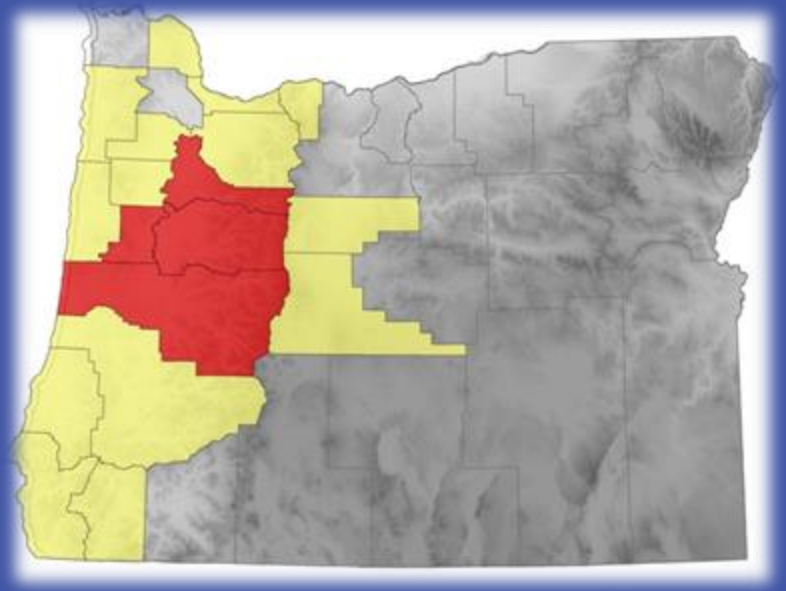
OREGON
DEPARTMENT OF
AGRICULTURE

Meadow & Orange Hawkweed



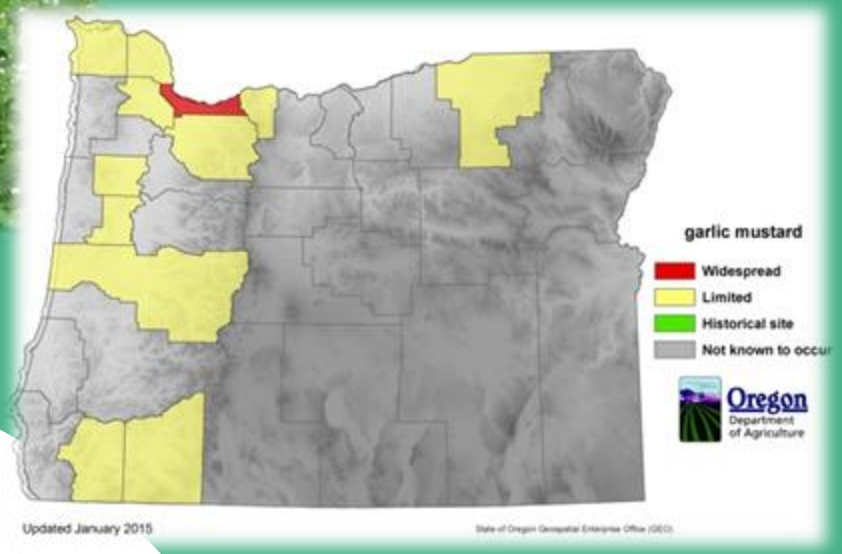
OREGON
DEPARTMENT OF
AGRICULTURE

False Brome



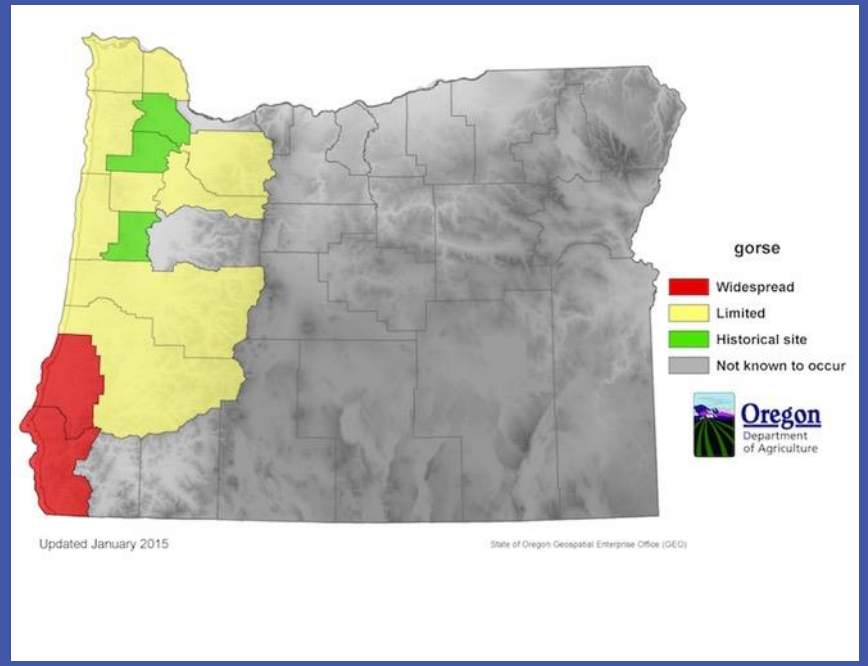
OREGON
DEPARTMENT OF
AGRICULTURE

Garlic Mustard



OREGON DEPARTMENT OF AGRICULTURE

Gorse



OREGON
DEPARTMENT OF
AGRICULTURE

Other Problematic Species

- Scotch Broom
- Armenian (aka Himalayan) Blackberry
- Spotted Knapweed
- Shiny Geranium & Herb Robert (annuals)
- Japanese/Giant knotweed
- Yellow Archangel
- Perennial Peavine
- Jubata Grass
- Butterfly Bush

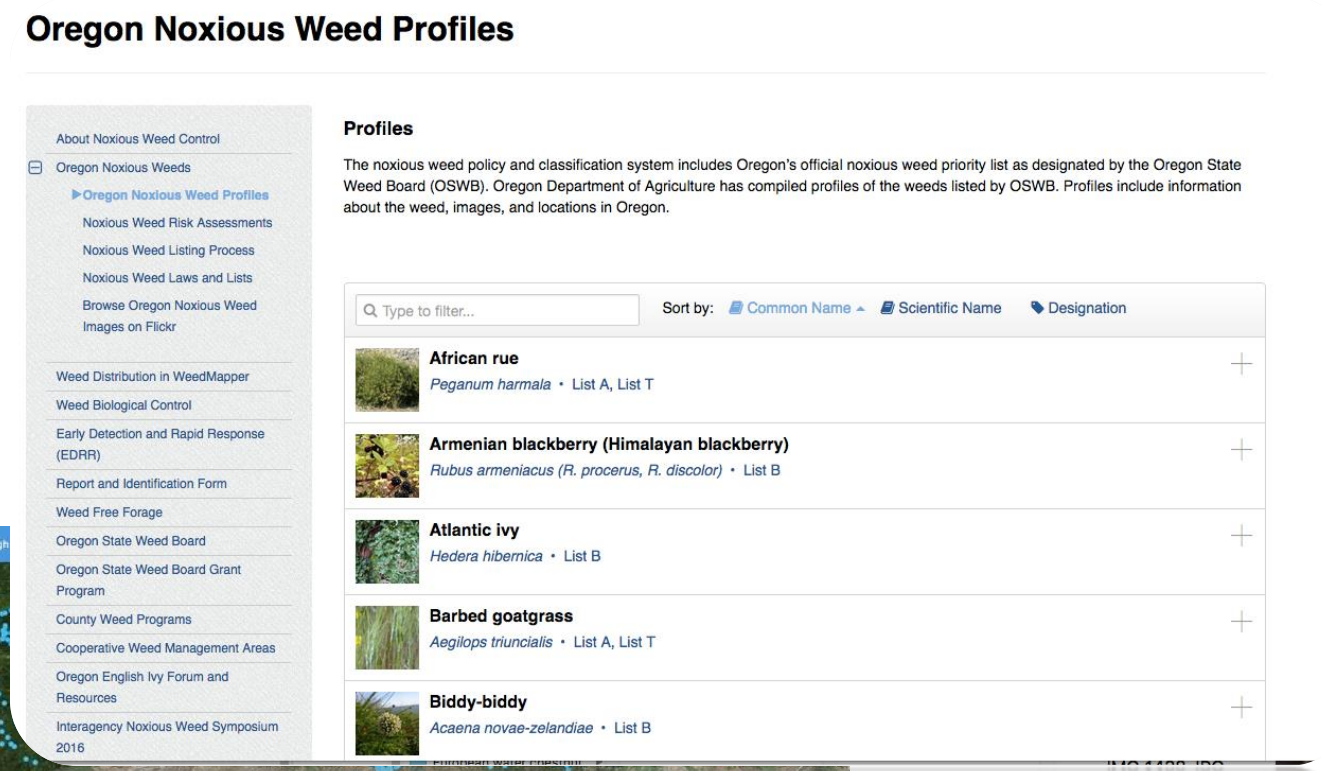
OREGON DEPARTMENT OF AGRICULTURE

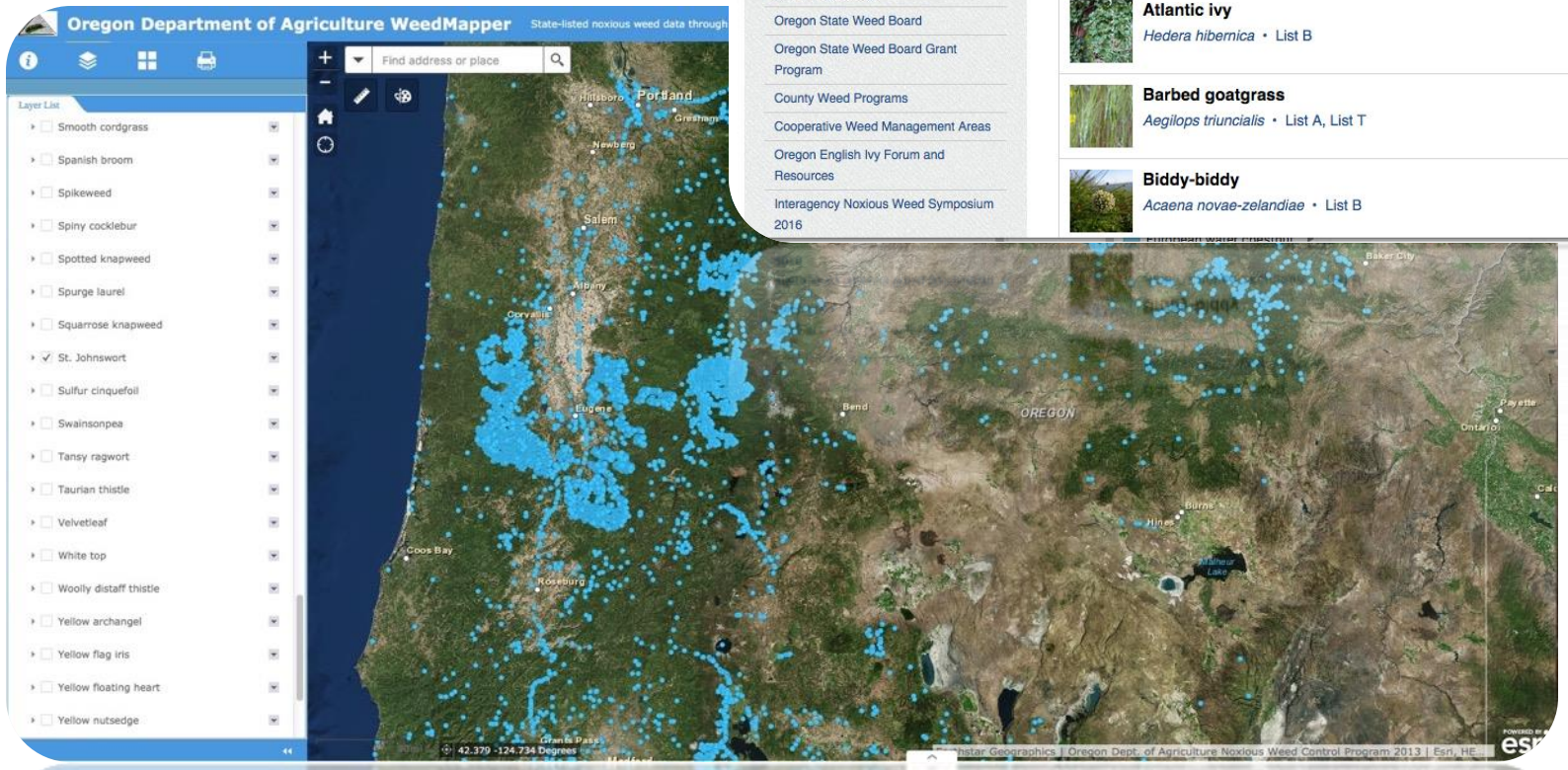
REPORTING HOT SPOTS

- Report new, small infestations before they spread or go to seed! We can send out herbicide applicators, collect data!
- Note GPS coordinates, milepost markers, landmarks, road numbers, take photos ….anything works! EDRR works!
- **Oregon Invasive Species Hotline** - oregoninvasiveshotline.org for online reporting. Or 1-866-INVADER phone line.
- **EDDMapS West** - Download the mobile app (for both Apple and Android devices) and report from the field!

OREGON DEPARTMENT OF AGRICULTURE

ODA Website Resources





OREGON DEPARTMENT OF AGRICULTURE

Oregon Department of Agriculture
Noxious Weed Control Program
oregon.gov/ODA/PLANT/WEEDS/
oregoninvasives.org

Beth Myers-Shenai
NW Oregon Noxious Weed Specialist
Beth.Myers-Shenai@oda.oregon.gov
503-580-1622

OREGON
DEPARTMENT OF
AGRICULTURE