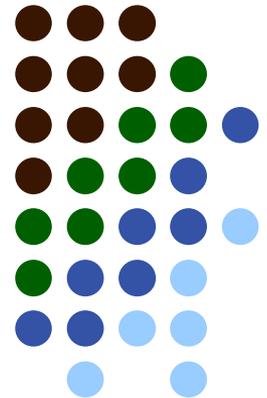


# *Getting Wise to Weeds!*



## **Introduction to the Top 12 Priority Invasive Weeds in Clackamas County**



*Samuel Leininger  
WeedWise Program  
September 19, 2013*

# THE CLACKAMAS WEEDWISE PROGRAM



- Non-regulatory program initiated in 2009 by the Conservation District
- Provide technical assistance to landowners and land managers
- Implement effective and efficient invasive weed control practices throughout Clackamas County
- Work with regional partners to address invasive weed issues across borders

# WE CAN HELP WITH...



- Control of priority invasive weeds
- Funding and cost share programs to help address invasives and other conservation practices
- Our weed equipment library to check out tools for removal of priority weeds
- Technical expertise to identify particular weeds
- Development of a management plan for your property.



# THE GOAL FOR TONIGHT...



To make sure that all of ***you*** know how to *identify*, and *report* the twelve priority invasive weeds in Clackamas County.

# WHAT ARE INVASIVE WEEDS?



They are plants that live outside their historic geographical range, and whose aggressive growth habit has a detrimental effect on our social, economic, or ecologic resources.



*Garlic Mustard*

# EARLY DETECTION AND RAPID RESPONSE (EDRR)



**EDRR is the most low-impact and cost-effective way to address the problem of invasive plants, short of preventing the problem in the first place.**

# EARLY DETECTION & RAPID RESPONSE (EDRR)



- Focuses on developing a priority list of species and to identify new invaders
- Relies on *detection* and *reporting* of small populations of new invaders
- Control these invaders when they are still small and manageable



*Orange Hawkweed*

# LETS LEARN TO IDENTIFY THE...



1. Garlic mustard (*Alliaria petiolata*)
2. False brome (*Brachypodium sylvaticum*)
3. Starthistles (*Centaurea* sp.)
  - a. Yellow starthistle (*Centaurea solstitialis*)
  - b. Purple starthistle (*Centaurea calcitrapa*)
4. Spurge laurel (*Daphne laureola*)
5. Giant hogweed (*Heracleum mantegazzianum*)
6. Policeman's helmet (*Impatiens glandulifera*)
7. Knotweed (*Fallopia* sp.)
  - a. Japanese knotweed (*Fallopia japonica*)
  - b. Giant knotweed (*Fallopia sachalinensis*)
  - c. Bohemian knotweed (*Fallopia x bohemica*)
8. Goatsrue (*Galega officinalis*)
9. Orange hawkweed (*Hieracium aurantiacum*)
10. Purple loosestrife (*Lythrum salicaria*)
11. Kudzu (*Pueraria lobata*)
12. Gorse (*Ulex europaeus*)

# GARLIC MUSTARD

*(Alliaria petiolata)*



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# GARLIC MUSTARD

(*Alliaria petiolata*)

- **WHAT TO LOOK FOR**

- garlic-like odor when leaves are crushed
- hook shaped tap-root
- Small white four petaled flowers

- **WHEN TO LOOK**

- Most easily recognized in the spring when second year plants are in bloom.

- **WHERE TO LOOK**

- forest understory, shaded roadsides, urban areas, riparian areas, along hiking trails, and on agricultural lands.



# FALSE BROME

(*Brachypodium sylvaticum*)



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# FALSE BROME

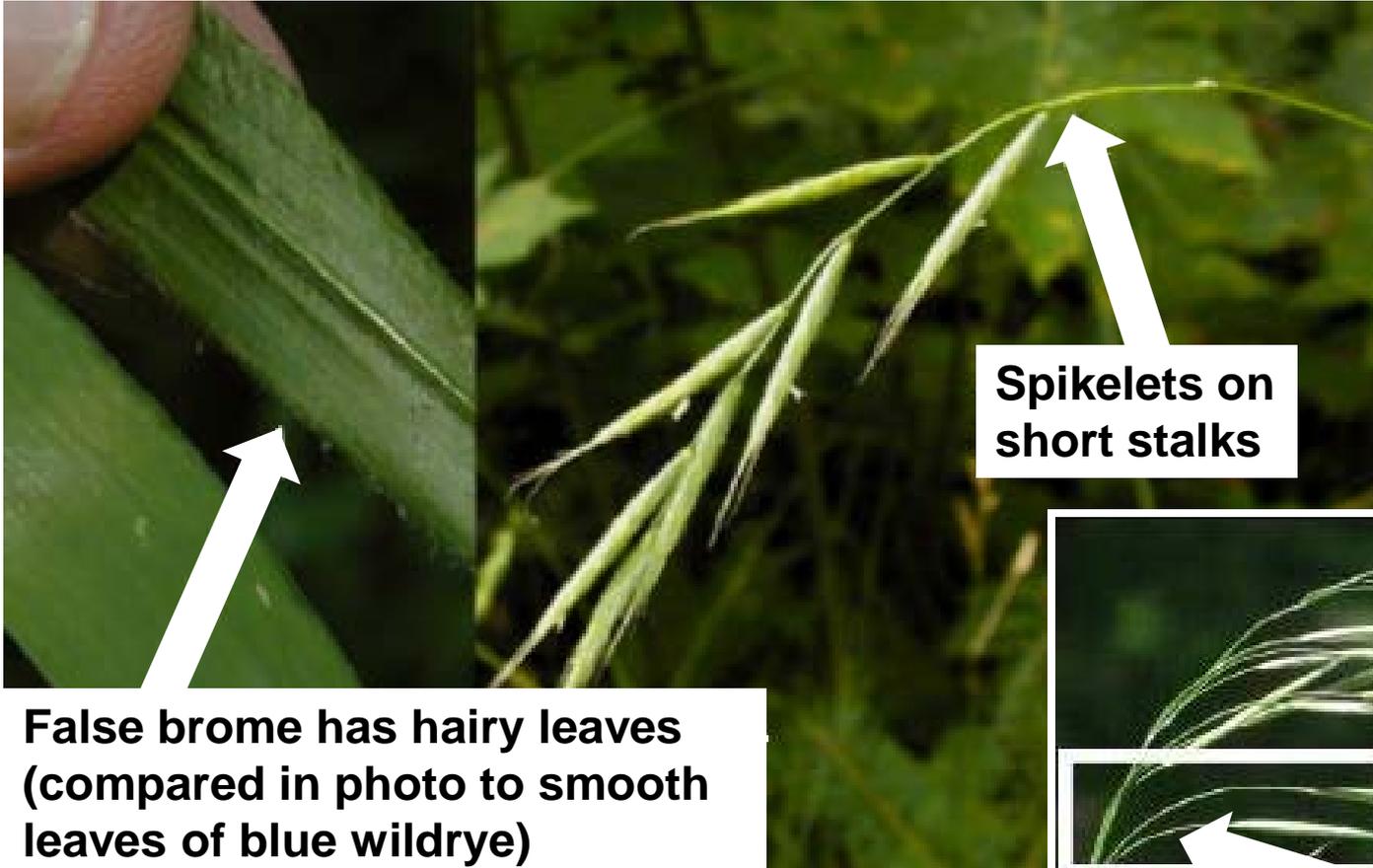
(*Brachypodium sylvaticum*)



- **WHAT TO LOOK FOR**
  - Hairy leaves
  - Spikelets on short stalks

# FALSE BROME

(*Brachypodium sylvaticum*)



**False brome has hairy leaves  
(compared in photo to smooth  
leaves of blue wildrye)**

**Spikelets on  
short stalks**



**Spikelets  
stalked**

# FALSE BROME

(*Brachypodium sylvaticum*)



## ● WHAT TO LOOK FOR

- Hairy leaves
- Spikelets on short stalks
- Chartreuse-colored squatty bunches

## ● WHEN TO LOOK

Throughout the year

## ● WHERE TO LOOK

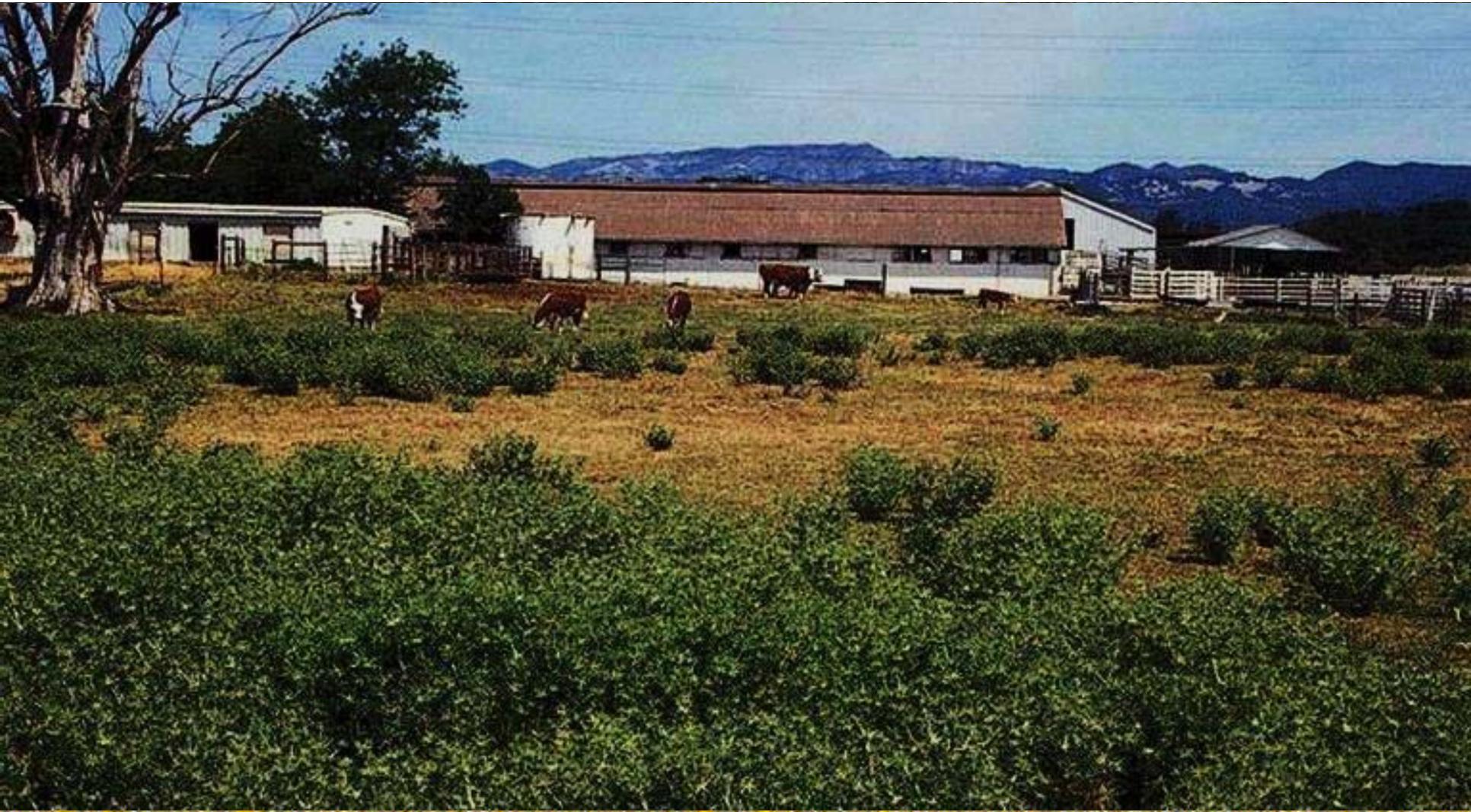
- False brome grows primarily in coniferous forest understory, but is also invading riparian forests, forest edges, and upland prairies.

# YELLOW & PURPLE STARThISTLE

(*Centaurea solistialis* & *C. calcitrapa*)



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# YELLOW & PURPLE STARHISTLE

(*Centaurea solistialis* & *C. calcitropa*)

## ● WHAT TO LOOK FOR

- Yellow Starthistle
  - Yellow flowers & sharp spines
  - White cottony hairs on stems and leaves
  - Winged stems
- Purple Starthistle
  - Purple flowers & sharp spines
  - White cottony hairs on stems and leaves
  - Rosettes will have a ring of thorns at the center

## ● WHEN TO LOOK

- Throughout the year, flowering occurs July through August

## ● WHERE TO LOOK

- Grows in grasslands and pastures, edges of cropland, roadsides, and disturbed areas.



# SPURGE LAUREL

(*Daphne laureola*)



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**HEALTH WARNING:  
DO NOT TOUCH PLANTS  
WITHOUT PROTECTIVE  
CLOTHING!!!**

# SPURGE LAUREL

*(Daphne laureola)*

- **WHAT TO LOOK FOR**

- Leaves arranged spirally and cluster at the shoot tips.
- yellow-green, bell-shaped flowers that emit a honey-like fragrance.
- Green berries that ripen to dark purple or black.

- **WHEN TO LOOK**

- It is found year-round, blooming March - May.

- **WHERE TO LOOK**

- Forest understory, parks, yards, and gardens



# GOATSRUE

(*Galega officinalis*)



# GOATSRUE

(*Galega officinalis*)

## ● WHAT TO LOOK FOR

- Herbaceous shrub 2-6 ft in height
- Pinnately compound mucronate leaflets
- No twining vines
- Hollow stems
- White to purple pea-like flowers

## ● WHEN TO LOOK

- Most easily recognized from June through early fall when plants are in full bloom.

## ● WHERE TO LOOK

- roadsides, urban areas, riparian areas, and gardens



# GIANT HOGWEED

(*Heracleum mantegazzianum*)





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**HEALTH WARNING:  
DO NOT TOUCH PLANTS  
WITHOUT PROTECTIVE  
CLOTHING!!!**

# GIANT HOGWEED

(*Heracleum mantegazzianum*)

- **WHAT TO LOOK FOR**

- Tall plant (10-15 ft).
- Large umbrella shaped flowers.
- Hollow stalks with red-purple blotches that have a single bristled hair in the center.
- Large (2.5-3ft wide) deeply incised leaves

- **WHEN TO LOOK**

- Look for flowers in May through July.

- **WHERE TO LOOK**

- Unmaintained urban areas, vacant lots, and areas near know establishments, roadsides, streams, rivers, and riparian areas.



# INVASIVE KNOTWEEDS

(*Fallopia japonica*, *F. sachalinensis*, & *F. × bohemica*)



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# INVASIVE KNOTWEEDS

(*Fallopia japonica*, *F. sachalinensis*, & *F. × bohemica*)

- **WHAT TO LOOK FOR**

- Tall clump forming plants 10 to 15 feet tall
- Flattened to heart shaped leaves
- Small White flowers
- Large bamboo-like stems

- **WHEN TO LOOK**

- It can be seen growing from spring to early fall
- Identified easiest while flowering in June – September

- **WHERE TO LOOK**

- It can be found in stream edges, roadsides, wetlands, and gardens,

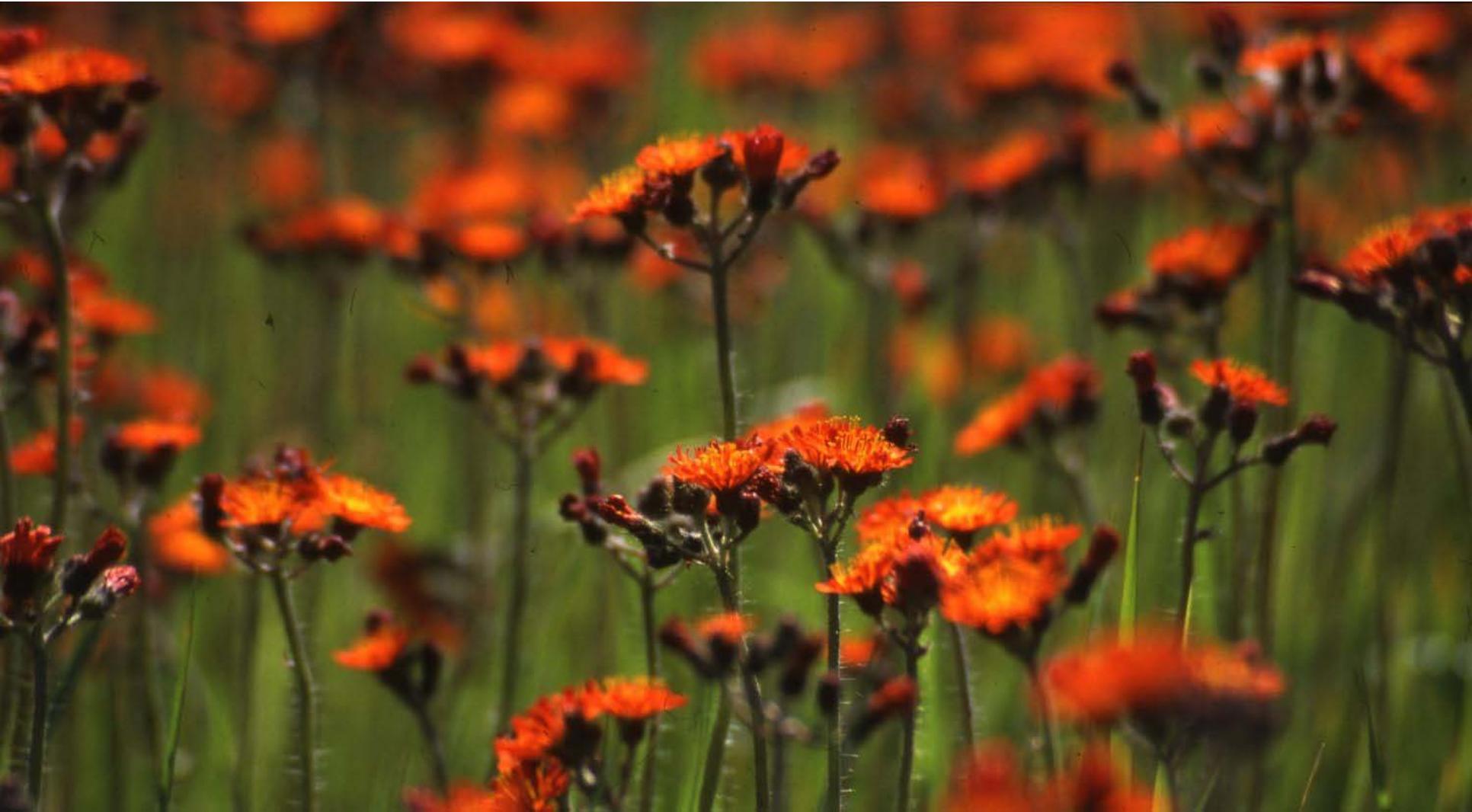


# ORANGE HAWKWEED

*(Hieracium aurantiacum)*



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# ORANGE HAWKWEED

*(Hieracium aurantiacum)*

- **WHAT TO LOOK FOR**

- Dandelion-like plants with multiple orange flower heads
- Bristly hairs located on the stems
- Stems are leafless
- Milky sap

- **WHEN TO LOOK**

- Hawkweeds can be found during their flowering period, from late May/early June through to September

- **WHERE TO LOOK**

- Open fields, mountain meadows, clearings in forest zones, and along roadsides.



# POLICEMAN'S HELMET

*(Impatiens glandulifera)*



# POLICEMAN'S HELMET

(*Impatiens glandulifera*)

- **WHAT TO LOOK FOR**
  - Tall annual plant reaching up to 10 feet in height
  - Shallow root system
  - Hood shaped white to purple flower with distinct spur at flower base
  - Powerful shooting seeds
- **WHEN TO LOOK**
  - It can be seen actively growing throughout the spring and summer months
  - Identified easiest while flowering in June – August
- **WHERE TO LOOK**
  - It can be found in wetlands, roadside ditches, river banks, and gardens,



# PURPLE LOOSESTRIFE

*(Lythrum salicaria)*



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# PURPLE LOOSESTRIFE

(*Lythrum salicaria*)

- **WHAT TO LOOK FOR**
  - Tall clump forming plants
  - Magenta flowers
  - Square Stems
- **WHEN TO LOOK**
  - It can be seen actively growing throughout the spring and summer months
  - Identified easiest while flowering in June – August
- **WHERE TO LOOK**
  - It can be found in wetlands, roadside ditches, river banks, and gardens,



# KUDZU

(*Pueraria lobata*)



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# KUDZU

(*Pueraria lobata*)

- **WHAT TO LOOK FOR**
  - Large climbing vine with velvety brown stems
  - Compound leaf with three fuzzy lobed leaflets
  - Pea-like flowers emerge in mid-summer and smells like grape
- **WHEN TO LOOK**
  - It can be seen growing through the spring and summer months
  - It flowers in late summer and early fall.
- **WHERE TO LOOK**
  - It can be found along roadsides, river banks, gardens, hedges, disturbed forest, or forest edges.



# GORSE

(*Ulex europaeus*)



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# GORSE

(*Ulex europaeus*)

- **WHAT TO LOOK FOR**

- Spiny evergreen shrub
- Yellow pea-like flowers
- Fuzzy seed pods on spiny stems

- **WHEN TO LOOK**

- Can be seen growing throughout the year, but flowers in late winter and early spring - February-April

- **WHERE TO LOOK**

- It can be found on disturbed sites, fields, pastures, riparian corridors, logged areas, and burned sites



# SO YOU THINK YOU HAVE FOUND ONE OF THESE WEEDS?

- Double check the identification
- Record the size of infestation
  - How many feet wide and long
  - Estimate the number of plants
- Record a written description of the plant
  - Flower color
  - Leaf shape
- Take a photo
  - Take a close-up of the flower
  - A close-up of the leaf
  - Include another object for scale
- Record locations on a map or collect GPS points

**REPORT!**



# WHERE TO REPORT?



## Help stop the spread of invasive species in Oregon

Think you've found an invader?

Have you seen something suspicious in your backyard or neighborhood? Are you having trouble identifying something you've found? Report potential invasive species you've found to the Online Hotline. Your submission will provide vital early detection information to the experts working to stop the next invasion before it starts.

There are three easy steps you can take to get involved:

**Learn** - Familiarize yourself with the potential invasive species in the areas where you live or visit frequently. Get started with [the Silent Invasion Quick Guide](#) or the [GardenSmart Oregon booklet](#) (download a PDF copy).

**Look** - Wherever you are - hiking in the forest, on a fishing trip or digging in your garden - keep your eye out for unusual animals or plants that you have never seen before and be prepared to take a picture and document your find.

**Report** - Use the Online Hotline to report your find.

[Tips for finding and reporting potential invaders >>](#)

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## Report an Invader

If you spot a potential invasive species in Oregon, use our online form to report it. Or call our toll-free number 1-866-INVADER.

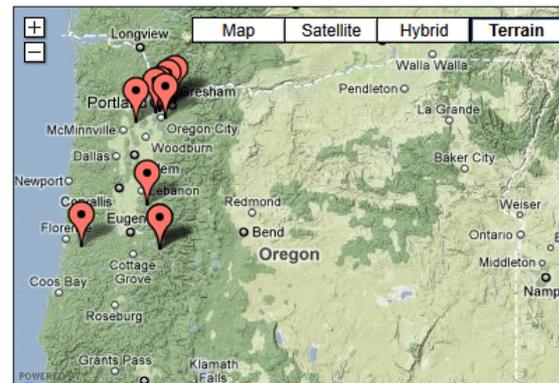
[Report Now](#)

[Tips for reporting >>](#)

## Where Have the Invaders Been Found?

Browse the map to find the ten most recent Hotline Reports. Click on the icons to read more. Or use the search tools to explore the full database of Hotline Reports.

[Search Hotline Reports >>](#)



<http://www.oregoninvasiveshotline.org>

# INCLUDE THE SPECIES, LOCATION, SIZE, AND YOUR CONTACT INFORMATION

Identification

[Need help?](#)

SELECT A SPECIES TYPE (REQUIRED):

DO YOU HAVE A PHYSICAL SPECIMEN?

PLEASE PROVIDE A DESCRIPTION OF YOUR FIND

 [Add an image](#)

DO YOU HAVE ADDITIONAL QUESTIONS FOR THE INVASIVE SPECIES EXPERT WHO WILL REVIEW THIS REPORT?

# WHEN YOU REPORT A PRIORITY INVASIVE WEED VIA THE HOTLINE...



- You will be notified by email verifying that your report has been submitted
- Your report will be examined and verified by a invasive species expert
- You will receive an email explaining the findings of the expert
- A plan will be developed to control the species as soon as possible
- ***Control and assistance will differ by location depending on local priorities and resource availability.***



# DEVELOPING A PLAN



- There is no “one size fits all”
- To achieve success an invasive species management plan must consider..
  - The current use of the site
  - Site specific details that may affect implementation
  - Long term management considerations
  - The ecology of the invader
- Use Integrated Pest Management (IPM) strategies



*False Brome*

# INTEGRATED PEST MANAGEMENT



*Integrated Pest Management (IPM)* utilizes multiple control practices

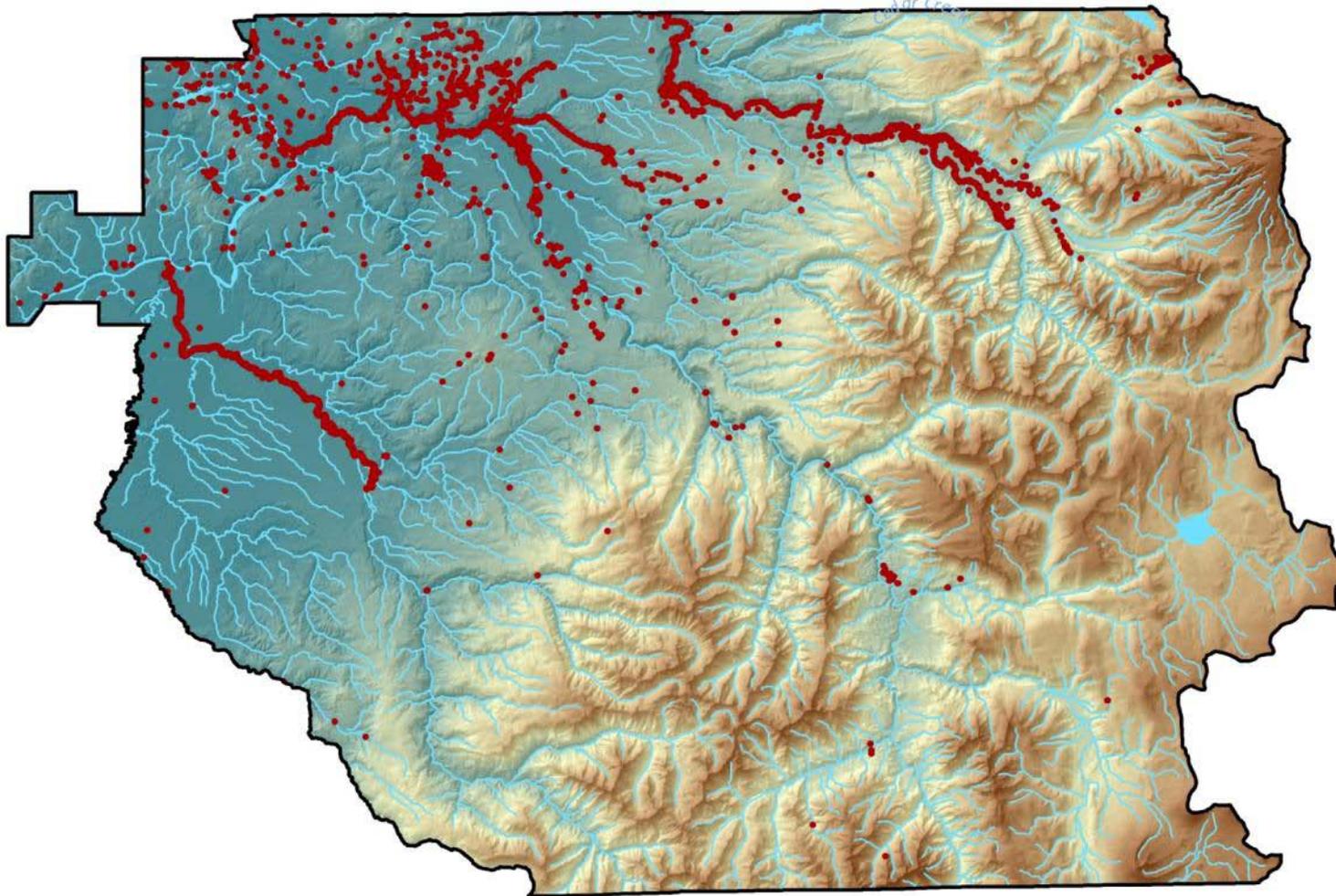
- Cultural techniques
- Manual and Mechanical control
- Biological control
- Chemical control methods

IPM practices...

- Provide more effective results
- Reduce the use of herbicides over time
- Prevent the development of resistant weeds



# PRIORITY WEEDS WE ARE CURRENTLY TRACKING



Good Dirt Clean Water

# ***THANK YOU FOR LISTENING!***



*“an ounce of prevention  
is worth a pound of cure.”*

