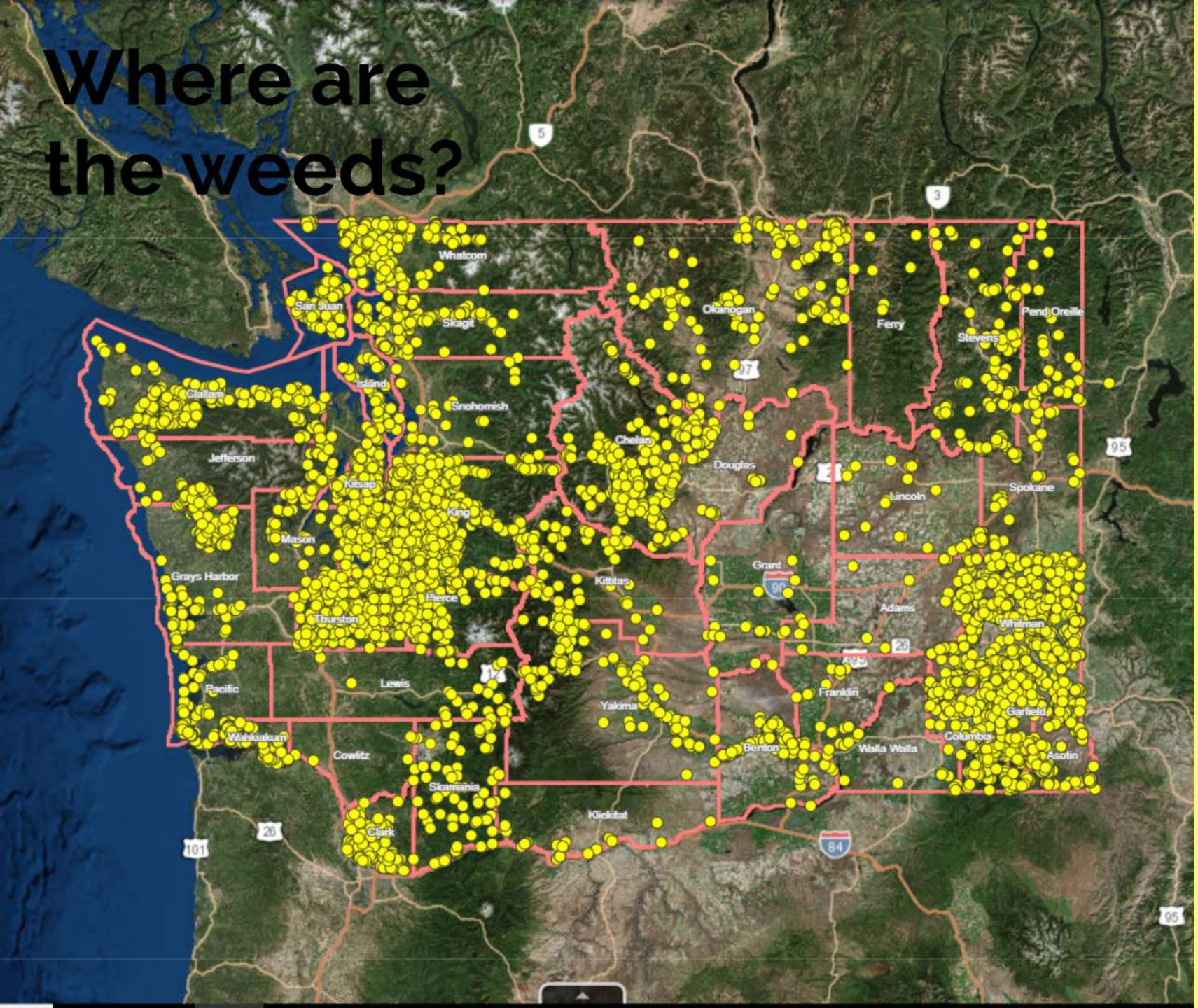
Know your weeds! Noxious weeds of Washington state and how to control

By Seth Luginbill
Program Coordinator
Island County Noxious Weed Control Board

Where are the weeds?



The Basics

Island County Weeds

Managing your weeds

What are noxious weeds?

Noxious weeds are undesirable non-native plants that have economic, ecological, or aesthetic implications. They are often highly destructive and extremely competitive with native flora, making them very difficult to control.

Three classes in Washington state law:

Class A - **Regulated**; Eradication legally required. Highest priority due to potential impact. Limited distribution

Class B - **Regulated**; Control legally required (i.e. suppression of seeds, limiting infestation to current physical boundaries). Consists of weeds that are local priority but still limited in distribution to certain areas.*

Class C - **Non-regulated**: Control or eradication strongly reccomended. No legal requirements. Widespread in distribution throughout the state.*

* Some class B weeds can be non-regulated (undesignated) if spread is too rampant (i.e. Scotch broom) and some Class C weeds can be regulated (designated) for control by county noxious weed control board (i.e. Canada thistle and Bull thistle)

Island County weeds

Amount of weed disposed in Island County:

2017 - 74 tons
2018 - 84 tons
2019 - 80 tons
2020 - 94.5
2021 - 74.5 tons
2022 - **112 tons**

Island County has 72 noxious weed species present (10 Class A weeds, 33 Class B weeds, 29 Class C weeds)

Island County Noxious Weed Control Program

Who are we and what do we do:

We help consult and guide land owners in developing feasible managment plans to help achieve compliance of Noxious weed law (RCW 17.10)

Provide education and teaching about noxious weeds

Conduct physical control work along IC ROW's and other county owned properties (County parks, preserves, etc)

Regulatory action: Notify non-compliant landowners of violation of state law.

Impacts of noxious weeds

Economic:

In 2016 study came out saying that invasive species cost washington state residence over 286 million dollars in direct costs.

Decreases in Crop Yields

Loss of Livestock

Decrease in wild animal stocks

Ecological:

Fire Hazard (Scotch broom, Gorse)

Loss of Biodiversity (Garlic Mustard, Yellow Archangel)

Loss of Habitat (Hairy Willow Herb, Shiny geranium)

Health:

Toxic species (Poison Hemlock, Giant Hogweed)

Toxic Invaders

Invasive but not noxious!

Aquatic Invaders

Island County Terrible Ten!

For the Pets

Terrestrial Invaders

The Terrible Ten (Terrestrial Invaders)

Yellow Archangel (Lamiastrum galeobdolon) - Class B

Garlic Mustard (Allaria petiolata) - Class A

Scotch Broom (Cytisus scoparius) - Class B unreg.

Canada and Bull Thistle (Cirsium arvense and Cirsium vulgare) - Class C reg.

Terrible Ten (Aquatic invaders)

Common Cordgrass (Spartina anglica) - Class A

Japanese Knotweed (Polygonum cuspidatum) - Class B

Hairy Willow Herb (Epilobium hirsutum) - Class B

Terrible Ten (Toxic Invaders)

Spurge Laurel (Daphne laureola) - Class B

Poison Hemlock (Conium maculatum) - Class B

Tansy Ragwort (Jacobaea vulgaris) - Class B

Top Ten weeds **not** on noxious weed list

Horsetail (Equistem spp.)

Stinging Nettle (Urtica dioica)

Creeping Buttercup (Ranunculus repens)

Curly Dock (Rumex crispus)

Yellow Bush Lupine (Lupinus arboreus)

Bracken Fern (Preridium aquilinum)*

Bachelor's Button (Centuraea cyanus)*

Creeping Jenny (Lysimachia nummularia)*

Periwinkle (Vinca minor)*

English Holly (Ilex aquilfolium)*

* Species on the Monitor List

What about the pets?

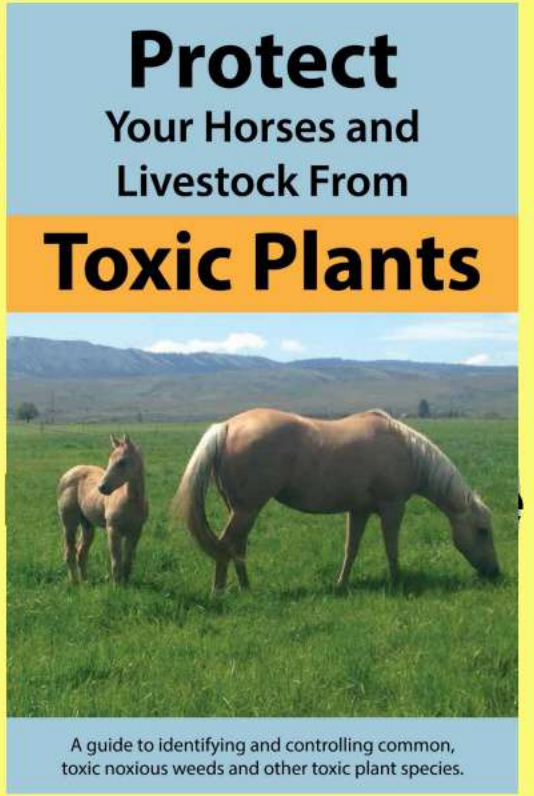
In addition to our toxic species Many additional species represent a danger for our pets.

Many common ornamental and native plants have toxicity for pets.

Ex. Italian Arum, Daffodils, Hyacinth, Nightshades, Rhododrendrons, Tulips, Hydrangeas, buttercups

An extensive list available on the ASPCA website

Want to focus in on three common plants that are increasing on our radar: Foxtail grass, Cheat grass and Houndstongue



Foxtail grass (Setaria spp.)

Annual grass in the Poaceae family.

Awns can become lodged in the feet of dogs causing severe inflamation and pain for dogs

Strategic mowing to elminate seed production easiest means for large infestations

Control of foxtail can be done manually or using a grass specific herbicide. Application should occur in spring.

Best prevention measures is to check dogs for awns during seed production.

Cheatgrass (Bromus tectorum)

A nonnative annual winter grass. Long awns, Self fertile, Spread only through seeds.

SImilar to Foxtail grass can become lodged in feet and in some cases if inhaled can cause punture of lungs and severe respiratory distress.

Also a concern as it can increase fire hazard at a site.

Houndstongue (Cynoglossum officinale)

biennial or short-lived perennial that begins as a rosette the first year and then produces stems that grow 1 to 4 feet tall. It develops a taproot that is thick, woody, black and branching. All parts are covered with hairs.

flower in clusters at the ends up upper stems. Flowers are a dull reddish-purple to burgundy

Class B noxious weed. Mostly seen on the Eastern side of the Cascade but migrating over the mountains. King and Skagit county both have known infestations.

Toxic species to humans, pets, and livestock.

Methods of Control

Determine your Land use goals

Design your management plan to create sites for the species y...

Decide how much of each weed is acceptable on your site

Set yourself up to Succeed

Monitor your progress periodically

Adjust your Control methods as needed

Revegetate bare ground (with desirable plant species)

Resources

Managing weeds

Methods of Control

Proper Disposal

7 principles for effective invasive weed management plan

Techniques

Mechanical - Digging, pulling,

Cultural - Planting desirable species, tillage,

Chemical - Herbicides to target species

Biological - Insects or grazers

Mechanical

Cultural

Chemical

Biological

Mechanical

Digging

Hand Pulling

Sheet Mulching

Pros: Low cost option. When done correctly proven to be incredibly successful

Cons: Most labor intensive form of control edit

Cultural

- Seeding an area with desirable species

- Tilling up land to prevent weed establishment and exhaust seed bank

- Mowing at strategic times to exhaust weed nutrients.

- Prescribed burns on the landscape

Pros: Great for open areas and agricultural fields
Cons: Can require expensive infrastructure

Chemical

Herbicides (both synthetic and biological)

Can be tailored to combat specific plants

Pros: Helpful tool for really out of control populations. High success rate of control if applied correctly

Cons: Potential health concerns to non target species (native vegetation, human health)

Biological

Two Common Forms:

- Insects (prey upon different phases of plant growth. Seeds, foliage, roots)
- Grazers (Sheep, Goats, etc)

Excellent tool for hard to reach habitats (bluff slopes, sensitive habitats, and sites where accessibility restricted)

Limitations: Generally only utilized as a prevention and minimization tool. Will disrupt one element of the lifecycle but generally not enough to completely eradicate infestation.

Biocontrol

Biocontrol in Action!

Cinnabar moth eating tansy ragwort (Jacobaea vulgaris)

Puccinia punctiformis on Canada thistle (credit: invasive.org)

Goats grazing on Leafy Spurge (credit: Northwest goat grazers)

Disposal

Bag all noxious weed material when disposing.

All Island County solid waste facilities will take noxious weed material **free of charge**

1. Determine your Land use goals

Is the land to be used for wildlife habitat, feeding pollinators, forage production, recreational land maintenance, or for attractive home landscaping?

Design your management plan to create sites for the species you want and to help prevent weeds from invading. Remember that a whole spectrum of tools and techniques are available when it comes to weed management.

2. Decide how much of each weed is acceptable on your site

be sure to control those noxious weeds as necessary by law

Are there some weeds that can serve in some habitat function or other purpose while controlling (ex. maintaining a Himalayan blackberry patch)

3. Set yourself up to Succeed

Divide large noxious weed infestations into sections. Limit the size of the area you work on to something that is manageable and then target a new area. Small wins go a long way.

4. Monitor your progress periodically

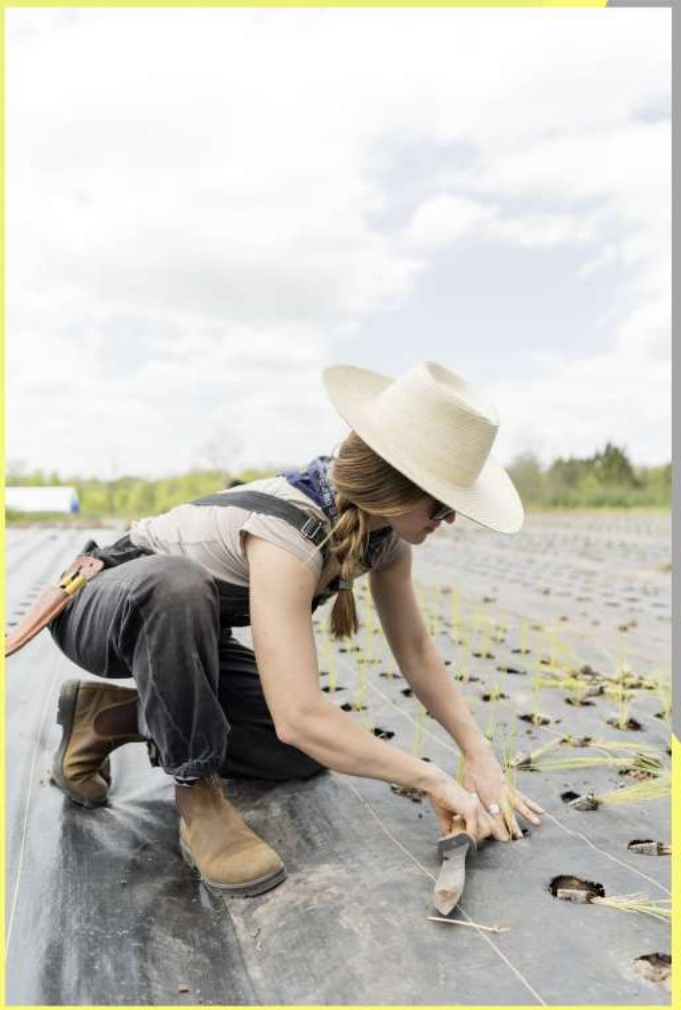
Are noxious weeds decreasing, new weeds appearing, and desired plants establishing. Taking pictures can help gauge progress, and comparing before-and-after pictures is rewarding!

5. Adjust your Control methods as needed

If unsure of where to go get more help from your county weed board if you don't think you are making enough progress.

Our program currently offers consultations for landowners on their infestations; we have a weed wrench rental program in place, and assistance for those landowners who might have physical or financial limitations in performing required control work.

7. Revegetate bare ground (with desirable plant species)



Utilize natives if possible or pick species that serve functional roles in the habitat.

REVEGETATION GUIDELINES:
Considering Invasive and Noxious Weeds

By Noelle Orloff[1], Monica Pokorny[2], Jane Mangold[1], Jerry Marks[3], Bryce Christiaens[3], and Steffany Rogge[3]

[1] MSU Department of Land Resources and Environmental Sciences
[2] United States Department of Agriculture Natural Resources Conservation Service
[3] Missoula County Department of Ecology and Extension

A photo of a hillside covered with arrowleaf balsamroot in bloom.

MONTANA STATE UNIVERSITY | EXTENSION

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

MISSOULA COUNTY DEPARTMENT OF ECOLOGY & EXTENSION

EB0242
New November 2022

Additional Resources

Island County Noxious Weed Control Board

http://www.islandcountywa.gov/Health/DNR/Noxious-Weed/Pages/Home.aspx

Island County Facebook page

https://www.facebook.com/islandcountynoxiousweedprogram/

State Noxious Weed Control Board

http://www.nwcb.wa.gov

Washington Invasive Species Council

Apps. for phones that you can record invasive species infestations.
https://invasivespecies.wa.gov/report.shtmlk

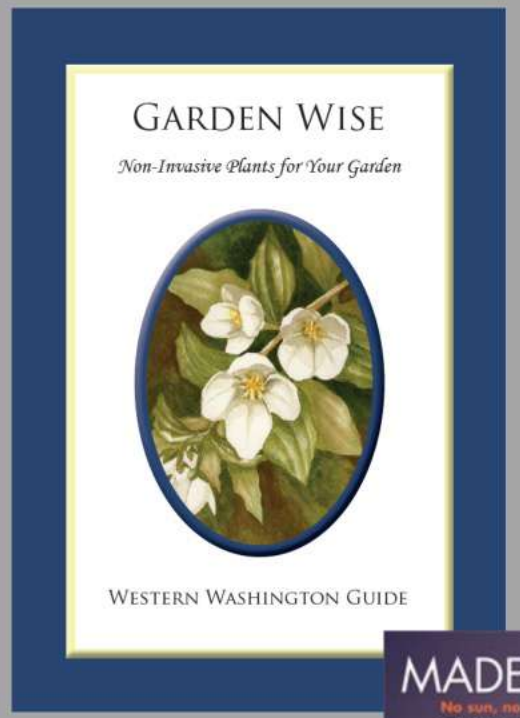
WEED'EM AND REAP™
CONTROL NOXIOUS WEEDS
PROTECT OUR RESOURCES

More Resources

Planting guides and resources:

GardenWise Online - https://www.nwcb.wa.gov/gardenwise-western

Great plant picks- http://www.greatplantpicks.org/



SOUND WATER STEWARDS PRESENTS

SOUND WATER STEWARDS
of Island County, WA

KNOW YOUR WEEDS

Noxious Weed Workshop

with

Seth Luginbill, Noxious Weed Coordinator

Island County Noxious Weed Control Board

3-11-2023
Greenbank Farm
765 Wonn Rd,
Whidbey Island
10:30 to 12:30

Do you know the law?
It is the responsibility of all landowners to control noxious weeds on their land(s). Let us help you learn how.

FUTURE WORKSHOPS & WORK PARTIES

- 4-14-23 - Poison Hemlock
- 6-23-23 - Tansy Ragwort
- 8-11-23 - Thistle

SCAN TO REGISTER

soundwaterstewards.org

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