Watershed Events

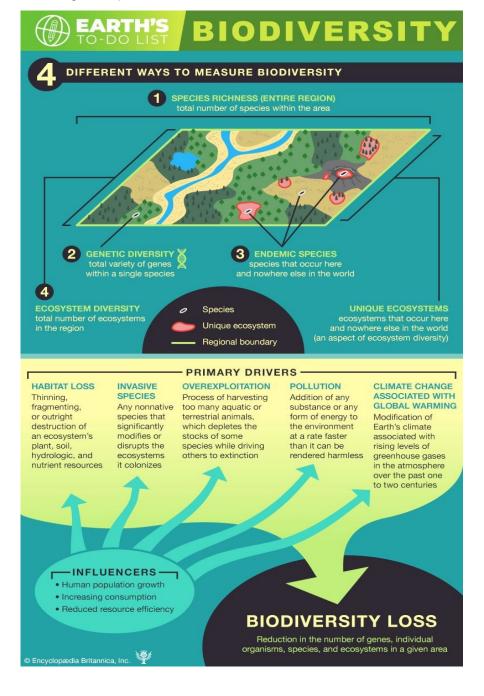
Glenn and Gibson Creeks Watershed Council Spring 2022



Biodiversity: What is it and Why Do We Care?

Wikipedia defines Biodiversity as the biological variety and variability of life on Earth. Biodiversity is a measure of variation at the genetic, species, and ecosystem level. Wikipedia also cites a UN report that 25% of all plant and animal species are threatened with extinction as a result of human activity.

This issue of <u>Watershed Events</u> takes a look at invasive plants, one of the main drivers of biodiversity loss, along with reporting protocols and suggestions about controlling their spread.





IN THIS ISSUE:

- The importance of Biodiversity
- Threats to Biodiversity
- Profiles of four invasive species by the Western Invasives Network (WIN)
- English Ivy
- Shiny Geranium
- Tansy Ragwort
- Lesser Celandine

For more information about WIN

http://

www.cascadepacific.org/ western-invasives-network





**********NOXIOUS WEED ALERT*******

English Ivy

For nearly as long as Europeans have been in North America, English ivy (*Hedera helix*) has also been present. Unfortunately, it quickly escaped cultivation in western Oregon and has had dramatic impacts on our forests and natural areas that seem to provide the perfect habitat for the aggressive, creeping climber.

Why is it a problem?

Like many ivies, English ivy is extremely shade tolerant. The forests of western Oregon provide a greenhouse-like environment for English ivy to explode, and it does, robbing water and sunlight from native plants.

English ivy can create monocultures on the forest floor. These monocultures modify the habitat composition and stratification, pushing out native flora and fauna that are crucial to the ecosystem services provided by the landscape.

As plants mature and grow, they require even more resources and begin to search for sunlight by climbing trees. Eventually the ivy reaches the canopy. Now competing for resources at every level, even the mighty trees are eventually no match for the stress of an ivy invasion. Mid-canopy and understory habitats are further modified as these canopy infestations reduce solar exposure.

What Can You Do?

Manual removal is typically the most successful approach, however, it can be very time consuming and costly. Ivy on trees should be cut at least 6 feet up from ground level when doing overstory control.

English ivy has a very waxy coating on the leaves, hindering herbicide application. That said, a combination of manual, mechanical and chemical controls can be very effective when timed properly. Be careful, as the ivy will often be intertwined with desirable native vegetation. ALWAYS follow the label.

For more Best Management Practices, please check out these resources:

OSU EXTENSION- English Ivy Forum

The Western Invasives Network is asking for your help in identifying populations of English Ivy in Oregon.

How Do I Report English Ivy? Report Online at:

https://oregoninvasiveshotline.org/

-or-

Contact your local CWMA



English ivy has taken over this understory in Clackamas County. Soon, this infestation will rise high into the canopy. (Photo: Thaddeus Niebel)



A mature English Ivy in full fruit. The seeds in these berries are readily dispersed by small animals and birds. (Photo: Jenny Meisel)





**********NOXIOUS WEED ALERT*******

Shiny Geranium

Shiny, or shining geranium (Geranium lucidum) is an invasive annual (biennial) in Oregon, and ODA B-List weed, that is rapidly invading forest understories throughout western Oregon and the Willamette Valley. Native to Eurasia and used medicinally across Europe, this accidental introduction has been wreaking havoc since the 1970's in Oregon.

Why is it a problem?

As is the case with many other invasive species, shiny geranium has the ability to rapidly displace native vegetation in forest understories. The normally resilient oak woodlands of Oregon have been hit especially hard. Not to leave any landscapes out, shiny geranium can be prolific in mixed-conifer forests, pastures and residential properties, too.

Shiny geranium flowers from April-June and shoots its seeds up to 20' away in late summer. These extremely viable seeds germinate in early fall, just as their neighbors begin to senesce and go dormant. By the following spring, the geranium will have formed a dense mat, inhibiting native species from growing. Understories in deciduous forests can be overtaken in just a couple seasons and large-scale control efforts have had limited success.

What Can You Do?

Prevention is always the best practice and this is especially true with shiny geranium. Limiting soil disturbance and bare soil is important in at-risk landscapes. Cleaning yard and recreational equipment is important to prevent seed transport.

If you are cleaning up a shiny geranium infestation, NEVER dump yard debris without thorough composting/solarization and never on public lands.

For more Best Management Practices, please check out these resources:

Columbia Gorge CWMA-BMP

King County WA Profile

The Western Invasives Network is asking for your help in identifying populations of Shiny Geranium in Oregon.

How Do I Report Shiny Geranium?

Report Online at:

https://oregoninvasiveshotline.org/

-or-

Contact your local CWMA



The lobed leaves of a shiny geranium glisten after a spring rain. Later in the year, these leaves will turn red. (Photo: Jenny Meisel)



Left unchecked, shiny geranium will quickly take over a suitable site. Unfortunately, it's not a very picky plant. (Photo: Jenny Meisel)





**********NOXIOUS WEED ALERT*******

Tansy Ragwort

Tansy ragwort (Senecio jacobea) is a common invasive weed in Oregon from the aster family. Tansy was introduced in the 1920's and quickly became a problem as thousands of livestock were killed by the toxic foliage in contaminated pastures and feed.

Why is it a problem?

Tansy is perfectly suited for Pacific Northwest land uses, preferring areas that have been disturbed by fire, grazing, logging and farming. This creates a nearly endless supply of vectors and makes coordinated control efforts difficult.

In addition to being highly toxic to livestock, tansy ragwort is an aggressive pasture invader and a prolific seed producer. Tansy displaces native species and decreases productivity of high value lands in Oregon.

Livestock tend to select away from tansy when a pasture is infested, however, this can ensure that the plants reach maturity if they're not managed otherwise. An unchecked population can quickly take over even the healthiest pastures.

What Can You Do?

If you have just a few plants, hand pulling before they set seed or digging up rosettes can be effective. Some chemical treatments are also effective. For larger populations, consult with your local SWCD. They can help you determine if biocontrol agents are present or arrange for biocontrol to be released on your infestation. If growing pasture for hay, be sure to keep tansy plants out of the finished feed.

For large infestations that are not on your own property, please use the reporting tools found below.

For more Best Management Practices, please check out these resources:

OSU Extension Info Page

TechLine Invasive Plant News

The Western Invasives Network is asking for your help in identifying populations of Tansy Ragwort in Oregon.

How Do I Report Tansy Ragwort?

Report Online at:

https://oregoninvasiveshotline.org/

-or-

Contact your local CWMA



The frilly rosette of tansy ragwort is easy to identify. The plant will spend its first year in this stage, hoarding nutrients to build its root system in preparation for flowering/seed production the next year. (Photo: Jenny Meisel)



Cinnabar moth caterpillars are an important ally in the fight against tansy ragwort. (Photo: Jenny Meisel)





**********NOXIOUS WEED ALERT********

Lesser Celandine

Lesser Celandine (*Ficaria verna*) is a perennial in the Ranunculus family. Native to Europe and Asia, lesser celandine was brought to North America as an ornamental and favored for its showy flowers, glossy leaves and early season emergence. There are historic medicinal uses as well.

Why is it a problem?

Lesser celandine is toxic and can be potentially fatal to grazing animals and humans. Equally problematic is the plants hardiness. Nearly 80% of the United States is considered suitable habitat and it can spread at a rate of up to 10 acres per year!

Established stands begin to form their vegetative mats in late winter, ensuring little competition when spring arrives and creating a dense monoculture. The above ground mat and the dense underground network of tubers make it exceedingly difficult for native plants, and even other ornamentals, to compete.

More recently, horticulturists have developed new varieties with different colored flowers. These varieties are equally invasive but more difficult to identify.

What Can You Do?

Lesser celandine can be difficult to eradicate once it is established due to its ability to propagate vegetatively. Take special care to

remove all roots and dispose of properly. Solarization of removed plants is a good practice before disposal.

Chemical treatments may be required for larger infestations and can be quite effective when timed properly. Please consult with your local SWCD or Noxious Weeds Dept. for quidance and always follow label directions.

For more info on lesser celandine:

ODA Profile

Invasive Plant Science and Management

The Western Invasive Networks is asking for your help in identifying populations of lesser celandine in Oregon.

How Do I Report Lesser Celandine? Report Online at:

https://oregoninvasiveshotline.org/

-or-

Call 1-866-INVADER

-or-

Contact your local CWMA



(541) 910-8769

The showy flowers make lesser celandine a popular spring garden plant. (Photo: Troy Abercrombie)



Lesser celandine can even displace dense, established lawns. (Photos: Troy Abercrombie)



Too Much Information?

Overwhelmed yet? The number and persistence of invasive species is daunting, to be sure, and this issue has only covered four weed species. Here are some conclusions and suggestions to consider:

Individuals can make a difference

Report populations of invasive weeds. WIN lists an email address to report invasive species. Your report helps track the incidence and prevalence of the invader. Report invasive species at https://oregoninvasiveshotline.org/

Pick the most troubling weed in your own yard and focus on that particular weed. English Ivy is a good place to begin due to the plants' ability to destroy biodiverse communities in so many ways. If you have English Ivy growing on your property, pull the vines down and uproot them. Discard the vines in the trash - not the big green recycling bin. Be on the lookout for regrowth or new starts and pull these immediately.

Plant a variety of natives to increase your garden's biodiversity. Think in layers and seasons. If your yard hosts high, midstory and low plantings that flower at varying times of the year, it provides cover and food for a variety of pollinators. In suburban neighborhood, one of the biggest monocultures is the prevalence of lawn. If you want a space with uniform low vegetation for a play area, eco-lawn mixes provide diverse plant species to create this effect.

To find out more about the Western Invasives Network www.cascadepacific.org/western-invasives-network



The City of Salem: making a difference

As part of the Mayor's Pollinator pledge, the City of Salem has begun to plant native plant gardens in Salem's parks. These photos are from the pollinator garden at Orchard Heights Park. This garden attracts a variety of pollinators including bees, butterflies, hummingbirds and finches.

Funds for the seeds and plants in the garden were provided by the Glenn and Gibson Creeks Watershed Council through donations to the Salem Electric Habitat Improvement Program (HIP).

Interested in participating in HIP?

https://glenngibsonwc.org/Site/docs/ HabitatImprovementProgramDonationForm.pdf



