

# ~ Willamette Valley ~ Invasive Plants



Himalayan Blackberry



Spotted Knapweed



Clematis



Yellow Archangel



Garlic Mustard



English Ivy



Knotweed



Vinca



Purple Loosestrife



English Holly



Yellow Flag Iris



Reed Canary Grass



Canada Thistle



Lesser Celadine



Scotch Broom

## WHAT MAKES A PLANT INVASIVE?

Invasive plants have been introduced into an environment in which they did not originate. They have no natural predators, grow and reproduce easily and are able to thrive in a wide variety of conditions. These characteristics allow plants to invade new habitats and out-compete native plants.

### HABITAT:

Dense thickets of invasive plants limit native plant diversity, which reduces food and shelter for wildlife. Invasive plants are the second leading cause of species extinction.

### WATER QUALITY:

Many invasive plants have shallow root systems that provide limited erosion control. Invasive plants also shade out seedlings, resulting in fewer trees. Less shade creates higher water temperatures, reducing oxygen for fish and other aquatic species. Reduced tree cover also reduces stormwater interception.



## INFORMATION RESOURCES

### WEBSITES:

- **Center for Invasive Species Management**  
[www.weedcenter.org/resources](http://www.weedcenter.org/resources)
- **National Invasive Species Council**  
[www.invasivespecies.gov](http://www.invasivespecies.gov)
- **Noxious Weeds lists and Photos**  
[www.invasive.org](http://www.invasive.org)
- **Oregon Department of Agriculture**  
[www.plants.usda.gov](http://www.plants.usda.gov)
- **Pacific Northwest Invasive Plant Council**  
[www.pnw-ipc.org](http://www.pnw-ipc.org)
- **Report Invasive Species online**  
[www.oregoninvasiveshotline.org](http://www.oregoninvasiveshotline.org)
- **Washington State Noxious Weed Board**  
[www.nwcb.wa.gov](http://www.nwcb.wa.gov)

### BOOKS:

- **GardenSmart Oregon** a guide to non-invasive plants at  
[www.portlandonline.com/bes/gardensmart](http://www.portlandonline.com/bes/gardensmart)
- **Weeds of the West** by Larry C. Burrill, Steven A. Dewey, David W. Cudney, B. E. Nelson, Tom D. Whitson
- **Field Guide to Weeds of the Willamette Valley** by the Institute for Applied Ecology. Copies available online at  
[www.appliedeco.org](http://www.appliedeco.org)
- **Northwest Weeds: The Ugly and Beautiful Villains of Fields, Gardens and Roadsides** by Ronald J. Taylor, Mountain Press Publishing Co.

### WORKSHOPS:

- **Naturescaping**
- **Rain Gardens 101 – Basics & Benefits**
- **Soil Health**

All workshops sponsored by the **Upper Willamette Soil & Water Conservation District (UWSWCD) and Natural Resources Conservation Service (NRCS)**. To schedule or register for an upcoming workshop or for more information on backyard conservation, call us at 541-465-6443 x 102.

Thank you to the numerous agencies and organizations that provided resource information and grant funds that made this possible.



## REMOVING INVASIVE PLANTS

Manual and mechanical removal is best for small patches of invasive plants. Infestations of more than half an acre may require mechanical methods combined with other weed control techniques. Invasive plants can reproduce from roots and underground stems (rhizomes), which must be removed for effective control. Removal is most effective when the soil is moist, but be careful not to disturb any nearby native species.

**Canada Thistle** – Cut back or dig out before plant goes to seed.

**Clematis** – Cut vines from tree canopies and dig up roots at the base of the vine. Tracing the vine back to the basal clump is easier in winter. For older plants too large to dig, a cut stump herbicide treatment may control re-sprouting from the base.

**English Holly** – English Holly has the same issues as the ivy, in that the entire root system must be removed, or the plant will grow back. Removal is best done when the soil is moist. This plant also reproduces from cut stem fragments, so do not leave the cut stems on the ground.

**English Ivy** – Removing berries prevents birds from spreading seeds. Pulling ivy and removing roots is effective for small areas. Repeated pulling may be necessary. Cut vines all the way around a tree trunk to 4.5 feet from the ground to kill ivy in the upper branches. Clear ivy from a six-foot radius around the base of trees.

**Garlic Mustard** – Be careful to remove the upper portions of the roots along with the stem. Buds grow in the top segments of the root, so if not removed, additional stems can reproduce. To eliminate leftover roots with potential re-growth capabilities, try to remove all of the plant roots.

**Himalayan Blackberry** – Hand pull, cut or mechanically remove the canes, then dig out the roots. Even very small root fragments can re-sprout as new plants.

**Knotweed** – Knotweed reproduces from rhizomes, which must be dug up for effective control. Mowing and cutting are not sufficient. This plant also reproduces from cut stem fragments, so do not leave the cut stems on the ground.

**Lesser Celadine** – Due to its short life cycle, the window of opportunity for controlling this plant is very short but can be accomplished with persistence using methods that are appropriate for the site and size of infestation. For small infestations, it may be pulled up by hand or dug up using a hand trowel or shovel. It is very important to remove all bulblets and tubers; they must be bagged up, removed from the site and disposed properly in a landfill or incinerator.

**Purple Loosestrife** – This plant reproduces from root fragments so the entire root system must be removed. Pull plants before seeds set because each plant can produce 100,000 seeds.

**Reed Canary Grass** – Reed Canary Grass is difficult to control due to its persistent rhizome/seed system. Isolated plants or small infestations of RCG can successfully be removed by digging out and removing the entire root mass. Removal is easiest when the soil is moist. Take care to remove all rhizomes and roots prior to flowering of the plant (June) to assist in the removal of the seeds that the plant also produces. Mowing is generally not effective in controlling RCG. Solarization or use of shade cloth can be effective but can also be very time and labor intensive.

**Scotch Broom** – Scotch Broom has its own issues with proper removal, due to the strength of its root system. Large Scotch Broom plants are hard if not impossible to pull up. These older plants do not tend to regrow when cut at the base. This technique also minimizes ground disturbance and subsequent seed stimulation. There is a specialized tool for removing large Scotch Broom from the ground. Seeds can survive for 50 years, so we like to remove the plant and seed.

**Spotted Knapweed** – The most effective control is early detection and removal of pioneering plants. Individual plants or small populations can be removed by digging or pulling, preferably prior to seed set. Gloves should be worn because of the possibility of skin irritation.

**Vinca** – Removing a vinca vine manually is easier to do when the soil is moist. Take a garden rake and run it through where the vinca vine is growing to loosen the plant from the ground. Then pull it up near the base of the plant and continue to pull until most of the roots come up. If you notice new growth appear later, pull it up again.

**Yellow Archangel** – Stems and roots tend to break off when pulled, which makes removing this plant very time consuming. Plants readily re-sprout from fragments left behind. For dense patches, sheet mulching or covering with weed cloth is recommended.

**Yellow Flag Iris** – Spreads by broken stem fragments and by seeds that float in water. All parts of this plant are toxic to humans and animals. Pull plants before seeds set.

Check [www.oregon.gov/OISC](http://www.oregon.gov/OISC) for updated information on invasive plant disposal methods. These are just a few of the hundreds of invasive plants affecting Oregon. For more information on weeds threatening our environment see **Information Resources**.