



Stop Invasive Weeds!

*A Landowner's Guide for Identifying & Controlling
Invasive Weeds In the McKenzie River Watershed*

Developed by The McKenzie Watershed Council

Why Control Invasive Weeds?



Weeds are not just in your backyard garden. When non-native species take root in places they do not belong, they crowd out native plants, harm animal habitats and increase erosion. Once established, non-native species are virtually impossible to eradicate, therefore they are called ***“invasive”*** species.

Most invasive plant species were brought here with the best of intentions. Himalayan blackberries were a source of food, and English ivy was brought in as a ground cover. Until very recently Scotch Broom was sold at garden centers as an ornamental (decorative plant), and Butterfly Bush can still often be found for sale at local plant nurseries. Currently, each of these invasive species are running rampant in Oregon, crowding out native plants and creating impenetrable barriers to livestock and humans alike.

All eight of the invasive weed species that are documented in this brochure are found within the McKenzie Watershed. Get to know these plants so you can easily identify them and work to control further advancement, as once established these plants become quite difficult to eradicate.

There are numerous ways to control invasive weeds. A couple of these control methods are the repeated mowing of the weeds and the removal of the weed roots by either pulling or digging. It's important to note, however, that regardless of the means by which you choose to control the weeds, ***the most crucial component in the weed control process is to “turn the tables” on the weeds by re-planting the area heavily with site appropriate native trees and shrubs.*** These newly planted trees and shrubs will work to outcompete the



weeds, primarily through their own growth, which eventually will exclude sunlight critical for weed growth.

It's also important to remember that the continued mowing of weeds will be necessary for a few years after the planting of native trees and shrubs in order to allow the native plants to thrive and not have to compete with the invasive weeds for water during the dry summer.



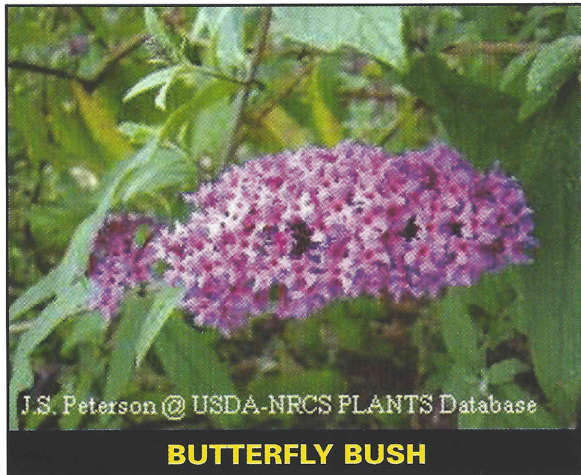
Develop a Healthy Riparian Area on Your Property

Streams and riparian areas develop together, each affecting the development of the other. Riparian habitat is a combination of three areas; aquatic, stream bank, and the transition between the bank and the upland area. Each is distinctive and contributes to the entire watershed ecosystem.

Riparian vegetation provides cover for aquatic and terrestrial animals. Shade created by the riparian vegetation moderates water and air temperatures. This vegetation also controls bank erosion, increases bank stability and limits water pollution.

By working to remove invasive weeds and replanting the area in native plants, shrubs and trees, you can contribute to the health of the McKenzie Watershed. If your land borders the river, or has a stream on it, consider developing a healthy riparian area. Healthy riparian areas benefit salmon, trout, wildlife and humans.

Invasive Weeds



Butterfly Bush

(*Buddleja davidii*)

This large shrub grows up to 8 feet tall, drooping branches have willow-like narrow grey-green leaves. Flowers are lilac to purple and form long clusters. Very fragrant, attracts butterflies for pollen, but cannot be used as a host plant. Displaces native plant species used by butterflies as a host plant. This plant is frequently used in landscaping, and spreads rapidly by seed.

To control, remove budding stalks during the flowering season. Pull all plant material including roots. This plant will resprout unless entire root is removed.

Replant with native species; Oceanspray, Red-flowering Currant, Nootka Rose, Western Mock Orange.

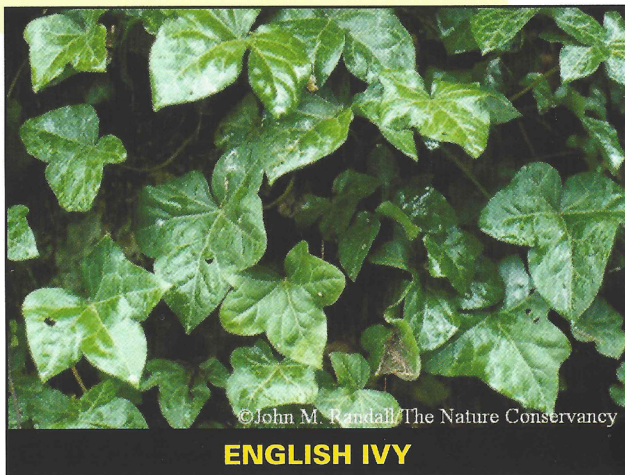
English Ivy

(*Hedra helix*)

Used in the past as a landscape ground cover, English Ivy has taken over Oregon. This is a trailing or climbing evergreen vine, leaves are leather, dark green and are 3-lobed heart-shaped. Flowers are small white umbrella-like clusters blooming in the fall. Forms dense mats with fine roots growing from the stems. This chokes out many seed and nut bearing plants that our songbirds need for food and cover.

To control, pull plants and remove the roots, which easily rolls up into a ball when pulling-up a huge area. If Ivy is climbing, cut roots at base of trees/structure, allow ivy to die off. Allow plant material to dry before composting.

Replant with native species; Twinflower, Wild Ginger, Piggyback Plant, Sword Fern, Coast Wild Strawberry.



Invasive Weeds

False Brome

(*Brachypodium sylvaticum*)

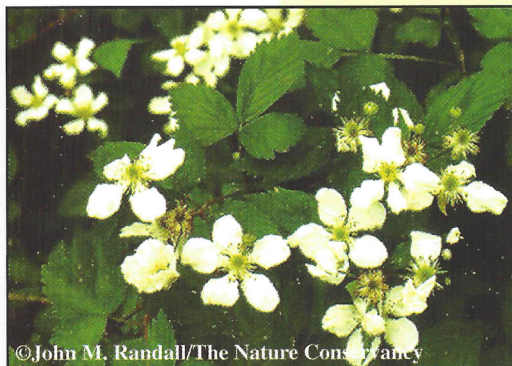
This grass is distinguished from other grasses by its hairy leaf edges and lower broad stems. The flower spikes droop, and leaves remain green through fall and first part of winter. This grass competes with native grasses and displaces Kincaid's Lupine (host plant for the endangered Fender's blue butterfly).

To control large areas, herbicides are most effective. Small patches can be pulled, but be sure to remove all roots. Prevention of spreading the seeds is most important. Seeds spread through hiking boots, bike and car tires and clothing.

Replant with native grasses, Sword Fern, Pacific Bleeding Heart, Large-leaf Lupine, Kincaid Lupine.



FALSE BROME



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HIMALAYAN BLACKBERRY

Himalayan Blackberry

(*Rubus discolor*)

This shrub is of the rose family, a robust evergreen perennial growing up to 20 feet tall, and forming dense thickets. Stems are thorny, flowers are white and produce large juicy blackberries.

To control pull stems during wet season, dig out root nodes. Persistent mowing or weeding is needed, performed 3-6 times over the course of the growing season. Keep cutting back resprouts. One of the best long-term solutions is shade. Blackberries love sunlight, so planting and maintaining shadetrees will stop or minimize their spread.

Replant with native species; Indian Plum/Osberry, Salmonberry, Snowberry, Red-osier Dogwood, Bigleaf Maple, Douglas-fir.

Invasive Weeds



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KNOTWEEDS

Knotweeds

Polygonum Xbohemicum (Bohemian)

Polygonum cuspidatum (Japanese)

Polygonum polystachyum (Himalayan)

Knotweeds are shrubs that can reach heights of 3-16 feet tall. Stems are hollow and look like bamboo. Large smooth-edged leaves range from an elongate triangle (Himalayan), oval (Bohemian), a heart shape (Japanese), to a huge elephant ear (Giant). Flowers range from white to green and grow in drooping clusters. Knotweeds often spread along rivers and streams during flooding. It can spread quickly and creates a dense thicket that completely clogs waterways.

To control, pull young plants, removing the root and all plant material. Do not compost these materials; tiny root fragments can produce new plants. Throw away in garbage cans or burnpile. Chemical control is most effective for large patches.

Replant with native species; Willow, Oregon Ash, Red Elderberry or Blue Elderberry.

Reed Canary Grass

(Phalaris arundinacea L)

This is a large, coarse perennial grass, has stems 2-15 feet tall. Leaf blades are flat and 1/4- to 3/4-inches wide. Plants are typically light green, often with sooty-gray hue, but may fade to straw-colored in late summer. Flowers occur in dense compressed panicles. Spreads by creeping roots/rhizomes, and forms thick mats. It quickly takes over wet areas and chokes waterways and often impedes high water flows. Wildlife have trouble nesting and finding food in areas infested with this grass.

To control, try a solarization method of tilling roots/rhizomes, then cover area with black plastic. Establishing shade will help control spreading.

Replant with native species; Willow, Red Alder, Western Red Cedar, Douglas-fir.



REED CANARY GRASS

Invasive Weeds

Purple Loosestrife

(*Lythrum salicaria*)

This plant grows 2-10 feet tall and up to 5 feet wide. Stem can be smooth to hairy, four sided and multi-branched. Leaves are 4 inches long, and opposite or whorled. It grows in clumps with tall purple flowers, five to seven petals that look wrinkled and crushed. This plant is taking over waterways. Once it has entered an area, Purple Loosestrife makes it difficult to fish and boat.

To control, pull young plants, removing the root, and all plant material. Remove budding stalks during the flowering season to stop seeding. Allow plant material to dry before composting.

Replant with native species; Red-flowering Currant, Willow, or Asters.



J.S. Peterson © USDA NRCS NPDC



SCOTCH BROOM

Scotch Broom

(*Cytisus scoparius*)

This perennial shrub of the pea family grows 3-10 feet tall. Green branches appear to be leafless or have small leaves, flowers are yellow with a brownish black seedpod. Unless controlled, Scotch broom with its prolific seed bank (seeds can survive in the environment for up to 80 years), forms dense brush fields, therefore diminishing habitat for grazing animals.

To control, pull the plant during wet soil conditions, plant will resprout unless entire root is removed. Remove flowers to prevent seeds from spreading.

Replant with native species; Serviceberry, Thimbleberry or Tall Oregon Grape.

What is a Watershed?

A watershed is an area of land that is drained by a distinct stream or river system, and is separated from other watersheds by ridgetop boundaries. The McKenzie Watershed comprises about 1300 square miles in Lane and Linn counties. Bounded on the east side by the crest of the Cascade Mountains, the McKenzie Watershed drains westward, following the path of the McKenzie River as it flows from Clear Lake to its confluence with the Willamette River just north of Eugene, Oregon.

This guide was developed by the McKenzie Watershed Council in partnership with:

- **Ferguson Foundation**
- **Oregon Watershed Enhancement Board**

Other contributors to this guide include:

- **City of Springfield**

If you'd like to find out more about invasive weeds, please visit these websites:

The Nature Conservancy
<http://tncweeds.ucdavis.edu>

Oregon Dept. of Agriculture
Noxious Weed Control Program;
http://www.ODA.STATE.OR.US/PLANT/WEED_CONTROL



What is the McKenzie Watershed Council ?

The McKenzie Watershed Council, established in 1993, brings together residents, organizations, industry, and government agencies to foster better stewardship of the McKenzie River watershed resources through voluntary partnerships and cooperation.