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
- National Invasive Species Council
  www.invasivespecies.gov
- Noxious Weeds lists and Photos
  www.invasive.org
- Oregon Department of Agriculture
  www.plants.usda.gov
- Pacific Northwest Invasive Plant Council
  www.nwip.org
- Report Invasive Species online
  www.oregoninvasiveshotline.org
- Washington State Noxious Weed Board
  www.nwcb.wa.gov

BOOKS:
- GardenSmart Oregon a guide to non-invasive plants at
  www.portlandonline.com/bes/gardensmart
- Weeds of the West by Larry C. Burill, 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
- 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
seed set.

Check www.oregon.gov/OJSC 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 threatens our environment
see Information Resources.