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GardenSmart Oregon

a guide to
non-invasive
plants





A gardener's dream

Oregon is a gardener's dream. Our varied climates and mild conditions allow us to showcase a wide variety of plants from around the world. In fact, nursery crops are Oregon's number one agricultural commodity.

Unfortunately, a few plants used in gardens and landscapes cause serious ecological harm by 'jumping the fence' and spreading elsewhere. These invasive plants can become serious problems that threaten water quality, wildlife and our economy by crowding out native plants, changing stream flows, increasing erosion, competing with crops or creating fire hazards.

This booklet offers gardeners and landscape designers many choices of plants that work for gardens while protecting the health and beauty of Oregon's natural lands and waters. We highlight plants that should be avoided because they are invasive, and offer non-invasive alternatives (both natives and non-native ornamentals) that you can safely plant instead.

We hope you will use this booklet as a guide to help you make the most informed choices for your garden, water garden or landscape. Enjoy your garden!

Quick definitions

Native (indigenous) plant: Present in the Pacific Northwest historically prior to European-American settlement.

Non-native (exotic, alien, introduced) plant: Brought to the Pacific Northwest by humans either deliberately or by accident.

Invasive plant: Thrives and spreads aggressively outside its natural range.

Ornamental plant: A non-native plant commonly sold and available in garden centers.

Weed: Casual term used for any plant that is undesirable in a given location.

Noxious weed: Plant listed by the state as "noxious" because it is harmful to agriculture, water resources or human health.

Regions of concern: Areas within Oregon where the plant is known to have invasive tendencies, or has a high probability of becoming invasive.

Cover photographs: center image © Mark Turner, remaining images from Environmental Services.

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GardenSmart Oregon is available as a downloadable file:
<http://oregoninvasiveshotline.org>

This publication is a project of the **Stop the Invasion** campaign: Oregonians taking action to protect our state from invasive species.



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GardenSmart Oregon

a guide to non-invasive plants



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What you can do

Every Oregonian can do something to safeguard what we love about our state - our pristine natural areas, healthy streams and lakes, abundant fish and wildlife, and working farms and ranches. The first step is to avoid purchasing, planting or growing invasive plants. By being part of the solution, you can help protect Oregon from invasive species.

- Use this guide to select non-invasive plants.
- Support nurseries and businesses that sell non-invasive plants.
- Don't trade plants with other gardeners if you suspect they may be invasive.
- Spread the word (but not the weed!) to your fellow gardeners.

If you already have invasive plants in your garden:

- Remove the invasives and replace them with suitable non-invasive plants.
- Dead-head (remove flowering heads and seeds) so plants do not release seed.
- Dispose of invasive plant materials by bagging and placing in the garbage (composting does not kill some plants and seeds).

About water gardens:

- Be sure your water garden is fully contained (not near creeks, natural ponds or areas prone to flooding).
- Do not dump pond plants (or animals such as fish, snails or turtles) into natural areas.
- Buy water garden supplies only from knowledgeable and responsible retailers.
- Inspect and rinse aquatic plants in tap water to remove unintended hitchhikers, such as snails and plant fragments.

For more information about invasive species and how you can prevent them, see the Resources section on page 52.

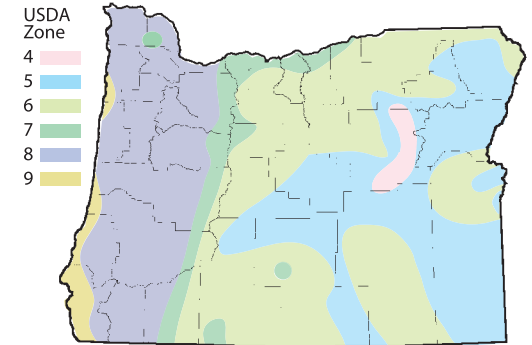
Guide to plant selection

Each plant is unique, not only in how it looks, but also in the growing conditions it requires. There are no exact substitutes for invasive plants, so check the characteristics of any alternative you are considering to ensure it will grow in your situation.

Many invasive plants can grow in a wide variety of challenging conditions. For example, English ivy is both a groundcover and a vine, grows in both full sun and full shade, tolerates drought, and is hardy down to about -20° F. Suitable replacements need to fit your specific circumstances. Creeping juniper might be a good replacement in full sun, but Barren strawberry would be a better option in shade.

USDA hardiness zones

USDA hardiness zones are based on a single factor: average minimum temperature. Lower numbered zones experience lower temperatures, so plants must be tougher to survive there. Choose alternatives with a USDA zone equal to or lower than the zone where you live. For example, in Zone 7, a Zone 5 plant may be fine, but a Zone 8 plant probably won't survive the winter.



USDA zones do not account for other conditions such as moisture and light, so keep that in mind when choosing alternatives. Some of our recommended plants may be suitable only in western, eastern or southern Oregon, but not throughout the entire zone.

Your local nursery can help you select the best alternatives for your location.

Symbols used in this booklet

🌲 evergreen 🍃 deciduous

☀️ full sun 🌞 partial sun ● shade

💧 wet 💧 moist but drained 💧 moderately dry 🚫 drought tolerant

Brooms and Gorse

Scotch (Scot's) broom - *Cytisus scoparius*, Portuguese broom - *C. striatus*, Spanish broom - *Spartium junceum*, French broom - *Genista monspessulana*, Gorse - *Ulex europaeus*

Habitats Invaded:

Grasslands, prairies, pasture and rangelands, roadsides, cut-over forest lands and sand dunes. Brooms and gorse both change soil nutrients and create fire hazards.

Region of Concern:

All of Oregon

Identification:

- Shrubs to 6 ft tall with green stems, small, inconspicuous green leaves and, pea-like yellow flowers
- Portuguese broom has pale yellow flowers and fruit pods that are densely white-hairy
- Gorse has distinctive 1 inch long thick spines

Things You Should Know:

- Over 12,000 seeds can be produced by each mature shrub
- Seeds can survive in soil up to 50 years
- Adds nitrogen to soil and provides highly flammable fuels for wildfires
- Flowers and seeds are toxic to humans and most livestock



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Alternatives

NATIVE PLANTS



© Environmental Services

◀ Tall Oregon grape
Mahonia (Berberis) aquifolium

USDA

Zone 5   

Mountain mahogany - *Cercocarpus ledifolius*

Zone 4   

Golden currant - *Ribes aureum*

Zone 4   

Mock orange - *Philadelphus lewisii*

Zone 4   

Blue blossom - *Ceanothus thyrsiflorus*

Zone 7   

ORNAMENTALS



© Mark Turner

◀ Forsythia hybrids
Forsythia x intermedia
Has fall color

USDA

Zone 5   

Winter jasmine - *Jasminum nudiflorum*

Zone 6   

Japanese kerria - *Kerria japonica*

Zone 4   

Hardy dwarf broom - *Genista lydia*

Zone 6   

Butterfly bush, Summer lilac

Buddleja (Buddleia) davidii, B. variabilis

Habitats Invaded:

Butterfly bush can form crowded stands along riverbanks and on cobbles, cut-over forest lands, pastures, and in open waste areas.

Regions of Concern:

Western Oregon, and spreading into the western slope of the Cascade Mountains

Identification:

- Shrub up to 10 ft tall with arching branches and dense clusters of showy flowers
- Flowers are 4-petaled, tubular at base, and white to pink to purple (sometimes with orange centers)
- Leaves are velvety, lance-shaped and gray-green in color

Things You Should Know:

- Spreads by broken stem fragments and by seeds that are dispersed by wind and water
- Flowers produce nectar that is attractive to butterflies and other insects



© Glen Miller - Oregon Dept of Agriculture



© Tom Forney, Oregon Dept of Agriculture

Alternatives




NATIVE PLANTS






© Linda McMahan - OSU Extension Service


◀ **Blue blossom**
Ceanothus thyrsiflorus

USDA
Zone 7   

Red-flowering currant - *Ribes sanguineum* Zone 5   

Mountain mahogany - *Cercocarpus ledifolius* Zone 4   

Mock orange - *Philadelphus lewisii* Zone 4   

Blue elderberry - *Sambucus cerulea* Zone 4   




ORNAMENTALS








© Linda McMahan - OSU Extension Service


◀ **Meyer lilac**
Syringa meyeri
Has fall color

USDA
Zone 3   

Eastern ninebark - *Physocarpus opulifolius* Zone 2   

Beautyberry - *Callicarpa americana* Zone 7   

Koreanspice viburnum - *Viburnum carlesii* Zone 5   

Weigela varieties - *Weigela florida* Zone 4   

English holly

Ilex aquifolium

Habitats Invaded:

English holly can occur in pristine to highly disturbed coniferous forests, in forest gaps, and along the edges of wetlands.

Regions of Concern:

Western and southern Oregon

Identification:

- Evergreen shrub or small tree to 20 ft tall
- Leaves are thick and spiny or prickly along the edges
- May bear bright red berries

Things You Should Know:

- Birds and small mammals use berries as a food source and disperse seeds
- Berries and foliage are commonly used for holiday decoration
- Berries are toxic to humans



© Leslie Winter-Gorsline - Environmental Services

Alternatives

NATIVE PLANTS






© Pat Breen - Oregon State University

◀ Pacific waxmyrtle
Myrica californica

USDA

Zone 7    

Tall Oregon grape - *Mahonia aquifolium*

Zone 5     

Red elderberry - *Sambucus racemosa*

Zone 6    

Hairy manzanita - *Arctostaphylos columbiana*

Zone 7    

Toyon - *Heteromeles arbutifolia*

Zone 7    

ORNAMENTALS



© Mark Turner

◀ Meserve hybrid blue holly
Ilex x meserveae cvs.

USDA

Zone 5     

Strawberry tree - *Arbutus unedo*

Zone 7     

Chinese holly - *Ilex cornuta*

Zone 7     

Holly oak - *Quercus ilex*

Zone 7     

False holly - *Osmanthus heterophyllus* 'Goshiki'

Zone 6     

European hawthorn, Oneseed hawthorn

Crataegus monogyna

Habitats Invaded:

Forests, riverbanks, oak woodlands, disturbed grasslands and pastures.

Regions of Concern:

Western and southern Oregon

Identification:

- Deciduous shrub or small tree to 15 ft tall with smooth, pale gray bark
- Leaves are 3-lobed, flowers are white and showy, dark red berries with one seed
- Branches with stout thorns up to 1 inch long

Things You Should Know:

- Birds consume berries and disperse seeds
- May interbreed with native Douglas hawthorn



© Piero Amorati - IC Croce-Caselecchio di Reno



© Pat Breen, Oregon State University

Alternatives

NATIVE PLANTS



© Environmental Services

◀ Western serviceberry


Amelanchier alnifolia

Has fall color


USDA

Zone 4    

Mock orange - *Philadelphus lewisii*

Zone 4    

Douglas hawthorn - *Crataegus douglasii*

Zone 5    

Suksdorf's hawthorn - *Crataegus suksdorfii*

Zone 7    

ORNAMENTALS



© Pat Breen - Oregon State University

◀ Lavelle hawthorn

Crataegus x lavellei

Has fall color

USDA

Zone 4    

Flowering crabapple - *Malus spp.*

Zone 4    

Green hawthorn - *Crataegus viridis* 'Winter King'

Zone 4    

Thornless cockspur hawthorn - *Crataegus crusgalli*

Zone 4    

Himalayan blackberry, Armenian blackberry

Rubus armeniacus, R. discolor, R. procerus

Habitats Invaded:

Himalayan blackberry can form dense impenetrable thickets in moist forests, riverbanks, near ponds, wetlands and drainage ditches. It is also common along roadsides, right-of-way corridors and can dominate range and pasturelands.

Region of Concern:

All of Oregon, especially western Oregon

Identification:

- Shrubby dense thickets of long bending branches (canes) that appear as 8 ft tall mounds or banks
- Stems/canes are 5-angled in cross-section with hooked prickles
- Leaves usually with 5 large, oval leaflets that are dark green on top and grayish-green underneath
- Showy flowers are white-pink, yielding juicy, black, edible berries

Things You Should Know:

- Spreads by seeds, root sprouts and by cane tips that readily root
- Introduced to North America by the famous plant breeder Luther Burbank in 1885 as *Himalayan Giant*



© Leslie Winter-Gorsline - Environmental Services

Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ **Salmonberry**
Rubus spectabilis

USDA

Zone 5    

Thimbleberry - *Rubus parviflorus*

Zone 4    

Thin-leaf huckleberry - *Vaccinium membranaceum*

Zone 5    

Snowberry - *Symphoricarpos albus*

Zone 3     

Indian plum - *Oemleria cerasiformis*

Zone 6    

ORNAMENTALS



© Oregon Raspberry and Blackberry Commission

◀ **Marionberry or Boysenberry**
Rubus 'Marion' or 'Boysen'

USDA

Zone 6   

Red raspberry - *Rubus idaeus*

Zone 4   

Black raspberry - *Rubus occidentalis*

Zone 4   

Rocky Mt. thimbleberry - *Rubus deliciosus*

Zone 5     

Knotweeds, Fleece flower, Mexican bamboo

Japanese knotweed - *Polygonum cuspidatum*, Giant knotweed - *P. sachalinense*, Himalayan knotweed - *P. polystachyum* and hybrids, syn. *Fallopia japonica* and *Reynoutria japonica*

Habitats Invaded:

Riverbanks, wet seeps and open disturbed sites. Knotweeds can form large, dense stands that degrade streamside habitats for salmon and other wildlife.

Regions of Concern:

All of Oregon

Identification:

- Feathery white to cream colored flowers
- Bamboo-like hollow stems up to 10 ft tall, often with purple speckles
- Stems have a distinctive reddish-brown papery sheath at stem joints

Things You Should Know:

- Spread primarily by broken stem fragments that are easily dispersed by flowing water
- Dense infestations can restrict public access along riverbanks for recreation and fishing



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© The Nature Conservancy

Alternatives

NATIVE PLANTS



© Leslie Winter-Gorsline - Environmental Services

◀ **Red osier dogwood**
Cornus sericea ssp. occidentalis
Has fall color

USDA

Zone 3   

Native willows - *Salix spp.*

Zone 4   

Ninebark - *Physocarpus capitatus*

Zone 5   

Oceanspray - *Holodiscus discolor*

Zone 5   

Goat's beard - *Aruncus dioicus*

Zone 7   

ORNAMENTALS



© Pat Breen - Oregon State University

◀ **Virginia sweetspire**
Itea virginica
Has fall color

USDA

Zone 5   

Dappled willow - *Salix integra* 'Hakuro Nishiki'

Zone 5   

Clumping bamboo - *Fargesia* species and cultivars

Zone 5   

Tatarian dogwood - *Cornus alba*

Zone 3   

Summersweet - *Clethra alnifolia*

Zone 4   

Russian olive, Oleaster

Elaeagnus angustifolia

Habitats Invaded:

Russian olive occurs mostly in the arid interior of Oregon along riverbanks and streambanks, as hedgerows, and in seasonally moist places. It is tolerant of soil salinity and alkalinity, and can alter river flows.

Regions of Concern:

Eastern and southern Oregon, spreading west along the Columbia River into the Columbia Gorge

Identification:

- Large shrub or small tree up to 30 ft tall with large 2-3 inch long thorns
- Leaves are long, narrow and silvery with tiny scales
- Flowers are small, yellow and fragrant, developing into green-brownish red dry mealy fruits

Things You Should Know:

- Birds and small mammals feed on the fruits and disperse seeds
- Originally recommended for use as windbreaks, wildlife habitat and for soil stabilization



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Alternatives

NATIVE PLANTS



© Mark Turner

◀ **Quaking aspen**
Populus tremuloides
Has fall color

USDA
Zone 3    


Blue elderberry - *Sambucus cerulea*

Zone 4    

Scouler's willow - *Salix scouleriana*

Zone 6    

Silver buffaloberry - *Shepherdia argentea*

Zone 3    

Narrowleaf willow - *Salix exigua*

Zone 4    

ORNAMENTALS



© Mark Turner

◀ **Variegated boxelder**
Acer negundo 'Variegatum'
Has fall color

USDA
Zone 5    

Common hackberry - *Celtis occidentalis*

Zone 3    

Corneliancherry dogwood - *Cornus mas*

Zone 4    

Silverberry - *Elaeagnus commutata*

Zone 4    

Thorny elaeagnus - *Elaeagnus pungens 'Fruitlandii'*

Zone 6    

Saltcedar, Tamarisk

Tamarix ramosissima

Habitats Invaded:

Saltcedar occurs mostly in moist seeps in arid regions, along riverbanks and streambanks, lake and pond margins, and in ditches and canals. It alters water availability, soil chemistry, and creates fire hazards.

Regions of Concern:

Eastern and southern Oregon, spreading west along the Columbia River into the Columbia Gorge

Identification:

- Large shrub or small tree up to 26 ft tall with small, scale-like leaves, often with salt glands or crystals
- Bark is reddish-brown and smooth
- Showy flowers are white-to-pink and borne in feathery flower clusters

Things You Should Know:

- Spreads by broken root and stem fragments and by seeds that are dispersed by wind and flowing water
- Each mature plant can produce 500,000 seeds per year
- Plants can exude salts and other chemicals onto the soil surface making it unsuitable for other plants to germinate
- Consumes large amounts of water



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Alternatives

NATIVE PLANTS



© Leslie Winter-Gorsline - Environmental Services

◀ **Blue elderberry**
Sambucus cerulea


USDA

Zone 4    


Native roses - *Rosa nutkana* or *R. woodsii*

Zone 5    

Birchleaf spirea - *Spiraea betulifolia*

Zone 4    

Ponderosa pine - *Pinus ponderosa*

Zone 3    

Narrowleaf willow - *Salix exigua*

Zone 4    

ORNAMENTALS



© Pat Breen - Oregon State University

◀ **Black elderberry**
Sambucus nigra cvs
Has fall color

USDA

Zone 5   

Chinese fringe flower - *Loropetalum chinense*

Zone 8    

Escallonia - *Escallonia* 'Apple Blossom'

Zone 7    

Chinese fringetree - *Chionanthus retusus*

Zone 5    

White fringetree - *Chionanthus virginicus*

Zone 4    

Spurge laurel

Daphne laureola

Habitats Invaded:

Spurge laurel occurs in the understory of coniferous forests and oak woodlands.

Regions of Concern:

Western Oregon and the Columbia Gorge

Identification:

- Small shrub up to 3 ft tall with spirally arranged dark, shiny, evergreen leaves
- Flowers are light green, bearing small blue-black berries

Things You Should Know:

- Birds consume berries and disperse seeds
- Leaves, bark and berries are toxic to humans, and may cause skin dermatitis



© Whatcom County Weed Board



© Whatcom County Weed Board

Alternatives

NATIVE PLANTS



© Leslie Winter-Gorsline - Environmental Services

◀ Evergreen huckleberry
Vaccinium ovatum

USDA

Zone 6   


Tall Oregon grape - *Mahonia aquifolium*

Zone 5   

Salal - *Gaultheria shallon*

Zone 6   

Western rhododendron - *R. macrophyllum*

Zone 5   

Sword fern - *Polystichum munitum*

Zone 5   

ORNAMENTALS



© Chris Guntermann

◀ Winter daphne
Daphne odora


USDA

Zone 7   


Rhododendron - *Rhododendron* spp. and cvs

Zone 5   


Fragrant sweet box - *Sarcococca ruscifolia*

Zone 7   

Delavay osmanthus - *Osmanthus delavayi*

Zone 7   

Burkwood daphne - *Daphne x burkwoodii*

Zone 5   

Tree of heaven

Ailanthus altissima

Habitats Invaded:

Riverbanks, wet seeps and open disturbed sites such as roadsides, forest and field edges. Tree of heaven can also form large, dense thickets in urban waste lots, pavement cracks, railroad beds and old mine spoils.

Regions of Concern:

All of Oregon, especially southwest Oregon and the Columbia Gorge, and in disturbed urban areas

Identification:

- Tall tree to 80 ft with smooth gray bark and large compound leaves
- Leaves can be up to 4 ft long and are generally comprised of 11-41 leaflets per leaf
- Flowers are yellow-pink and borne in clusters, developing into dry straw-colored or reddish-brown fruits
- Fruits are papery-winged with a single seed in the center

Things You Should Know:

- Root sprouts can form large dense colonies
- Small seeds with paper-winged structures allow long-distance dispersal by wind; a single mature tree can produce more than 300,000 seeds per year
- Tree described in the famous children's book *A Tree Grows in Brooklyn*
- Crushed leaves smell like rancid peanut butter and produce toxic chemicals that may prevent the establishment of adjacent vegetation



© Jennifer Goodridge, Environmental Services

Alternatives

NATIVE PLANTS



© Pat Breen - Oregon State University

◀ Sitka or Pacific mountain ash
Sorbus sitchensis
Has fall color

USDA

Zone 4    

Bigleaf maple - *Acer macrophyllum*

Zone 5    


Ponderosa pine - *Pinus ponderosa*

Zone 3    

Greene's mountain ash - *Sorbus scopulina*

Zone 3    

Lodgepole pine - *Pinus contorta* var. *latifolia*

Zone 4    

ORNAMENTALS



© Pat Breen - Oregon State University

◀ Autumn purple ash
Fraxinus americana
'Autumn Purple'
Has fall color

USDA

Zone 4    


Japanese tree lilac - *Syringa reticulata*

Zone 3    

Kentucky coffeetree - *Gymnocladus dioica*

Zone 3    

Japanese zelkova - *Zelkova serrata* varieties

Zone 5    

Ginkgo (sterile male) - *Ginkgo biloba*

Zone 4    

Bachelor's button and Knapweeds

Bachelor's button, cornflower - *Centaurea cyanus*

Bighead knapweed - *C. macrocephala*, Meadow knapweed - *C. pratensis*

Habitats Invaded:

Grasslands, roadsides, reforestation sites and rights-of-way. Knapweeds can form dense infestations that devalue pastures and rangelands.

Region of Concern:

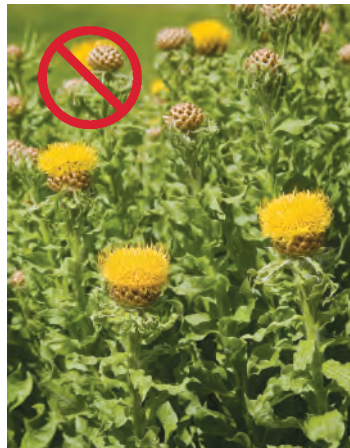
All of Oregon

Identification:

- Bachelor's button - Annual up to 3 ft tall with showy white, blue or purple flower heads, foliage is covered with short, gray hairs
- Bighead knapweed - Perennial to 5 ft tall with large, stalked, basal rosette leaves, and showy globe-shaped yellow flower heads that can be 3 inches in diameter (photo on right)
- Meadow knapweed - Perennial to 3 ft tall and is often many-branched with white to rose-purple flowers (photo on left)

Things You Should Know:

- Seeds are spread by grazing animals, on shoes and clothing, and by vehicles and road equipment
- Bachelor's buttons are still often included in "wildflower" seed mixes (do not buy these)



© Mandy Tu - The Nature Conservancy

© Mark Turner

Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ Bluehead gilia
Gilia capitata

USDA

Zone 5    

Common camas - *Camassia quamash*

Zone 6    

Jacob's ladder - *Polemonium pulcherrimum*

Zone 5    

Showy fleabane - *Erigeron speciosus*

Zone 5    

Farewell-to-spring - *Clarkia amoena*

Zone 4    

ORNAMENTALS



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◀ Pincushion flower
Scabiosa columbaria

USDA

Zone 4    

Globe thistle - *Echinops ritro*

Zone 3    

Sea holly - *Eryngium amethystinum*

Zone 3    

Sweet-sultan - *Centaurea moschata*

Annual   

Purple coneflower - *Echinacea purpurea*

Zone 4    

Fennel

Foeniculum vulgare

Habitats Invaded:

Fennel can develop dense uniform stands in grasslands, pastures, creekbanks, old fields, ditches, roadsides and in open abandoned lots.

Regions of Concern:

Western and southern Oregon

Identification:

- Aromatic perennial up to 6 ft tall with finely dissected grayish-green feathery leaves
- Tiny yellow flowers clustered into umbrella-shaped groups
- Base is non-bulb forming

Things You Should Know:

- Bulb-forming varieties of fennel are non-invasive
- Seeds can be dispersed by birds and rodents
- Foliage smells of licorice

© Tom Forney - Oregon Department of Agriculture



© Tom Forney - Oregon Department of Agriculture



Alternatives

NATIVE PLANTS



◀ Yarrow

Achillea millefolium

USDA

Zone 4    

Wild white aster - *Aster divaricatus*

Zone 4    

Goat's beard - *Aruncus dioicus*

Zone 7     

Canada goldenrod - *Solidago canadensis*

Zone 4    

Lovage - *Ligustichum apiifolium*

Zone 7    

ORNAMENTALS



◀ Cosmos

Cosmos bipinnatus

USDA

Annual   

Annual sunflowers - *Helianthus annuus*

Annual   

Ground clematis - *Clematis recta* 'Purpurea'

Zone 3    

Golden alexander - *Zizia aurea*

Zone 3     

Anise - *Pimpinella anisum*

Annual    

Hawkweeds

Yellow hawkweed, Kingdevil hawkweed - *Hieracium floribundum*
 Orange hawkweed - *H. aurantiacum* (photos below)

Habitats Invaded:

Grasslands, pastures, rangelands and disturbed open ground.
 Hawkweeds can form dense colonies that reduce available soil moisture and nutrients.

Region of Concern:

All of Oregon, especially central and northeast Oregon

Identification:

- Perennials up to 2 ft tall, growing from a basal rosette of hairy leaves, often with long horizontal aboveground stems
- Flowers are dandelion-like with petals squared on the ends with several rounded teeth and are either yellow (Yellow hawkweed) or orange with an orange-red center (Orange hawkweed)
- Flowers are typically clustered at the top of a hairy, flowering stalk (unlike dandelions which have one flower per stalk)
- Stems and leaves exude a milky sap

Things You Should Know:

- Can spread vegetatively from aboveground stems (stolons)
- Seeds have small barbs that catch in fur or on clothing



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Alternatives

















NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ Oregon sunshine
Eriophyllum lanatum

USDA
 Zone 5    

Douglas aster - *Aster subspicatus* Zone 5    
 Orange sneezeweed - *Helenium hoopesii* Zone 4    
 California poppy - *Eschscholzia californica* Zone 5    
 Arrowleaf balsamroot - *Balsamorhiza sagittata* Zone 4    















ORNAMENTALS



© Mark Turner

◀ Tickseed
Coreopsis verticillata
 'Moonbeam'

USDA
 Zone 3    

Black-eyed Susan - *Rudbeckia hirta* 'Prairie sun' Zone 4    
 Mt. Atlas daisy - *Anacyclus depressus* Zone 5    
 Common sneezeweed - *Helenium autumnale* Zone 3   
 Yellow oxeye daisy - *Bupthalmum salicifolium* Zone 5   

Herb Robert and Shiningstar geranium

Herb Robert, Stinky Bob - *Geranium robertianum*
Shining geranium, Shining crane's bill - *G. lucidum*

Habitats Invaded:

Understory of moist forests along trails, old logging roads and areas with disturbed soils. Common in urban parks and in areas with lots of foot traffic.

Region of Concern:

Western Oregon

Identification:

- Annuals or biennials up to 1.5 ft tall, typically as low-growing rosettes
- Herb Robert has fine white glandular hairs covering the entire plant, deeply divided dark green-red leaves, and flowers are pink to purple (*photos bottom left*)
- Shining geranium is hairless with yellowish-green shiny leaves that are lobed and have tiny pink-to-purple flowers (*photo below right*)

Things You Should Know:

- Generally spreads by seed
- Herb Robert is easily recognized by its unique strong, unpleasant smell



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Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ Stream violet
Viola glabella

USDA

Zone 6    

Beach strawberry - *Fragaria chiloense*

Zone 8    

Wood strawberry - *Fragaria vesca*

Zone 6    

Wild bleeding heart - *Dicentra formosa*

Zone 5    

Sea pink - *Armeria maritima*

Zone 4    

ORNAMENTALS



© Mark Turner

◀ Cranesbill geranium
Geranium sanguineum cvs.

USDA

Zone 3   

Bishop's hat - *Epimedium pinnatum*

Zone 5    

Japanese painted fern - *Athyrium nipponicum*

Zone 3   

Chinese false spirea - *Astilbe chinensis*

Zone 4    

Dwarf goat's beard - *Aruncus aethusifolius*

Zone 3    

Jubata grass, Purple pampasgrass

Cortaderia jubata

Habitats Invaded:

Jubata grass can form dense impenetrable stands and create substantial fire hazards in coastal bluffs and dunes, disturbed grasslands, forest gaps or cut-over forest areas.

Regions of Concern:

Western Oregon, especially southern Oregon coast

Identification:

- Large clump-forming grass up to 8 ft tall
- Large showy flower plumes are typically purple-tinged to tawny in color
- Leaves are long, linear, coarse and scratchy

Things You Should Know:

- Large plant clumps can produce more than one million seeds per year
- Sharp leaves can cut skin and hands
- All plants are female and can develop viable seed without fertilization



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© Mandy Tu - The Nature Conservancy

Alternatives

NATIVE PLANTS





© Darcy Stumbaugh - The Nature Conservancy

◀ Idaho fescue
Festuca idahoensis

USDA

Zone 5    


Giant chain fern - *Woodwardia fimbriata*

Zone 8    

Tufted hairgrass - *Deschampsia caespitosa*

Zone 5    

Roemer's fescue - *Festuca roemerii*

Zone 7    

California fescue - *Festuca californica*

Zone 4    

ORNAMENTALS



© Carolyn Martus

◀ Deergrass
Muhlenbergia rigens

USDA

Zone 7     

Big bluestem - *Andropogon gerardii*

Zone 7     

Little bluestem - *Schizachyrium scoparium*

Zone 3     

New Zealand flax - *Phormium tenax*

Zone 8     

Giant ryegrass - *Leymus condensatus*

Zone 7    

Myrtle spurge and Leafy spurge

Myrtle spurge - *Euphorbia myrsinites* (photo right)

Leafy spurge - *E. esula* (photos left)

Habitats Invaded:

The spurges can form thick substantial stands in semi-arid grasslands, pastures and rangelands, pine savanna woodlands, prairies, disturbed roadsides and neglected croplands.

Regions of Concern:

Eastern and southern Oregon

Identification:

- Perennial up to 3 ft tall with distinctive blue-green leaves that are geometrically arranged
- Stems and leaves exude a sticky, milky sap
- Flowers are small, yellow-green and clustered

Things You Should Know:

- Large colonies can form from extensive root systems
- Plant and milky sap is toxic to humans and most grazing animals



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Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ Stonecrop

Sedum spathulifolium or
S. lanceolatum

USDA

Zone 5



Pussytoes - *Antennaria argentea*

Zone 5



Wild strawberry - *Fragaria virginiana*

Zone 5



Sulphur flower - *Eriogonum umbellatum*

Zone 4



Oregon sunshine - *Eriophyllum lanatum*

Zone 5



ORNAMENTALS



© Linda McMahan - OSU Extension Service

◀ Creeping raspberry

Rubus calycinoides

USDA

Zone 7



Miniature yarrow - *Achillea tomentosa* 'Nana'

Zone 3



Hens-and-chicks - *Sempervivum tectorum*

Zone 4



Penstemon - *Penstemon pinifolius* 'Mersea yellow'

Zone 4



Evening primrose - *Oenothera macrocarpa*

Zone 4



Policeman's helmet, Jewelweed

Impatiens glandulifera

Habitats Invaded:

Policeman's helmet can form dense thickets in lowland forests, riverbanks and streamsides, and along roads.

Regions of Concern:

Western Oregon, and spreading east along the Columbia River into the Columbia Gorge

Identification:

- Annual up to 5 ft tall with juicy, succulent purple-tinged stems that are easily broken
- Attractive pink-to-purple flowers with a short spur at the base

Things You Should Know:

- Contains explosive seed pods
- Sometimes seeds are exchanged among garden groups (do not do this)

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Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ Red columbine
Aquilegia formosa

USDA

Zone 4    

Western maidenhair fern - *Adiantum aleuticum*

Zone 5   

Alum root - *Heuchera micrantha*

Zone 4    

Wild bleeding heart - *Dicentra formosa*

Zone 5    

Western meadowrue - *Thalictrum occidentale*

Zone 6    

ORNAMENTALS



© Mark Turner

◀ Cardinal flower
Lobelia cardinalis



USDA

Zone 3     

New England aster - *Aster novae-angliae*

Zone 4    

Spider flower - *Cleome hassleriana*

Annual    

Meadowrue - *Thalictrum aquilegifolium*

Zone 5    

Toad lily - *Tricyrtis hirta*

Zone 4   

Toadflaxes

Dalmatian toadflax - *Linaria dalmatica*

Yellow toadflax, Butter and eggs - *L. vulgaris*

Habitats Invaded:

The toadflaxes can form dense stands in grasslands, meadows, pasture and rangelands, and in the understory of dry coniferous forests.

Region of Concern:

All of Oregon, especially eastern and southern Oregon

Identification:

- Perennials up to 10 ft tall with waxy, green-blue leaves and stems
- Flowers are showy and bright yellow-orange and have an obvious elongated spur

Things You Should Know:

- Spreads from laterally creeping roots or by seed
- A mature plant of Dalmatian toadflax can produce 500,000 seeds annually



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Alternatives

NATIVE PLANTS



© David McClurg - Native Plant Society of Oregon

◀ Blue flax
Linum lewisii

USDA

Zone 4

Blue-eyed grass - *Sisyrinchium bellum*

Zone 8

Yellow-eyed grass - *Sisyrinchium californicum*

Zone 8

Oregon sunshine - *Eriophyllum lanatum*

Zone 5

Oregon iris - *Iris tenax*

Zone 7

ORNAMENTALS



© 2003 Tony Morosco

◀ Snapdragons
Antirrhinum majus

USDA

Annual

Torch lily - *Kniphofia* 'Little maid'

Zone 7

Penstemon - *P. barbatus* 'Schooley's yellow'

Zone 3

Penstemon - *P. pinifolius* 'Mersea yellow'

Zone 4

Daylilies - *Hemerocallis* 'Stella de oro', 'Hyperion'

Zone 3

English ivy and Irish ivy

Hedera helix, H. hibernica

Habitats Invaded:

Moist coniferous and deciduous forests, especially near urban areas. English ivy can form a thick canopy layer that carpets the forest understory, climbs and smothers trees, encourages tree rot, makes tree canopy heavier and more susceptible to windthrow, and increases fire hazards.

Region of Concern:

Western Oregon

Identification:

- Vigorous woody perennial with 2 growth forms
- Juvenile form remains as a creeping understory vine with leaves that are usually 3-lobed
- Adult reproductive form has erect, shrubby stems with diamond-shaped leaves
- Small white flowers in tight clusters with purple berries

Things You Should Know:

- Birds can disperse fruits and seeds into forests and stem fragments can regenerate if left in soil
- Dense infestations can harbor other pests such as rats
- Sap may cause skin dermatitis



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© Tom Forney - Oregon Department of Agriculture

Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ Beach strawberry
Fragaria chiloense


USDA

Zone 8    

Wood strawberry - *Fragaria vesca*

Zone 6    

Sword fern - *Polystichum munitum*

Zone 5    

Prostrate ceanothus - *Ceanothus prostratus*

Zone 5    

Kinnikinnick - *Arctostaphylos uva-ursi*

Zone 3    

ORNAMENTALS



© Pat Breen - Oregon State University

◀ Allegheny spurge
Pachysandra procumbens

USDA

Zone 5   

Creeping juniper - *Juniperus horizontalis cvs*

Zone 4    

Star jasmine - *Trachelospermum asiaticum*

Zone 7     

Barren strawberry - *Waldsteinia fragarioides*

Zone 4     

Creeping raspberry - *Rubus calycinoides*

Zone 7     

Old man's beard, Traveler's joy

Clematis vitalba

Habitats Invaded:

Moist coniferous and deciduous forests, especially along riverbanks and near urban areas. Old man's beard climbs into tree canopies and can smother shrubs and trees.

Regions of Concern:

Western Oregon, and spreading east along the Columbia River into the Columbia Gorge

Identification:

- Deciduous perennial vine up to 100 ft long
- Small white flowers form distinctive globular-feathery seed heads

Things You Should Know:

- Feathery seeds are easily dispersed by wind, water and animals
- One large plant can produce over 100,000 seeds per year
- Seed puffs give this plant its common name

© Tom Forney - Oregon Department of Agriculture



Alternatives

NATIVE PLANTS



◀ Orange honeysuckle
(Western trumpet)
Lonicera ciliosa

USDA

Zone 5

Rock clematis - *Clematis columbiana*

Zone 4

Hairy honeysuckle - *Lonicera hispidula*

Zone 5

ORNAMENTALS



◀ Anemone clematis
Clematis montana

USDA

Zone 5

Purpleleaf grape - *Vitis vinifera* 'Purpurea'

Zone 6

Ornamental kiwi vine - *Actinidia kolomikta*

Zone 4

Silvervein creeper - *Parthenocissus henryana*

Zone 6

Clematis cultivars - *Clematis* 'Jackmanii', etc.

Zone 4

Parrotfeather and Brazilian elodea, Giant waterweed

Parrot feather, *Myriophyllum aquaticum*

Brazilian elodea, *Egeria densa*

Habitats Invaded:

Freshwater lakes and ponds, reservoirs, wetlands, wet ditches and slow moving streams. Dense infestations can trap sediments, restrict water flow and impede irrigation and recreation.

Region of Concern:

All of Oregon

Identification: *Myriophyllum aquaticum* (photos bottom left and center)

- Aquatic perennial that has both submersed and emergent stems and leaves
- Above water stems resemble bright green bottle brushes

Identification: *Egeria densa* (photo bottom right)

- Fully submersed aquatic plant with leaves in whorls of 4
- Leaves are about 1 inch long with finely toothed edges
- Showy white 3-petaled flowers rise above water

Things You Should Know:

- Both species spread from broken stem fragments
- Do not dump pond plants into streams, rivers, ponds, or wetlands
- Thick stands of these species can inhibit boating and pose a serious threat to swimmers who become entangled in the submerged vegetation



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Alternatives

NATIVE PLANTS



© Environmental Services

◀ Wapato
Sagittaria latifolia

USDA

Zone 4   

Water plantain - *Alisma plantago-aquatica*

Zone 5   

Spatterdock - *Nuphar polysepalum*

Zone 4   

Floating-leaved pondweed - *Potamogeton natans*

Zone 5   

Water shield - *Brasenia schreberi*

Zone 4   

ORNAMENTALS



© Van Bloem Gardens

◀ Zebra rush
Scirpus zebrinus

USDA

Zone 3   

Purple loosestrife

Lythrum salicaria

Habitats Invaded:

Freshwater wetlands, wet prairies, meadows, and shorelines of lakes, streams, rivers, ditches and canals. Can survive in drier garden areas with irrigation. **Extensive stands can restrict water flow and impede irrigation and recreation.**

Region of Concern:

All of Oregon

Identification:

- Perennial to 8 ft tall with showy, pink-purple flower spikes
- Stems are angular
- Flowers usually have 5-7 petals with a small yellow center

Things You Should Know:

- Spreads from broken stem fragments and seeds that are easily dispersed by wind and water
- Each plant can produce as many as 100,000 seeds per year



© Eric Coombs - Oregon Department of Agriculture



© Eric Coombs - Oregon Department of Agriculture

Alternatives

NATIVE PLANTS



© Environmental Services

◀ **Douglas spirea**
Spiraea douglasii
Has fall color

USDA

Zone 5   

Meadow checkermallow - *Sidalcea campestris*

Zone 7   

Common camas - *Camassia quamash*

Zone 6   

Small-flowered bulrush - *Scirpus microcarpus*

Zone 5   

River lupine - *Lupinus rivularis*

Zone 7   

ORNAMENTALS



© Mark Turner

◀ **Spike speedwell**
Veronica spicata

USDA

Zone 3   

Gayfeather - *Liatris spicata*

Zone 3   

Bee balm - *Monarda didyma*

Zone 4   

Siberian iris - *Iris siberica* or *I. sanguinea*

Zone 4   

Swamp milkweed - *Asclepias incarnata*

Zone 3   

Ribbongrass, Reed canarygrass

Phalaris arundinacea var. *picta*

Habitats Invaded:

Ribbongrass can form dense colonies in marshes, meadows, wet ditches, and along riverbanks and on cobblebars. It can survive in both fresh and brackish water.

Region of Concern:

All of Oregon

Identification:

- Perennial to 10 ft tall with flat leaf blades
- Ribbongrass has variegated green-white leaves
- Rhizomes can form a thick sod layer

Things You Should Know:

- Spreads by broken stem fragments or by seeds that are often dispersed by flowing water
- Can be grazed, but consuming too much often leads to a debilitating condition in livestock called "Phalaris staggers"

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Alternatives

NATIVE PLANTS




◀ **Tufted hairgrass**
Deschampsia caespitosa




USDA

Zone 5    

Slough sedge - *Carex obnupta*

Zone 5    

Santa Barbara sedge - *Carex barbarae*

Zone 7    

Cattails (tall or dwarf) - *Typha latifolia*

Zone 4    

ORNAMENTALS



◀ **Big bluestem**
Andropogon gerardii

USDA

Zone 7    

Little bluestem - *Schizachyrium scoparium*

Zone 3    

Yellow flag iris, Yellow water iris

Iris pseudacorus

Habitats Invaded:

Freshwater and brackish wetlands, and shorelines of lakes, streams, rivers, ditches and canals. **Dense mats can trap sediments creating higher, drier land.**

Region of Concern:

All of Oregon

Identification:

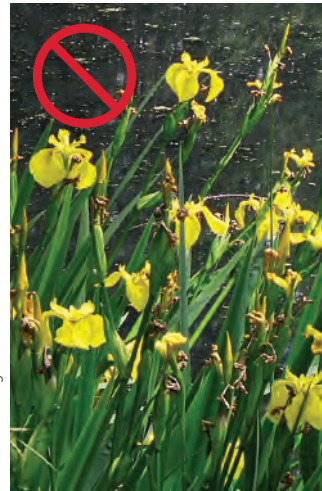
- Perennial to 5 ft tall with thick swordlike leaves and several yellow to cream-colored flowers per stem
- The only completely yellow-flowered iris that grows in natural settings

Things You Should Know:

- Spreads by broken stem fragments and by seeds that float in water
- **All parts of the plant are toxic to humans and animals**



© Ash Creek Images



© Ash Creek Images

Alternatives

NATIVE PLANTS



© Linda McMahan - OSU Extension Service

◀ **Monkeyflower**
Mimulus guttatus

USDA			
Zone 6			
Zone 4			
Zone 5			
Zone 6			

Rocky Mountain iris - *Iris missouriensis*

Douglas iris - *Iris douglasii*

Skunk cabbage - *Lysichiton americanum*

ORNAMENTALS



© Mountain Mist Ornamentals Inc.

◀ **Japanese iris**
Iris ensata

USDA			
Zone 4			
Zone 4			
Zone 4			

Siberian iris - *Iris sibirica* 'Butter and sugar'

Blue-flag iris - *Iris versicolor*

Resources

Be informed. Get involved.

To report invaders or Class A Oregon noxious weeds:

<http://oregoninvasiveshotline.org> or www.weedmapper.org
or call the Invasive Species Hotline, 1-866-INVADER

Learn to identify invasive species, remove them, and help protect Oregon from invaders:

The Statesman Journal's Invasive Species of Oregon, www.statesmanjournal.com

Oregon Public Broadcasting, www.opb.org/silentinvasion

SOLV, www.solv.org/programs/invasives.asp

The Nature Conservancy, www.nature.org/oregon

The Nature Conservancy's technical web site, <http://tncweeds.ucdavis.edu>

Oregon Invasive Species Council, www.oregon.gov/OISC/

Oregon noxious weed profiles, <http://oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml>

Center for Invasive Plant Management, www.weedcenter.org

Pacific Northwest Invasive Plant Council, <http://depts.washington.edu/waipc>

National Invasive Species Information Center, www.invasivespeciesinfo.gov/

Oregon's list of noxious weeds, <http://oregon.gov/oda/plant/weeds/lists.shtml>

Oregon State University-Oregon Sea Grant-Aquatic Invaders Identification Guide
<http://seagrant.oregonstate.edu/themes/invaders/index.html>

Native Plant Nurseries: www.plantnative.org/nd_or.htm

For more information on what you and your business can do about invasive plants, see the Voluntary Codes of Conduct for the horticulture industry, endorsed by the Oregon Association of Nurseries
www.centerforplantconservation.org/invasives/codesn.html

WEB SITES AND PHONE NUMBERS

BOOKS

Boersma, P.D, Reichard, S.H. and A.N. Van Buren (eds.). 2006. Invasive Species in the Pacific Northwest. University of Washington Press, Seattle.

Kaufman, S.R. and W. Kaufman. 2007. Invasive Plants: A Guide to Identification, Impacts, and Control of Common North American Species. Stackpole Books, Mechanicsburg.