

GARDEN WISE

Non-Invasive Plants for Your Garden



WESTERN WASHINGTON GUIDE

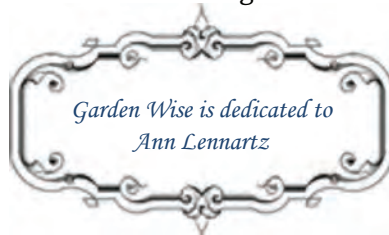
VOLUNTARY CODES OF CONDUCT

For the gardening public (annotated):

In an effort to reduce the spread of invasive plants used for horticultural purposes, experts have created the “Voluntary Codes of Conduct,” a series of steps that nursery professionals, landscape architects, gardeners, and others can take to help curb the spread of invasive horticultural plants.

- ◇ Ask for only non-invasive species when you acquire plants. Plant only environmentally safe species in your gardens. Work towards and promote new landscape design that is friendly to regional ecosystems.
- ◇ Seek information on which species are invasive in your area. Sources could include botanical gardens, horticulturists, conservationists, and government agencies. Remove invasive species from your land and replace them with non-invasive species suited to your site and needs.
- ◇ Do not trade plants with other gardeners if you know they are species with invasive characteristics.
- ◇ Request that botanical gardens and nurseries promote, display, and sell only non-invasive species.
- ◇ Help educate your community and other gardeners in your area through personal contact and in such settings as garden clubs and other civic groups.

For the full Gardening Codes of Conduct, or to learn about the Codes of Conduct for Government, Nursery Professionals, Landscape Architects, and Botanic Gardens and Arboreta, please go to the Center for Plant Conservation’s website at: www.centerforplantconservation.org/invasives/codes2012.asp



GARDEN WISE

Non-Invasive Plants for Your Garden

While most exotic plants are not problematic, a few have become invasive in Washington State. When these plants spread to wild areas, they cause serious problems. For example invasive knotweeds, butterfly bush, and yellow flag iris are changing our streamsidess and riverbanks; spurge laurel and Atlantic ivy are altering our forests.

This booklet represents the collaboration of nonprofit conservation groups, state and country government, and the nursery industry. We believe that preventing introduction is the most efficient way to reduce the spread and impact of invasive species. Whether you are looking for new and exciting plants to add to your garden, or you are looking to replace invasive plants in your yard, we hope this book will be a valuable resource. Working together, we can ensure that future generations enjoy pristine wild areas in Washington State.

Please note that this booklet is a product of an ongoing project. Visit www.nwcb.wa.gov for updates and to learn about other problematic plants and their alternatives. You can also learn more from your local nursery, WSU Master Gardeners, and at www.GreatPlantPicks.org.



Full Sun



Regular Water



Well-Drained Soil



Part Sun



Medium Water



Heavy Soil



Full Shade



Low Water



Evergreen



Washington Native



Wildlife Friendly



Deciduous



Great Plant Pick

HERBACEOUS

INVASIVE

Common Fennel - *Foeniculum vulgare*

Non-bulbing varieties of this herb are prized for their tall, feathery, aromatic, and often colorful foliage. However, this perennial colonizes grasslands and disturbed areas, including roadsides and abandoned lots, where dense stands can crowd out native flora. Fennel escapees are a serious problem in California, particularly in natural, open lands and along the coast. Fennel invasions are becoming a common sight in western Washington and may pose an additional threat to our state's vanishing grasslands.



CLASS B WASHINGTON STATE NOXIOUS WEED

Florence Fennel, Finocchio, Bulbing Fennel

Foeniculum vulgare var. *azoricum*



This annual plant is most like common fennel, with the same feathery foliage and is ideal for culinary uses.

- The flavor of foliage and seeds is very similar to common fennel, and the swollen stem base is a crispy, flavorful vegetable used in many cuisines.
- The foliage is green and has a feathery texture like common fennel, but the plant is smaller in stature (2-3 feet, not 4-6 feet).
- Like common fennel, Florence fennel likes full sun and well-drained soils.
- The yellow flowers attract butterflies, and butterfly larvae feed on the foliage.
- USDA zones 4-9





Dill

Anethum graveolens



The foliage of this plant is also feathery and reaches 3-4 feet.

- With a wonderful feathery foliage, dill offers a fennel-like hazy texture, although the plant is slightly smaller in stature.
- Dill is easy to grow in sunny, well-drained sites.
- This annual will self-sow in your garden, so remove spent flower-heads before seeds scatter.
- Flat yellow flowers appear about the same time as those of fennel, attracting butterflies, and butterfly larvae feed on the foliage.
- USDA zones 3-7



Courtesy of Deborah Jordan, Solas Gardens



Cosmos

Cosmos bipinnatus



Cosmos foliage is ferny like common fennel, but its daisy-like flowers differ.

- This annual has a long bloom time, from summer into autumn.
- It can add pink, purple or white color to the garden.
- The profuse, 3-inch daisy-like flowers, create a different effect in the garden than fennel.
- Easy to grow and care for, cosmos can be deadheaded to prolong flowering.
- Cosmos prefers well-drained soils and needs sunny sites, like common fennel.
- USDA zones 3-10



Image courtesy of Trois Helvy

More choices: *Amelanchier alnifolia*, *Cornus stolonifera* (Syn. *Cornus sericea*), *Holodiscus discolor*, *Hydrangea macrophylla*, *Physocarpus capitatus*, *Woodwardia fimbriata*, and *Calamagrostis x acutiflora* 'Karl Foerster' all of which are Washington natives except for *Hydrangea* and *Calamagrostis*.

HERBACEOUS

INVASIVE

Policeman's Helmet - *Impatiens glandulifera*

Policeman's helmet has pretty pink-to-purple flowers and is unusually tall for an annual plant, reaching a maximum height of 10 feet. A garden escapee, this prolific, self-seeding plant has heavily colonized lowland riparian areas, including forests, stream banks, and roadside thickets,



where it dominates native plant communities. Although considered a serious problem in Great Britain, and on the WSDA quarantine list, it is still often illegally exchanged amongst garden groups in Washington.



Image courtesy of King County NWCB

CLASS B WASHINGTON STATE NOXIOUS WEED

Milky Bellflower

Campanula lactiflora 'Loddon Anna'



An upright long-blooming perennial for a well-drained, sunny to partly shady site.

- This easy-to-grow perennial will last in your garden to add color and texture over many years.
- The upright habit, reaching up to 4 to 5 feet, adds similar texture and height to the garden.
- Beautiful light lilac-pink star-shaped flowers in panicles are similar in color, but not form, to policeman's helmet.
- Blooms mid-summer, trim back fading flowers to encourage re-bloom later in the season.
- USDA zones 5-8



Image courtesy of Ann Chapman





Delphinium, Larkspur

Delphinium parishii 'Sky blue'
and *Delphinium x elatum*



An upright, taller herbaceous perennial for a sunny site.

- The flower color ranges from white to deep lavenders and blues.
- Some cultivars reach heights similar to policeman's helmet.
- Spurred flowers on long spikes attract butterflies.
- This deciduous perennial grows back stronger each year. Check with your local nursery for disease-resistant cultivars.
- USDA zones 4-7



Image courtesy of Monrovia Nursery



Cardinal Flower

Lobelia cardinalis & cultivars



An upright herbaceous perennial for a moist, sunny to partly shady site.

- Cardinal flower grows in similar conditions as policeman's helmet: moist soils and part shade.
- Showy flower spikes can reach heights of 3 feet, shorter than policeman's helmet.
- Blooms are generally bright crimson, though color can range from orange-red to fuchsia to purple in some cultivars.
- A popular choice for attracting hummingbirds.
- USDA zones 3-10



Image courtesy of Erv Evans,
North Carolina State University

More choices: *Cleome* species, flowering tobacco (*Nicotiana glauca*), Japanese primrose (*Primula japonica*), *Thalictrum delavayi* 'Hewitt's Double', and natives: western meadow-rue (*Thalictrum occidentale*), bleeding heart (*Dicentra formosa*), western blue flax (*Linum perenne*), monkeyflowers (*Mimulus guttatus* and *M. lewisii*), and inside-out flower (*Vancouveria hexandra*).

HERBACEOUS

INVASIVE

Tall or Purple Verbena - *Verbena bonariensis*



Tall verbena has been a popular addition to garden borders for its lavender, tubular flower clusters borne atop elevated flower stalks. Although attractive in the garden, this vigorously self-seeding perennial is rapidly spreading into fields and open areas around the world, including the state of

Oregon, and is on its way to being a problem in western Washington. The prickly hairs on the stem make this weed difficult to hand pull. Identify it early and nip it in the bud!



Image courtesy of John Randall,
The Nature Conservancy

WASHINGTON STATE MONITOR SPECIES

Russian Sage

Perovskia atriplicifolia

This sage is a long-blooming perennial for a sunny, dry site.

- Twelve-inch spires of small tubular purple flowers add a tall splash of color in late summer.
- Like purple verbena, Russian sage is a drought-tolerant plant once established that does well in poor soils.
- Similar in height to tall verbena, Russian sage adds a strong vertical element to the garden with its silvery stems and foliage.
- USDA zones 5-9



Image courtesy of Alice B. Russell,
North Carolina State University





Frikart's Aster

Aster × frikartii 'Mönch'

This prolific bloomer grows in a mounded form in full sun.

- The long flowering period (July-October) offers lavender-blue flowers throughout the season.
- A more densely branched habit than tall verbena, Frikart's aster grows 1.5 to 3 feet tall, prefers full sun but can grow in part shade.
- Provides color in the landscape when other plants are dying back in autumn.
- Its 2.5 inch flowers attract pollinators such as butterflies.
- USDA zones 5-8

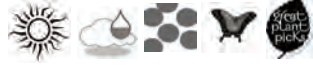


Image courtesy of Bellevue Botanical Garden Society, Great Plant Picks



Pincushion Flower

Scabiosa caucasica 'Ultra Violet'

An ever-blooming perennial for a well-drained, sunny site.

- This cultivar's bright violet pincushion-shaped flowers are perched on thin stems to 2 feet tall
- Pincushion flower is not only great for cutting, but it also attracts butterflies in the garden.
- 'Ultra Violet' is a new cultivar with greater disease resistance than past offerings.
- USDA zones 4-9



Image courtesy of Kennedy Harris

More choices: Homestead purple verbena (*Verbena* 'Homestead Purple'), and Penstemon or beardtongue (*Penstemon*) species, many of which are Washington natives.

HERBACEOUS

INVASIVE

Knotweeds - *Polygonum* species *Giant, Bohemian, Himalayan, & Japanese*

Feathery white flower heads, large foliage, and tall, bamboo-like stems once made this group of knotweeds popular as garden ornamentals. Native to Asia, knotweeds have become a serious problem worldwide

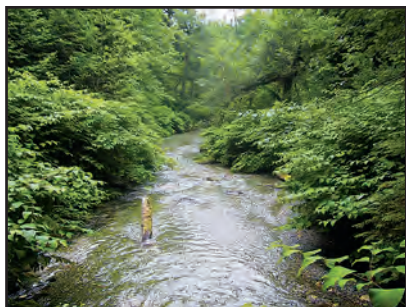


Image courtesy of Whatcom County NWCB



and are increasingly prevalent in Washington. They rapidly invade riparian zones: blocking sunlight, disturbing nutrient cycling, and facilitating stream bank erosion. These knotweeds are a serious problem along Washington State waterways where they degrade habitat for wildlife and fish species including salmon.

CLASS B WASHINGTON STATE NOXIOUS WEED'S

Goats Beard

Aruncus dioicus

This robust perennial native provides height to your garden.

- Like knotweed, goat's beard thrives in moist soil.
- It produces a panicle of cream-colored flowers similar to knotweeds, though foliage texture is finer.
- Blooms in June and July, a little earlier than knotweeds.
- Goat's beard grows up to 6 feet tall.
- USDA zones 3-7



Image courtesy of Erv Evans,
North Carolina State University





Fothergilla

Fothergilla major

This is a deciduous shrub with gorgeous fall foliage.

- Small, fragrant white flowers bloom in spring, unlike the later-blooming knotweeds.
- Green foliage in summer turns to spectacular fall color, as opposed to less colorful knotweeds.
- Like knotweeds, fothergilla sports large leaves up to 5 inches long.
- Shrub grows up to 9 feet tall.
- Cultivar 'Mt. Airy' grows 5 to 6 feet tall and is a Great Plant Pick.
- Also known as witch-alder, this shrub prefers moist, well-drained soils.
- USDA zones 4-8



Image courtesy of Victor Carrano



Robusta Clumping Bamboo

Fargesia robusta

This is a true clumping bamboo with an upright form.

- It grows to 15-20 feet, taller than knotweeds.
- Unlike knotweeds and running bamboo varieties, clumping bamboo varieties steadily increases in diameter.
- The stems provide the bamboo effect that gardeners prize in knotweeds.
- Unlike the knotweeds, *Fargesia robusta* keeps its narrow, shiny leaves in the winter for year-round interest.
- It takes morning sun and afternoon shade.
- USDA zones 7-9



Courtesy of Noah Bell, bambuogarden.com

More choices: Western serviceberry (*Amelanchier alnifolia*), ocean-spray (*Holodiscus discolor*), Pacific ninebark (*Physocarpus capitatus*), giant chain fern (*Woodwardia fimbriata*), red osier dogwood (*Cornus stolonifera*), all of which are Washington natives, as well as bigleaf hydrangea (*Hydrangea macrophylla*) and giant fleecflower (*Persicaria polymorpha*).

GROUNDCOVER

INVASIVE

Yellow Archangel - *Lamium galeobdolon*

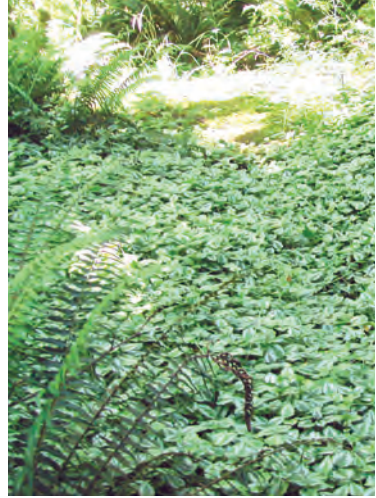
Striking variegated leaves and the ability to thrive in shady areas makes yellow archangel a popular ornamental



plant for groundcover and hanging baskets.

Unfortunately, this trailing plant easily establishes wild populations, in many cases as the result of improper disposal of garden cuttings or hanging

baskets. Yellow archangel forms dense, homogenous mats in forests and parks and is a serious problem in British Columbia and western Washington.



CLASS B WASHINGTON STATE NOXIOUS WEED

Recommended Alternative  10

Wintercreeper

Euonymus fortunei 'Silver Queen' & 'Emerald Gaiety'



This is a low-growing evergreen plant with attractive foliage.

- The variegated leaves of wintercreeper provide contrast in the low light preferred by yellow archangel.
- Wintercreeper will tolerate full sun as well as the shade that yellow archangel prefers.
- USDA zones 4-8



Image courtesy of Monrovia Nursery



Heucheras & Heucherellas

Heuchera & *Heucherella* species



Low-growing perennials, some native to the Northwest.

- These plants produce small, airy flowers above ornamental leaves in a variety of colors and patterns, rivaling the foliage of yellow archangel.
- Heucheras and heucherellas tolerate sun to light shade.
- Their delicate flowers are also attractive to hummingbirds.
- USDA zones 4-9



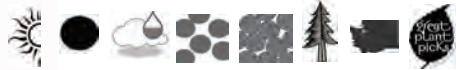
Top Heuchera Image : Victor Carrano

Bottom Heuchera Image: Terra Nova Nurseries



Wild Ginger

Asarum caudatum



Evergreen groundcover growing in part to full shade.

- Beautiful deep green, heart-shaped leaves smell of lemon-ginger when crushed.
- Unique purple-brown flowers that may be covered by leaves, unlike the insignificant flowers of yellow archangel.
- Grows in a variety of garden conditions and is drought tolerant once established.
- Grows by rhizomes and slowly forms expanding mats.
- USDA zones 7-9



Image courtesy of Richie Steffen, Great Plant Picks

More choices: Bleeding heart (*Dicentra formosa*), wild lily-of-the-valley (*Maianthemum dilatatum*), three-leaf foamflower (*Tiarella trifoliata*), all of which are Washington natives, as well as Japanese Spurge (*Pachysandra terminalis*), barrenwort (*Epimedium*) species, sweetbox (*Sarcococca hookeriana* var. *humilis*), and miniature London pride (*Saxifraga* 'Primuloides').

GROUND COVER

INVASIVE

Old Man's Beard & Silverlace Vine

Clematis vitalba & *Polygonum albertii*

Climbing vines such as old man's beard and silverlace vine are commonly used on arbors and trellises. Yet these vines can establish in forests and along riverbanks where they can smother shrubs and trees and form dense mats in the understory, displacing native flora. Both vines produce thousands of tiny seeds, which are spread by wind or carried on the bodies of birds. Silverlace vine can also regenerate from garden cuttings tossed aside, making escape from cultivation easy.



Images courtesy of King County NWCB.

CLASS C WASHINGTON STATE NOXIOUS WEED & MONITOR SPECIES

Sweet Autumn Clematis

Clematis paniculata,
synonym *C. dioscoreifolia*

This clematis is a vigorous and fragrant climber.

- This clematis has fragrant creamy white flowers.
- Like the invasive vines, this is a robust climber.
- It takes full sun to partial shade.
- Like silver lace vine and old man's beard, Sweet Autumn clematis blooms from summer to fall.
- This climber grows up to 20 feet tall.
- USDA zones 5-9

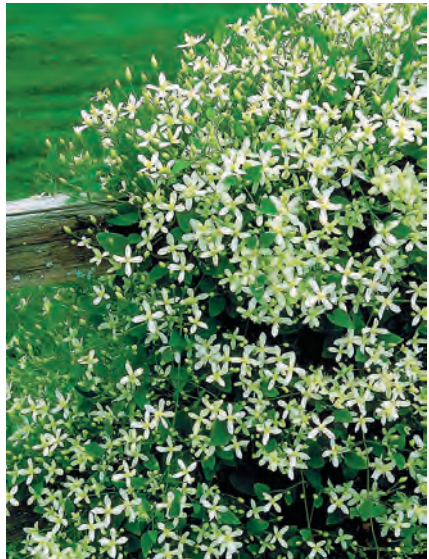


Image courtesy of Monrovia Nursery



Italian Clematis

Clematis viticella & cultivars

This species includes a variety of colorful cultivars.

- There are various flower colors to choose from, whereas the invasive vines offer only white.
- Growing only 15 feet tall, it does not overburden trees like the invasive vines.
- This clematis prefers full sun.
- Like silverlace vine and old man's beard, this plant is not particular about soil type.
- Zones 5-9



Image courtesy of Pat Breen, Oregon State Univ.



Orange Honeysuckle

Lonicera ciliosa

Orange honeysuckle is a colorful northwest native that butterflies and birds love too.

- The flowers are a brilliant orange instead of white.
- It grows up to 30 feet tall, like old man's beard.
- This native takes full sun to partial shade.
- Blooms occur from May to July, earlier than either of the invasive vines.
- Birds and butterflies are attracted to its edible berries and nectar flowers.
- Zones 6-9



Image courtesy of Ben Legler

More choices: Kiwi vine (*Actinidia kolomikta*), chocolate vine (*Akebia quinata*), Japanese hydrangea vine (*Schizophragma hydrangeoides*), climbing hydrangea (*Hydrangea anomala* subsp. *petiolaris*), and silvervein creeper (*Parthenocissus henryana*).

GROUND COVER

INVASIVE

Atlantic & Invasive English Ivy Cultivars

Hedera hibernica & *Hedera helix* 'Baltica',
'California', 'Pittsburgh', & 'Star'

While over 400 cultivars of ivy are used for landscaping, only a few are considered invasive. When allowed to climb and mature, invasive ivies produce seed-filled berries which are spread by birds. A serious problem in western Washington, these cultivars spread into forests where the vines block sunlight, smother trees, and encourage rot. Dense mats of ivy blanket the forest understory, displace native flora, outcompete forest seedlings, and harbor pests such as rats.



CLASS C WASHINGTON STATE NOXIOUS WEED

Crinkle-Leaf Creeper

Rubus pentalobus

synonym *Rubus calycinoides*

Forms a great, durable carpet of rough leaves, dark green in summer and tinged reddish in winter.

- This creeper is a good groundcover for slopes and will grow to cover larger spaces.
- It is drought tolerant like ivy, once established.
- Crinkle-leaf creeper is an attractive evergreen, finer in texture than ivy—with leaves the size of strawberry leaves.
- It grows well in sun and partial shade and remains healthy with little care.
- USDA zones 6-9



Image courtesy of Pat Breen, Oregon State Univ.



Kinnikinnick

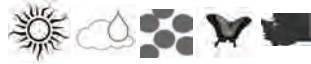
Arctostaphylos uva-ursi

A great native plant for carpeting the ground, Kinnikinnick helps sustain wildlife.

- Its evergreen foliage and mat-like spreading habit give an emerald look year-round.
- Like ivy, kinnikinnick is adapted to well-drained sandy soils and sun.
- Though drought tolerant once established, unlike ivy, it does not tolerate shade.
- Unlike ivy, kinnikinnick flowers are ornamental. Whitish-pink bells appear in summer, followed by red berries.
- USDA zones 5-10



Image courtesy of Ben Legler



Climbing Hydrangea

Hydrangea anomala subsp. petiolaris

A good vine for climbing trees or walls or fences: holds on like ivy. Medium green, heart-shaped leaves are beautiful, but different in texture and scale.

- Large-leaved deciduous foliage will cover like ivy in summer, and cinnamon-red shaggy bark offers winter texture.
- Unlike ivy, it has beautiful lacey hydrangea-like blooms of cream-white in June which are good for dried arrangements.
- Plant is relatively disease free and easy to care for.
- USDA zones 4-8



Image courtesy of Monrovia Nursery



More choices: silvervein creeper (*Parthenocissus henryana*), miniature London pride (*Saxifraga Primuloides*), bearberry (*Cotoneaster dammeri*), wintercreeper (*Euonymus fortunei*), boxleaf honeysuckle (*Lonicera pileata*), sweetbox (*Sarcococca hookeriana* var. *humilis*), Boston ivy (*Parthenocissus tricuspidata*) and natives beach strawberry (*Fragaria chiloensis*) and evergreen violet (*Viola sempervirens*).

WETLAND AND AQUATIC

INVASIVE

Yellow Flag Iris - *Iris pseudacorus*

With its showy yellow flowers and dense, lance-shaped leaves, yellow flag iris has been a popular addition to ornamental ponds and water gardens. However, this emergent wetland plant quickly spreads through underground rhizomes and rhizome fragments. It naturalizes along streams, canals, and shorelines in Washington. Yellow flag iris can completely out compete native wetland plants along the shoreline, and its dense, root-like mat collects sediment and severely reduces water flow, affecting plants, fish, and other animals.



CLASS C WASHINGTON STATE NOXIOUS WEED

Japanese Iris

Iris ensata cultivars including 'Variegata'

These are beautiful irises for pond edges and bogs.

- They are ideal for wet boggy areas and edge-of-pond plantings, easy to grow.
- Elegant large flowers of white, purple, and violet blue form in late spring and early summer, a little after yellow flag iris.
- Foliage can reach 16 inches, the scale of the plant is smaller than yellow flag iris.
- The foliage of the cultivar 'Variegata' offers a creamy white and green foliar accent to pond plantings.
- USDA zones 5-8



Image courtesy of Laura Burton





Laevigata Iris

Iris laevigata & cultivars



A true water-loving iris, beautiful in and out of flower.

- An ideal replacement for yellow flag iris in pond plantings, laevigata iris grows well in 6 inches of water. It is also good for wet boggy areas, and it's easy to grow.
- Flowers are large white, purple, lavender, and pink. Yellow-blooming cultivars are rare.
- Blooms later than yellow flag iris.
- Foliage can reach 18 inches, so the scale of the plant is smaller than yellow flag iris.
- USDA zones 2-9



Pat Woodward, Pacific Rim Native Plant Nursery



Siberian Iris

Iris sibirica & hybrids such as 'Butter & Suga', 'Sunfisher'
(both yellow blooming)



A very versatile, easy-to-grow iris: the one to choose, other than a bearded iris, if you want yellow flowers.

- 'Butter & Suga', 'Sunfisher'
- Good for mixed borders with normal water needs; also suitable for damp sites, but not for standing water.
- Flower colors range from white to purple to blue-purple to yellow.
- With foliage usually 2 feet or less, and taller flowers, the plant is smaller than yellow flag iris.
- Blooms May-June, but its lovely foliage makes this iris beautiful in and out of bloom.
- USDA zones 4-9



Image courtesy of Todd Boland

More choices: Arctic iris (*Iris setosa*), blue flag irises (*Iris versicolor* and *Iris virginica*), bearded iris (*Iris x germanica*), and native species Rocky Mountain iris (*I. missouriensis*), western skunk cabbage (*Lysichiton americanum*), and golden-eyed grass (*Sisyrinchium californicum*).

WETLAND AND AQUATIC

INVASIVE

Fragrant Water Lily - *Nymphaea odorata*

Although native to the eastern half of the United States, fragrant waterlily has been deliberately introduced into ponds and water gardens in the Pacific Northwest because of its large



and beautiful, sweet-smelling white flowers. However, this floating-leaved plant can quickly dominate the

water, denying submerged aquatic vegetation light and oxygen, stagnating water flow, degrading habitat for fish and invertebrates, and restricting wildlife and human access to water bodies.



Image courtesy of Stevens County NWCB

CLASS C WASHINGTON STATE NOXIOUS WEED

Recommended Alternative 18

Fragrant Waterlily cultivars

Nymphaea 'Lucianna',
N. 'Pink Beauty', *N.* 'Hermine'



These fragrant waterlilies are ideal for contained water gardens.

- Less aggressive cultivars of *Nymphaea*, such as the Marliac cultivars, come in a wide range of both bold and subtle colors.
- These water garden plants should not be placed in natural ponds, lakes, streams, or rivers where spread may be a danger or a problem.
- USDA zones 3-11



Courtesy of Erv Evans,
North Carolina State University



Water Shield

Brasenia schreberi

A native aquatic plant with small floating leaves.

- Floating oval leaves are dark green on top and purple underneath.
- Water shield grows in water 2-6 feet deep.
- Found in lakes around western Washington, water shield is safe to use in natural water bodies to replace fragrant waterlilies.
- The small, dark purple flowers that appear in late summer are attractive but unlike fragrant water lilies' showy blooms.
- Fish and other wildlife use this plant for valuable food and shelter.

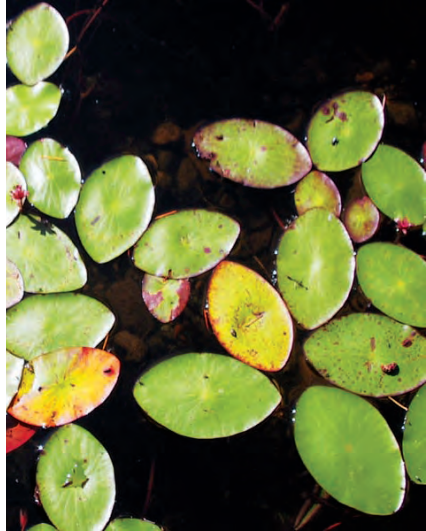


Image courtesy of Whatcom County NWCB



Spatterdock

Nuphar polysepala

A large native aquatic plant found in a range of water depths.

- Floating leaves on stiff stems sometimes lift above the water during low water levels.
- The showy yellow flower is dissimilar to fragrant waterlily's lotus-like bloom, but no less eye-catching.
- This native plant is found in ponds and lakes around Washington and is an important source of food and shelter for local fish and wildlife.



Image courtesy of Ben Legler

Please remember, never dump water garden, aquarium plants, or aquarium fish into natural water systems.

WETLAND AND AQUATIC

INVASIVE

Purple Loosestrife & Garden Loosestrife

Lythrum salicaria & *Lysimachia vulgaris*

Both garden and purple loosestrife are common additions to flower gardens. These invasive plants are a major threat to wetlands because of their ability to tolerate saturated soils and spread rapidly into non-disturbed areas. Purple loosestrife is notorious for forming uniform stands; it crowds out all native plants and reduces wetland habitat. Garden loosestrife is a new, serious concern as it has been observed out-competing noxious purple loosestrife in Washington State wetlands.



CLASS B WASHINGTON STATE NOXIOUS WEEDS

Recommended Alternative  20

Gayfeather

Liatris spicata

Eye-catching, purple-spiked perennial.

- Tall spikes of purple flowers are similar in appearance to purple loosestrife.
- This plant takes full sun.
- Gayfeather blooms July through September, around the same time as purple loosestrife.
- Unlike purple loosestrife, it likes well-drained soils.
- USDA zones 3-9

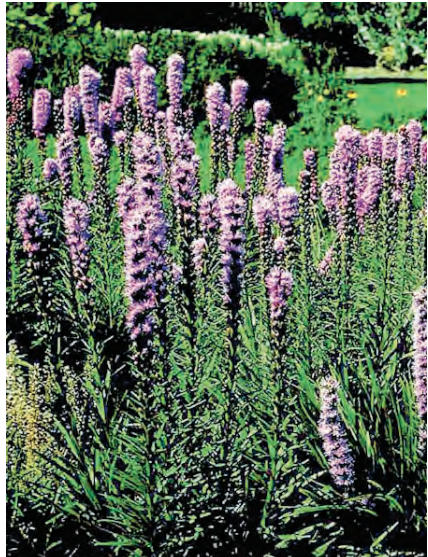


Image courtesy of Monrovia Nursery



Meadow Rue

Thalictrum aquilegifolium

Features light and airy flowers above feathery foliage.

- Mauve-to-purple flowers are similar to purple loosestrife.
- This plant thrives in moist, rich soils, like the two invasive loosestrife species.
- It tolerates full sun to light shade.
- The divided leaves resemble those of the columbine.
- USDA zones 5-9



Image courtesy of Carla Johnston



Wilson's Ligularia

Ligularia wilsoniana

A tall and showy wetland perennial.

- Spikes of bright yellow flowers open in mid-to-late summer, about the same time garden loosestrife blooms.
- It grows in moist conditions, like garden loosestrife.
- This ligularia takes full sun to partial shade.
- Cultivars of *Ligularia dentata* and *L. przewalskii* also have showy flower spikes, with *L. dentata* having shorter spikes.
- USDA zones 5-9



Image courtesy of Allison C. Mayer

More choices: Blue giant-hyssop (*Agastache foeniculum*), Hebe 'Purple Picture', cardinal flower (*Lobelia cardinalis*), dwarf Russian almond (*Prunus tenella*), tickseed coreopsis (*Coreopsis grandiflora*), bluebeard (*Caryopteris incana*), and WA native monkeyflowers (*Mimulus guttatus* and *M. lewisii*) and *Penstemon* species.

TREES AND SHRUBS

INVASIVE

Butterfly Bush - *Buddleja davidii*

With its showy purple flowers and ability to thrive under a variety of conditions, butterfly bush has become a popular garden ornamental in North America. However, it has escaped cultivation, invading roadsides, logged clearings, and other disturbed areas where it can form dense thickets. In the Pacific Northwest, it is problematic along rivers and streams, where it traps sediment. It does not seem to be a host plant for many butterfly larvae, but it can displace native willow species upon which many of our native butterfly larvae feed.



Top image courtesy of Tim Miller, WSU-NWREC,
Bottom image courtesy of Laurel Baldwin

CLASS B WASHINGTON STATE NOXIOUS WEED

California Lilac

Ceanothus 'Victoria', 'Dark Star',
'Julia Phelps', 'Blue Mist', *C. x*
vetchianus

A neat and tidy, profusely blooming and sun-loving evergreen shrub.

- A wonderful fast-growing and drought-tolerant shrub for well-drained soils, this nitrogen-fixing plant tolerates poor soils.
- It attracts butterflies and honey bees.
- The beautiful flowers are blue and fragrant, with long spring bloom-time.
- This is a very self-reliant plant that is easy to care for, with no pest or disease problems.
- California lilac is evergreen and looks neat & green year-round.
- 'Victoria' is a Great Plant Pick.



Image courtesy of Monrovia Nursery





Chaste Tree

Vitex agnus-castus



A tall and upright buddleja-like shrub for a hot sunny site.

- Summer to early autumn blooms add flower color at the same time of year as butterfly bush.
- Blooms are lilac-like in form, fragrant, and lavender-purple or white, blooming late summer into fall in full sun.
- The nectar attracts honey bees and butterflies and foliage provides food for butterfly larvae.
- Palmately compound, dark-green foliage is aromatic.
- The chaste tree is free of pests and diseases.
- USDA zones 6-10



Image courtesy of Alice Coulthard



Pacific Ninebark

Physocarpus capitatus & cultivars



A profusely blooming shrub with beautiful, shaggy bark for full sun or shade.

- It attracts butterflies and their larvae.
- Blooms are rounded pompoms of white to white-pink and the bloom time is earlier than butterfly bush –late spring to early summer.
- A deciduous shrub with an upright habit reaching a similar height to butterfly bush (12-15 feet). It can be maintained at 8-10 feet and is adapted to a wide range of soils and exposure to sun.
- USDA 3-10



Image courtesy of M.R. and R.W. Smith

More choices: Non-invasive butterfly bushes *Buddleja fallowiana*, *B. globosa*, and *B. x weyeriana*, *Caryopteris x clandonensis*, Rose-of-Sharon (*Hibiscus syriacus*), and natives Lewis' mock orange (*Philadelphus lewisii*) and red-flowering currant (*Ribes sanguineum*).

TREES AND SHRUBS

INVASIVE

Spurge Laurel - *Daphne laureola*

Spurge laurel is a shade-tolerant ornamental shrub with shiny, dark evergreen leaves and light green flowers. Birds spread its bluish-black berries into the forest understory, where the shrub competes with native plants for water and nutrients. A native to Europe and North Africa, spurge laurel is considered one of the top ten plants threatening rare Garry oak ecosystems in



British Columbia, and is spreading throughout Washington and Oregon. Its sap and berries are also toxic.



Image courtesy of Yamhill County Soil & Water Conservation District

CLASS B WASHINGTON STATE NOXIOUS WEED

Winter Daphne

Daphne odora 'Aureomarginata'

This is a winter blooming, deliciously fragrant shrub.

- The attractive ornamental has larger, fragrant, pinkish flowers than spurge laurel.
- This shrub prefers shady areas.
- Like spurge laurel, winter daphne is an early bloomer, from February to March, and is also an evergreen.
- The cultivar 'Aureomarginata' has a contrasting creamy gold leaf margin. The species has entirely green leaves and is also recommended.
- USDA zones 7-9



Image courtesy of Monrovia Nursery



Daphnoides Rhododendron

Rhododendron 'Daphnoides'



Beautiful, large purple flowers decorate this evergreen shrub.

- Large purple flowers are eye-catching, unlike spurge laurel's insignificant greenish-white flowers.
- This rhododendron does not have Daphne species' fragrant flowers.
- It prefers sun to partial shade.
- Daphnoides blooms after spurge laurel, in late spring.
- As its name suggests, the leaves are very "daphne-like".
- USDA zones 4-8



Courtesy of Pat Breen, Oregon State University



Salal

Gaultheria shallon



A highly adaptable, native, evergreen shrub with round leathery leaves.

- Small bell-shaped white flowers bloom March-June, with purplish berries appearing in late summer.
- Salal inhabits a wide variety of soil types and light levels.
- It attracts wildlife, including honey bees, and butterflies and their larvae.
- The foliage is often used in flower arrangements.
- This rounded, dense shrub grows 3-6 feet tall and up to 10 feet tall on favorable sites.
- USDA zones 6-9



More choices: Mexican mock orange (*Choisya* 'Aztec Pearl'), fragrant sweetbox (*Sarcococca ruscifolia*), *Skimmia* cultivars, variegated hybrid daphne (*Daphne* x *burkwoodii* 'Carol Mackie'), hybrid daphne (*Daphne* x *transatlantica* 'Eternal Fragrance') and our native evergreen huckleberry (*Vaccinium ovatum*).

TREES AND SHRUBS

INVASIVE

English Holly - *Ilex aquifolium*

English holly's evergreen foliage and red berries make it a traditional hedgerow shrub in the Pacific Northwest.

Two distinct leaf characteristics are evident, solid green and variegated. The solid green variety has been found escaping outside of gardens. Birds use the berries as a food source, and they spread seeds into surrounding areas where plants may propagate.



Because the Northwest's climate is similar to the species' native Europe, English holly is appearing as scattered shrubs or low

growing trees in lowland forests of western Washington.



WASHINGTON STATE MONITOR SPECIES

Recommended Alternative 26

Meserve Hybrid Hollies

Ilex x meserveae 'Blue Boy', 'Blue Girl', 'Blue Prince', 'Blue Princess', 'China Boy', 'China Girl', 'Berry Magic', 'Ebony Magie'



If you want lots of berries and beautiful holly foliage, these hybrids are the plants for you.

- Like English holly, the female cultivars will set fruit heavily only when pollinated.
- All are evergreen with a dense habit and take heavy pruning, making good hedges and screening plants.
- All cultivars reach 15-18 feet or less; easier to maintain as a hedge than English holly.
- USDA zones 6-8



Image courtesy of Pat Breen, Oregon State Univ.



Tall Oregon Grape

Berberis aquifolium

synonym *Mahonia aquifolium*

Plant with a dense, upright, almost pillar-like habit and dark green holly-like leaves.

- A great native plant, for screening and hedging in a sunny site, densely cloaked with leaves.
- Smaller than English holly, tall Oregon grape will grow to reach 8-10 feet in time.
- Unlike holly, this plant's bright yellow blooms are ornamental, appearing in very early spring and are followed by blue-black, not red, berries in summer.
- Easy to grow in a variety of soils.
- USDA zones 4-8



Image courtesy of Ben Legler



Osmanthus or False Holly

Osmanthus heterophyllus

Great for screening, this shrub looks like an English holly without berries.

- This plant is often mistaken for a holly and, like holly, is well suited for screening and hedges because of its densely branched upright habit.
- The absence of red berries is compensated by small but very fragrant flowers in autumn.
- It grows 15 feet or more in a variety of soil types and in sun or partial shade.
- Easy to care for, it is free of any disfiguring diseases or pests.
- Cultivars 'Goshiki', 'Purpureus', and 'Variegatus' are Great Plant Picks.
- USDA zones 6-9



Courtesy of Richie Steffen, Great Plants Picks

More choices: English holly cultivars *Ilex aquifolium* 'Ferox Argenta' and 'Gold Coast', *Berberis x gladwynensis* 'William Penn', *Eucryphia glutinosa*, and disease-resistant cultivars of firethorn such as *Pyracantha* 'Mohave', and *P. koidzumii* 'Victory'.

TREES AND SHRUBS

INVASIVE

Black Locust - *Robinia pseudoacacia*



John Randall,
Nature
Conservancy

Native to the southern U.S., black locust has been planted extensively for its attractive and fragrant flowers, hard wood, and rapid growth. This tall, fast-growing, and thorny member of the legume family can quickly form dense stands in prairies and along forest edges, displacing native vegetation and reducing the herbaceous understory. It is good at out-competing many other plants because of its nitrogen-fixing ability. Already problematic in the northeastern U.S. and in Texas, black locust is also invasive in the Pacific Northwest and California.



Image courtesy of Mandy Tu,
Nature Conservancy

Oregon Ash

Fraxinus latifolia



Native to the pacific northwest, this tree grows well in moist soils.

- Light green, compound leaves provide a texture similar to black locust.
- Oregon ash leaflets are larger than those of black locust.
- Similar in height to locust, Oregon ash can grow up to 80 feet.
- The round, full crown shape of mature trees is similar to that of black locust.
- USDA zones 6-8



Image courtesy of Pat Breen, Oregon State Univ.





Kentucky Coffee Tree

Gymnocladus dioica

A drought- and air-pollution-tolerant tree for moist, well-drained sites.

- Small leaflets on compound leaves provide a light and airy texture.
- Seed pods, similar to those of black locust, can be avoided by planting male trees.
- With heights of up to 75 feet, Kentucky coffee tree provides a similar shade canopy effect.
- Though moderately fast growing, Kentucky coffee tree does not seed aggressively like black locust.
- USDA zones 5-9



Image courtesy of Pat Breen, OR State Univ.



Golden Rain Tree

Koelreuteria paniculata

This medium-sized ornamental tree tolerates a wide range of soil conditions in sunny to partly shady sites.

- Showy yellow flowers grace what is one of the few mid-summer blooming trees.
- Compound foliage offers a similar texture to black locust.
- The ornamental fruit pods last through winter.
- Like black locust, golden rain tree grows quickly.
- This tree is disease- and pest-resistant.
- USDA zones 6-9



Image courtesy of Pat Breen, Oregon State Univ.

More choices: Katsura (*Cercidiphyllum japonica*), American tulip tree (*Liriodendron tulipifera*), and Japanese scholar tree (*Sophora japonica*).

INVASIVE

Common European Hawthorn & European Mountain Ash

Crataegus monogyna & *Sorbus aucuparia*



Pat Breen, OR State Univ.

These small, ornamental trees are popular for landscaping because of their attractive white flowers and showy red fruit. But birds readily disperse the seeds from garden plantings into natural areas, where hawthorn displaces native vegetation and forms impenetrable thickets that can change the understory ecosystem of forests.



James Manhart, Texas A&M

European mountain ash can establish in both wetland and upland areas. Native versions of both of these beautiful plants exist. More demand will create supply in nurseries.

Douglas Hawthorn

Crataegus douglasii



Native to western North America, this small tree can easily be confused with the invasive *Crataegus monogyna*.

- Similar in appearance to the single-seeded invasive hawthorn, Douglas hawthorn can be distinguished by the three to five nutlets found in the fruit and less-lobed leaves.
- Showy white flowers open in late spring.
- This native provides erosion control in moist soil conditions and riparian areas.
- USDA zones 2-8



Image courtesy of Pat Breen, Oregon State Univ.





Lavelle Hawthorn

Crataegus x lavalleei



A superb ornamental tree in all seasons for sunny to partly sunny, well-drained sites—one of the very best hawthorns for the garden.

- Showy white flower clusters appearing between May and June are more ornamental than the invasive hawthorn and ash.
- Bright orange-red crabapple fruits contrast with autumn leaves and dark bark.
- Glossy, dark green and boldly textured leaves develop a beautiful bronze tinge in the fall.
- This tree is eminently suited to urban and suburban gardens, reaching 25-30 feet tall and 20-25 feet wide.
- USDA zones 3-10



Courtesy of Alan Dodson, Great Plant Picks



Western Crabapple

Malus fusca



A Pacific coast native for moist soils in a sunny to partly shady site.

- Pretty white to pink flowers appear in mid-April.
- Edible but tart red crabapple fruits are visible in late summer to fall.
- Red or yellow-orange leaf color highlights your garden in fall.
- This native can be used as a small shrub or accent tree, growing to 35 feet in height.
- USDA zones 3-7



Br. Alfred Brousseau, St. Mary's College

More choices: Other mountain ash species (*Sorbus commixta* and *S. huphensis*), Washington hawthorn (*Crataegus phaenopyrum*), crab apple (*Malus* 'Evereste'), Japanese scholar tree (*Sophora japonica*), and natives western serviceberry (*Amelanchier alnifolia*), Columbia hawthorn (*Crataegus columbiana*), and Sitka mountain ash (*S. sitchensis*).

INDEX

Invasive & Alternative Plants by Scientific Name

| Name | Page | Name | Page |
|--|-------|--|------|
| <i>Anethum graveolens</i> | 3 | <i>Mahonia aquifolium</i> | 27 |
| <i>Arctostaphylos uva-ursi</i> | 15 | <i>Nuphar polysepala</i> | 19 |
| <i>Aruncus dioicus</i> | 8 | <i>Nymphaea odorata</i> | 18 |
| <i>Asarum caudatum</i> | 11 | <i>Osmanthus heterophyllus</i> | 27 |
| <i>Aster x frikartii</i> 'Mönch'..... | 7 | <i>Perovskia atriplicifolia</i> | 6 |
| <i>Berberis aquifolium</i> | 27 | <i>Physocarpus capitatus</i> & cultivars | 23 |
| <i>Brasenia schreberi</i> | 19 | <i>Polygonum albertii</i> | 12 |
| <i>Buddeja davidii</i> | 22 | <i>Polygonum</i> spp. | 8 |
| <i>Campanula lactiflora</i> | 4 | <i>Rhododendron</i> 'Daphnoides' | 25 |
| <i>Ceanothus</i> spp. & cultivars | 22 | <i>Robinia pseudoacacia</i> | 28 |
| <i>Clematis vitalba</i> , C. spp. & cultivars ... | 12-13 | <i>Rubus pentalobus</i> (syn. <i>R. calycioides</i>)... | 14 |
| <i>Cosmos bipinnatus</i> | 3 | <i>Scabiosa caucasica</i> 'Ultra Violet'..... | 7 |
| <i>Crataegus douglasii</i> & <i>C. monogyna</i> | 30 | <i>Thalictrum aquilegifolium</i> | 21 |
| <i>Crataegus x lavalleyi</i> | 31 | <i>Verbena bonariensis</i> | 6 |
| <i>Daphne laureola</i> | 24 | <i>Vitex agnus-castus</i> | 23 |
| <i>Daphne odora</i> 'Aureomarginata'..... | 24 | | |
| <i>Delphinium parishii</i> & cultivars | 5 | <u><i>Invasive Plants by Common Name</i></u> | |
| <i>Euonymus fortunei</i> & cultivars | 10 | Black locust | 28 |
| <i>Fargesia robusta</i> | 9 | Butterfly bush | 22 |
| <i>Foeniculum vulgare</i> | 2 | Common European hawthorn..... | 30 |
| <i>Fothergilla major</i> | 9 | Common fennel | 2 |
| <i>Fraxinus latifolia</i> | 28 | English holly..... | 26 |
| <i>Gaultheria shallon</i> | 25 | European mountain ash..... | 30 |
| <i>Gymnocladus dioicus</i> | 29 | Fragrant waterlily | 18 |
| <i>Hedera hibernica</i> & <i>Hedera helix</i> | 14 | Garden loosestrife | 20 |
| <i>Heuchera</i> & <i>Heucherella</i> spp. & cultivars | 11 | Ivy: Atlantic/Irish & English cultivars | 14 |
| <i>Hydrangea anomala</i> subsp. <i>petiolaris</i> ... | 15 | Knotweeds | 8 |
| <i>Ilex aquifolium</i> & <i>I. x meserveae</i> | 26 | Old man's beard | 12 |
| <i>Impatiens glandulifera</i> | 4 | Policeman's helmet | 4 |
| <i>Iris pseudacorus</i> & <i>Iris</i> spp. & cultivars | 16-17 | Purple loosestrife..... | 20 |
| <i>Koeleruteria paniculata</i> | 29 | Purple verbena | 6 |
| <i>Lamiastrum galeobdolon</i> | 10 | Silverlace vine | 12 |
| <i>Liatris spicata</i> | 20 | Spurge laurel | 14 |
| <i>Ligularia wilsoniana</i> | 21 | Tall verbena | 6 |
| <i>Lobelia cardinalis</i> & cultivars | 5 | Yellow archangel | 10 |
| <i>Lonicera ciliosa</i> | 13 | Yellow flag iris | 16 |
| <i>Lysimachia vulgaris</i> | 20 | | |
| <i>Lythrum salicaria</i> | 20 | | |
| <i>Malus fusca</i> | 31 | | |

WASHINGTON STATE NOXIOUS WEED LIST

To help protect our state's resources and economy, the Washington State Noxious Weed Control Board creates an annual Noxious Weed List of the most serious invasive plants (WAC 16-750). This list separates weeds into three major classes:

Class A Noxious Weeds

Species whose distribution in Washington is limited. State law requires eradication of these Noxious Weeds.

Class B Noxious Weeds

Species whose distribution is limited to portions of Washington. The goal is to contain plants where they already occur and prevent spread into new areas.

Class C Noxious Weeds

Noxious Weeds that are typically widespread in Washington State. Counties have the option to enforce control.

Because approximately half of the plants on the weed list are garden escapees, making wise garden choices is an excellent step in controlling invasive plants.

For information on weed laws or weed removal, contact your county's noxious weed control board. The state weed board can direct you to your county weed board from our website: www.nwcb.wa.gov (click on 'County Links'), or email: noxiousweeds@agr.wa.gov, or phone: (360) 725-5764.

INVASIVES

According to the American Nursery and Landscape Association, "invasive, non-native species are those that can or have spread into native wilderness or managed ecosystems, develop self-sustaining populations, and become dominant or disruptive to those systems."

Invasive plants are causing serious environmental and economical damage worldwide. These plants hurt Washington's economy and prized natural resources by reducing crop yields, displacing native plants, destroying fish and wildlife habitat, decreasing land values, choking waterways, and by diminishing recreational opportunities such as fishing, hunting, hiking, wildlife viewing, and bird watching.

Preventative weed control is one of the least expensive and most effective ways to combat invasive plants, and this practice can start right at home in your own garden.



For more information see: www.nwcb.wa.gov

ACKNOWLEDGEMENTS

Produced by:

- WA State Noxious Weed Control Board, www.nwcb.wa.gov
- WA State Nursery and Landscape Association, www.wsnla.org
- Great Plant Picks, www.GreatPlantPicks.org
- The Nature Conservancy of WA
- Conservation Northwest
- University of Washington Botanical Gardens
- Washington Native Plant Society
- King County Noxious Weed Control Board, www.kingcounty.gov/weeds
- Whatcom County Noxious Weed Control Board, www.co.whatcom.wa.us/publicworks/weeds/index.jsp

Compiled and Written By:

Alison Halpern, Seth Cool, Tanya DeMarsh-Dodson, and Wendy DesCamp

Design & Production By:

Cindy Orr & Alison Halpern

Inspired By:

Friendly Alternatives by the Auckland Regional Council, Cal-IPC *Don't Plant a Pest*, and original *Garden Wise* design by White Ink

Cover Art of Lewis' Mock Orange By:

Laurel Baldwin

Special Thanks To:

Erin Moore, Jeff Larsen, Danielle Warner, Karen Peterson, Sarah Reichard, Sasha Shaw, Seattle Urban Nature Project, Amy Yahnke & Ray Larson

For more information please visit the following website:

www.nwcb.wa.gov

