Noxious Weeds

That Harm Washington State

Western WA Field Guide

Washington State Noxious Weed Control Board
www.nwcb.wa.gov

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Introduction

What is a noxious weed?

"Noxious weed" is the traditional, legal term for invasive plants that are so aggressive they harm our local ecosystems or disrupt agricultural production. These plants crowd out the native species that fish and wildlife

depend on. They also cost farmers millions of dollars in control efforts and lost production – and that can make the food we buy more expensive.

The term "noxious weed" includes non-native invasive plants, shrubs, and trees that grow both on land and in wetlands, lakes, shorelines and streams.

How do noxious weeds spread?

Sue Winterowd, Stevens County NWCB

About half of the noxious weeds in Washington are "escapees" from gardens, and that explains why so many of them are quite beautiful. Others came to Washington as "stowaways" on ships, as seeds accidentally included in packing material, or on the wheels or shoes of travelers. The more people travel – and the more globally connected our world becomes – the more we spread seeds and plant fragments from place to place.

Why are there laws about noxious weeds?

Weed laws establish all property owners' responsibility for helping to prevent and control the spread of invasive plants. Since plants grow without regard to property lines or political jurisdictions, everyone's cooperation is needed to combat them. City gardeners, farmers, public land owners, foresters, and ranchers all have a role to play in this effort.

Washington's first noxious weed law was passed in 1881 to combat the spread of invasive plants that threatened farmers' fields. For many decades, the agricultural community led efforts to combat the spread of invasive plants. More recently, people have recognized the harm invasive plants cause to native ecosystems and wildlife. For instance, when spotted knapweed spreads in mountain meadows, it can reduce the native plants elk eat by 90%.

Washington's state weed law (RCW 17.10) established the State Noxious Weed Control Board, and authorized counties to establish County Noxious Weed Control Boards. Many County Noxious Weed Control Boards are financed with a small assessment included in property tax statements.

What are the three classes of noxious weeds?

Class A noxious weeds are newcomers. They are often found in only one or two places in the state, and state and local weed boards hope to completely eradicate them before they get a foothold in Washington. There are many success stories in the early detection and eradication of Class A weeds. For instance, kudzu – a notoriously invasive plant in the South – was found in Clark County. Kudzu was listed as a Class A invader, and eradicated. So far, it has not turned up anywhere else in our state.

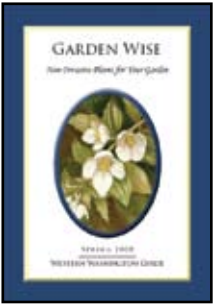
Class A noxious weeds are the ones you are least likely to see – but the ones that are most important to report. If you see a plant you think might be a Class A noxious weed, please report it to your County Weed Board or to the State Noxious Weed Control Board. Note the exact location, and if possible, take pictures.

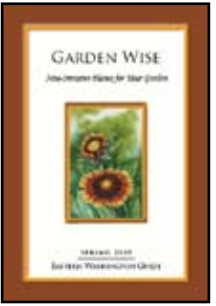
Class B noxious weeds are abundant in some areas of the state, but absent or rare in others. The goal for Class B weeds is to control and reduce their occurrence where they are abundant and to prevent them from spreading to those parts of the state where they are rare or absent.

Class C noxious weeds are already widespread in Washington. In some cases, counties may require property owners to control them, but more often counties simply try to educate residents about why controlling them is a good idea. Often the county noxious weed programs work with landowners with widespread weeds to develop a long-term control program incorporating all the tools of an integrated pest management (IPM) program.

For a complete list of Washington State noxious weeds or an introduction to Washington's weed laws go to www.nwcb.wa.gov or call 360-725-5764.

Also available for download are the popular Garden Wise booklets which illustrate non-invasive, alternative plants for your garden.





common reed

Phragmites australis

Identification: Common reed is a large perennial grass with woody, hollow stems up to12 feet tall. The lance-shaped leaves are up to 16 inches long and 1.5 inches wide and will often twist to one side in the wind. The flowerheads are dense, silky, brownish-purple plumes that can reach 16 inches long. Bloom time is July to October. Common reed has an extensive, creeping rhizome network.

Impact: This robust grass species forms dense colonies in both freshwater and saline wetlands and ditches. These stands alter hydrology, displace native vegetation, and degrade valuable wetland habitat.

Control: Since rhizomes can produce new plants, care must be taken to prevent dispersal. Mowing, when timed correctly, can reduce populations. For large infestations, selective aquatic herbicides can be effective, with late-summer through fall applications appearing to be most effective.

Rich Old, www.xidservices.com

Rich Old, www.xidservices.com

Rich Old, www.xidservices.com

Class B Noxious Weed

yellow nutsedge

Cyperus esculentus

Identification: Yellow nutsedge is a perennial sedge that grows 6-30 inches tall. It has a 3-sided stem that is bulb-like at the base, and bright green, stiff, grass-like leaves. Straw-colored to golden-brown flowers grow in a cluster of spikes that originate from a single point, with three long leaf-like bracts at the base. It produces tubers at the rhizome tips.

Impact: Yellow nutsedge is one of the most problematic perennial weeds of cultivated fields in the Pacific Northwest. It aggressively competes with crops, and tubers that invade potato fields reduce crop quality. Tuber density can reach 12 million per acre in heavily infested fields.

Control: Use caution when removing yellow nutsedge plants, as tubers break off easily when soil is disturbed. Tilling at least every four weeks can reduce tuber reserves. Planting competitive crops can help outcompete yellow nutsedge. Herbicides can suppress this noxious weed, but prevention of spread to new fields is best.

Class B Noxious Weed

spurge laurel

Daphne laureola

Identification: Spurge laurel is a shade-tolerant evergreen shrub 1.5-5 feet tall with yellow tinged gray bark. Leaves are dark green and glossy. They are spirally arranged around the stem and densest along branch tips. Inconspicuous, yellow-green flowers are clustered at the base of the leaves and bloom in late winter or early spring. Fruits are bluish-black.

Impact: Spurge laurel has escaped cultivation, primarily near urban areas where birds eat its fruit and disperse the seeds into nearby forests. The shrub rapidly forms monotypic stands that outcompete native understory plants. Oak woodland forests are at the greatest at risk.

Control: Due to the irritating toxins in the sap, stem, leaves, and fruits, it is advisable to wear gloves and other protective gear when handling spurge laurel. Seedlings can be hand-pulled and small shrubs can be dug up. Larger shrubs can be treated with a selective herbicide or cut below soil line. Herbicide applied to the cut stump prevents sprouting.

Class B Noxious Weed

orange hawkweed

Hieracium aurantiacum

Identification: Orange hawkweed can easily be identified by its brilliant orange flower clusters on the end of long, leafless stems up to 2 feet tall. Each dandelion-like flower is about 1 inch across. Leaves are long and taper to a point and grow from the base of the plant. The stems, leaves, and flower buds are covered with small, bristly hairs. Stems exude a milky sap when broken.

Impact: Like other non-native, invasive hawkweeds, orange hawkweed is an aggressive competitor that overwhelms pasture and rangeland plant species, and reduces forage for livestock and wildlife. Infestations can become extremely dense, with the basal leaves forming a thick carpet.

Control: For small, scattered patches, the simplest control is to hand-pull or dig up and dispose of plants and roots. Selective herbicide control can be effective on large, well-established infestations.

Fran Lucero

Fran Lucero

Class B Noxious Weed

buffalobur

Solanum rostratum

Identification: A member of the tomato family, buffalobur is an annual plant that reaches a height between ½ to 2 feet. The flowers are about 1-1½ inches across, with five yellow petals. The leaves are alternate and irregularly divided into 5-7 lobes. The entire plant is covered with straight, yellow spines.

Impact: Buffalobur is native to the Midwest, where it is highly aggressive and invasive in pastures and dry rangeland. It also hosts the destructive Colorado beetle. Seeds of this plant often contaminate other seed crops, and so buffalobur plants occasionally appear beneath bird feeders and in gardens. Eradication of buffalobur is a high priority because it is still rare in Washington, and it is still possible to prevent it from gaining a foothold here.

Control: Isolated plants or small infestations can be eradicated by hoeing or digging them out. Be certain to wear gloves. Selective herbicides can also be effective.

Rich Old, www.xidservices.com

Class A Noxious Weed

common fennel

Foeniculum vulgare

Identification: Unlike the non-invasive annual bulbing fennel, common fennel is a very large perennial herb that can grow from 4-10 feet tall. Alternate leaves are dark green or bronze with fine, feathery leaflets. It has flat-topped clusters of small, yellow flowers. It has a taproot that can be 10 feet long. All parts of the plant smell distinctively like anise or licorice.

Impact: Common fennel colonizes disturbed areas and grasslands, where dense stands out-compete native plants. Already a problem in coastal California, common fennel is beginning to escape gardens and landscapes along rights-of-ways and shorelines in western Washington. It poses an additional threat to our few remaining grasslands.

Control: Young plants can be hand-pulled and larger plants can be dug out with a shovel, but be sure to get the entire root. Do not mow if plants have already set seed, since this will help spread the seeds. Selective herbicides can be effective on large infestations.

Thurston County NWCB

Class B Noxious Weed

gorse / Scotch broom

Ulex europaeus & Cytisus scoparius

Description: Gorse and Scotch broom are evergreen shrubs in the pea family with bright yellow flowers. **Gorse** is readily identifiable by its prominent spiny thorns on mature stems instead of leaves. **Scotch broom** has 5-angled stems and deciduous leaves, each with three narrow leaflets. Gorse blooms early, in late February to April, while Scotch broom blooms from April to June.

Impact: Both of these noxious weeds displace grassland habitat, outcompete native and beneficial plants, and shade out tree seedlings in regenerating forests. They also pose a fire hazard due to their volatile oils. Scotch broom is far more abundant than gorse and is a familiar sight along western Washington highways when it blooms.

Control: Young plants can be hand-pulled, and tools such as Weed Wrenches and Extratigators can yank out even large shrubs. Herbicides are most effective when applied directly to cut stems. Because seeds of both species can remain viable for 40+ years, long-term management of infestations is necessary. Biocontrols are available for both species.

gorse

Scotch broom

sulfur cinquefoil

Potentilla recta

Identification: Sulfur cinquefoil is a perennial plant up to 3 feet tall. Palm-shaped leaves have 5-7 leaflets that are covered in stiff hairs on both the upper and lower surfaces and are finely toothed. The flowers are pale yellow with 5 heart-shaped petals.

Impact: Sulfur cinquefoil can form dense stands that displace native and beneficial plants and grasses. Because this species is not palatable to livestock and wildlife, infestations can significantly reduce the forage value of rangelands and pastures.

Control: For small, scattered patches, the simplest control is to hand-pull or dig up and dispose of plants and roots. Selective herbicides provide fair control of large, well-established infestations, but treatments are more effective when combined with other control techniques, such as planting competitive grasses.

Rich Old, www.xidservices.com

Class B Noxious Weed

tansy ragwort

Senecio jacobea

Description: Tansy ragwort is a biennial that grows 2-4 feet tall. Young plants form basal rosettes with dark green, ruffled leaves with reddish stems. Mature plants have dark green leaves with deep lobes rounded at the tip. Daisy-like flowers are dime-sized, yellow with golden centers, and typically have 13 petals.

Impact: Tansy ragwort is toxic to cattle and horses whether fresh or dry, causing irreversible liver damage. It spreads aggressively and seeds prolifically, with seeds remaining viable in the soil for over 10 years.

Control: For small patches or isolated plants, hand-pull or dig plants with a shovel before they flower and discard plants in the trash. Be sure to wear gloves. Do not mow - plants will just re-flower at a height shorter than the mover blade. For large infestations, selective herbicides can be very effective. Biocontrols (insects that attack this plant) are also available. Keep animals out of infested pastures.

Rich Old,
www.xidservices.com

Class B Noxious Weed

yellow archangel

Lamiastrum galeobdolon

Identification: Yellow archangel is a fast-growing, herbaceous perennial that trails along the ground. The stem is square and hairy. Coarsely toothed leaves are distinctively variegated with green and gray. Hooded flowers are small and yellow and are arranged in whorls on upright stems. Bloom time is brief and occurs in April or May.

Impact: This plant is commonly used in hanging baskets and as a groundcover. Unfortunately, it easily escapes cultivation due to improper disposal of garden cuttings or hanging baskets. It forms dense colonies in forests and parks and is becoming an increasing problem in western Washington.

Control: Prevent new infestations by disposing of plant material in the trash - do not put it in compost piles. Yellow archangel can be hand-pulled, but care must be taken to remove all root material and follow-up monitoring is necessary. Herbicides can also be effective.

Nancy Ness,
Grays Harbor NWCB

Class C Noxious Weed

yellow hawkweed

Hieracium caespitosum

Identification: Yellow hawkweed is an herbaceous perennial. Leaves are primarily basal - growing close to the ground from the base of the plant. They are narrow, 4-6 inches long, and covered in hairs. Dandelion-like flowers are yellow, ¾ inches in diameter, and grow in clusters at the top of a leafless, hairy stem that exudes a milky white sap when broken. The flower bracts of meadow hawkweed and several other non-native, invasive hawkweeds are covered in distinctively dark, bristly hairs.

Impact: Yellow hawkweed reproduces by seed, stolons, and rhizomes and is an aggressive competitor in mountain meadows, rangeland, and may even invade cultivated fields. It is unpalatable and crowds out more desirable forage. There are several other yellow-flowered hawkweeds on the noxious weed list. Learn more about them at www.nwcb.wa.gov.

Control: Small infestations may be hand-pulled or dug out, but the entire plant must be removed since it can resprout. For larger infestations, selective herbicides can be effective.

King County NWCB

King County NWCB

Rich Old,
www.xidservices.com

Class B Noxious Weed

garlic mustard

Alliaria petiolata

Description: Garlic mustard is a biennial plant that has a distinctive garlic odor when crushed. During the first year, the plant forms a basal rosette of kidney-shaped leaves. The second year, the stem grows up to 3 feet tall, and the leaves are heart-shaped or triangular and coarsely toothed. Bloom time is early spring, and the flowers are white with four petals.

Impact: This aggressive, shade-tolerant plant can completely dominate forest floors and displace native species. It releases compounds into the soil that prevent other plants from growing. Fruits can eject the tiny black seeds over ten feet, and the seeds are also dispersed by animals, boots, equipment, and mulch.

Control: Contact your county noxious weed control board if you think you have seen this plant. Pull up plants - including the roots - before they finish flowering and discard them in the trash. Selective herbicides can be effective for large populations. Check boots, clothing, and equipment before leaving a garlic mustard site.

Fran Lucero

Fran Lucero

King County NWCB

Vicky Nuzzo, Natural Areas Consultants, Bugwood.org

giant hogweed

Heracleum mantegazzianum

Identification: Giant hogweed is a member of the parsley family that can grow up to 15 feet tall. Its hollow stem is 2-4 inches in diameter, hairy, and has dark, purplish blotches. The umbrella-like, flat-topped flowerhead can reach a diameter of two feet, and consists of small white flowers arranged in clusters. The leaves are compound and huge – 2 to 5 feet wide – with jagged edges.

Impact: Giant hogweed is a public hazard, as the plant exudes a clear watery sap which sensitizes the skin to sunlight. This can result in severe burns, causing blistering and scarring. It also forms dense canopies, outcompetes native species, and increases soil erosion along streambanks.

Control: Always wear protective clothing and avoid getting sap on skin. If plants are blooming, cut and bag flowerheads and put them in the trash. Plants can be dug out, but be sure to remove all of the root stock. Selective herbicides can be very effective.

Class A Noxious Weed

knotweeds

Polygonum sachalinense, P. cuspidatum,

Identification: The four knotweed species - giant, Japanese, Bohemian, and Himalayan - are tall, shrub-like, perennial, herbaceous plants. Stems often grow to over 10 feet tall and are segmented and hollow, resembling bamboo. Knotweeds form dense colonies that sprout in April, and bear clusters of small white flowers in late summer. Each species produces differently shaped leaves, ranging from heart-shaped to arrow-shaped to long and slender.

Impact: The knotweeds' greatest impact is along streams and in riparian areas where they can completely displace native vegetation, erode stream banks, and change the nutrient cycle at the expense of salmon and other animals. Knotweed roots can grow so vigorously that they erupt through blacktop and damage foundations and other infrastructure.

Control: Knotweed's extensive roots and vigorous growth makes it extremely difficult to control. Although small patches can be dug up, it may take several years to eradicate, and most stands require repeated applications of herbicide over several years. County noxious weed control boards can provide advice and assistance.

P. bohemicum, and *P. polystachyum*

Skamania County NWCB

Island County NWCB

Tim Miller,
WSU-NWREC

poison hemlock

Conium maculatum

Identification: This biennial member of the parsley family can grow up to 8 feet tall. Small, white, 5-petaled flowers grow in 4-inch clusters on stalks that radiate out like umbrella spokes. Leaves are dark glossy green and fernlike. The stem is smooth and hollow with distinctive purple splotches. Crushed leaves also have a unique musty odor.

Impact: **All parts of the plant are extremely toxic to humans and livestock**. Accidental poisonings have occurred when the plants were mistaken for parsley, parsnip, or wild carrot. Poison hemlock easily colonizes roadsides, vacant urban lots, pastures, and waterways.

Control: Always wear gloves when handling this poisonous plant. Selective herbicides are effective on this noxious weed. Because poison hemlock foliage remains toxic after drying, it is critical to dispose of it in the trash.

Class B Noxious Weed

wild chervil

Anthricus sylvestris

Identification: Wild chervil is a biennial member of the parsley family that can grow 1-4 feet tall. Stems are hollow, noticeably ridged, and lower portions of the stem are covered in soft, felt-like hairs. Leaves are fernlike and slightly hairy, especially the undersides. Flowers are white and arranged in clusters on stalks arranged like umbrella spokes. Bloom time begins as early as March. Look for rod-shaped black fruits at maturity.

Impact: Wild chervil is highly adaptable and will grow in almost any type of soil. It forms dense infestations that outcompete native plants and reduce habitat quality for wildlife. It spreads rapidly along roadsides and other rights-of-way.

Control: For small patches, dig up and dispose of plants, being careful to remove the taproot. Selective herbicides can be effective, especially when controlling large infestations. Tilling plants into the soil, followed by seeding with competitive grasses, can control wild chervil.

Sue Winterowd, Stevens County NWCB

Class B Noxious Weed

butterfly bush

Buddleja davidii

Identification: Butterfly bush is a deciduous shrub with arching branches that can reach a height of 15 feet. It has showy flower spikes 4-10 inches long, consisting of numerous, bell-shaped flowers that are often purple with an orange center. Leaves are 4-10 inches long, lance-shaped, oppositely arranged, finely toothed along the edges, and have fuzzy whitish undersides.

Impact: Butterfly bush has tiny seeds that are spread far and wide by the wind. It colonizes roadsides, freeway medians, and disturbed areas, but its greatest impact comes when it spreads to stream banks, where it displaces native vegetation - changing stream habitat, and reducing food supplies for native butterfly larvae and other animals.

Control: If you have butterfly bush on your property, prevent the plant from establishing elsewhere by deadheading flowerheads before they set seed. Seedlings can be hand-pulled and adult plants dug up. Herbicide applied to foliage or cut stems can help reduce infestation.

Class B Noxious Weed

annual & common bugloss, blueweed

Anchusa officinalis, A. arvensis, Echium vulgare

Identification: All three species are covered in stiff, bristly hairs and have small, funnel-shaped flowers that grow close together in coiled stalks that unfold as the flowers open. **Annual bugloss** is between 4-12 inches tall with lance-shaped, alternate, wavy-edged leaves and sky-blue, curved flowers about ¼-inch long. **Common bugloss** is a perennial between 1-2 feet tall with lance-shaped alternate leaves and purplish-blue flowers about ¾-inch long. **Blueweed** is a biennial between 1-3 feet tall with broader-tipped leaves and showy, bright blue flowers up to ¾ inch long.

Impact: These invasive borages are highly competitive and spread through pastures, rangelands, and alfalfa fields. They outcompete native and desirable plants and are unpalatable to livestock and wildlife.

Control: Hand-pulling or digging can be effective for small infestations but be sure to remove the deep taproots of common bugloss and blueweed. Selective herbicides can also be effective for larger infestations.

annual bugloss

common bugloss

Fran Lucero

blueweed

Sue Winterowd

Fran Lucero

purple loosestrife

Lythrum salicaria

Identification: Purple loosestrife is a long-lived perennial, 6-10 feet tall. It has small, purple-to-magenta flowers with 5-6 petals arranged in upright flower spikes. Leaves are lance-shaped and either opposite or whorled in threes. The leaves are stalkless and clasp the stem, which is distinctively square in cross-section.

Impact: Purple loosestrife displaces large areas of riparian and wetland native plants needed by waterfowl and other wildlife for food, nesting, and groundcover. This invasive wetland species changes the nutrient cycle, affecting the food web. It also clogs irrigation canals and drainage ditches.

Control: Small patches can be dug up and discarded. Cutting alone will not control purple loosestrife because of its extensive and vigorous root systems. Because one plant is capable of producing 2 million seeds, flowers need to be disposed of properly along with roots and stem fragments, which can resprout. For large infestations, selective, aquatic herbicides can be effective, but a special permit is required. Several biocontrol insects are also available.

King County NWCB

Class B Noxious Weed

flowering rush

Butomus umbellatus

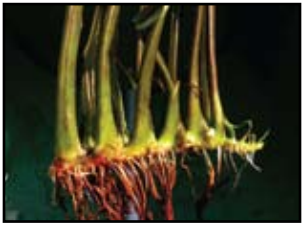
Identification: Flowering rush is a freshwater perennial, which can grow either as a submersed or emergent plant. The leaves are fleshy and triangular in cross-section, growing either below, above, or floating on the water surface. Flower stalks, when present, are usually taller than the leaves and can reach up to 3 feet above the water surface. Each flower stalk bears a single cluster of white to pink flowers at the tip, arranged like umbrella spokes.

Impact: Flowering rush rapidly colonizes wetlands, lake shorelines, and slow-moving rivers. It forms dense stands in previously unvegetated areas, which can reduce recreational activities such as swimming, boating, and fishing. This species also clogs unlined irrigation canals and drainage ditches.

Control: Flowering rush can be difficult to control, so if you find it, contact your county noxious weed control board. For small infestations it may be effective to cut below water surface several times during the summer months. Isolated plants can be dug up and disposed of, but be sure to include all rhizomes. Herbicides labeled for aquatic use are also available, but a special permit is required.

Ben Legler

Ben Legler



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Class A Noxious Weed

shiny geranium/herb-Robert

Geranium lucidum & G. robertianum

Identification: **Shiny geranium** is a small winter annual. Stems are hairless and often have a reddish tinge. Leaves are shiny, divided into 5-7 lobes, and sparsely covered with stiff hairs. The flowers have 5 bright pink petals, and each of the 5 green sepals (beneath the petals) has a distinctive ridge. **Herb-Robert** is also an annual. It's covered in short, glandular hairs and produces a musky odor when crushed. Leaves are fern-like and bright green. The flowers also have 5 bright pink petals and the sepals are burgundy and hairy.

Impact: Both invasive geranium species are most problematic in forests. They spread quickly and can dominate forest floors, displacing native herbaceous plants. While herb-Robert already has spread throughout western Washington, shiny geranium is a new invader with a very limited distribution.

Control: Both species have shallow root systems, and small infestations can be easily hand-pulled, ideally before they flower. Dispose of plants in the garbage, not the compost. Selective herbicides can be effective for larger infestations.

shiny geranium

Ben Legler

shiny geranium (left) & herb-Robert (right)

herb-Robert

Ben Legler

knapweeds: spotted, diffuse, & meadow

Centaurea stoebe, C. diffusa, & C. jacea x nigra

Identification: These members of the thistle family range from 2-5 feet tall, are spineless, and bear flowerheads with showy petals atop round or egg-shaped bases. Leaves are small, lobed, and often bluish-green. All three species start as basal rosettes in the spring. Spotted and meadow knapweed are perennials with stout taproots and pinkish-purple flowers. Diffuse knapweed is a biennial with white to purple flowers and small spines covering the base of the flower.

Impact: Invasive knapweeds rapidly spread along rights-of-way and colonize meadows, rangeland, prairies, and open forests. They quickly crowd out native and desirable plants, dramatically reducing available forage and habitat for livestock and wildlife.

Control: Knapweed species are prolific seed producers, so preventing the flowers from going to seed is critical. Hand-pulling or digging can be effective for small patches. Mowing is not a good option, because taproots can resprout. For large infestations, both selective herbicides and biocontrol are very effective options. Revegetate with desirable species to provide competition.

spotted knapweed

Spokane County NWCB

diffuse knapweed

Rich Old, www.xidservices.com

Okanogan County NWCB

meadow knapweed

policeman's helmet

Impatiens glandulifera

Identification: Policeman's helmet is an annual species with a smooth, hollow, purple-tinged stem ranging from 3-10 feet tall. Leaves are oval-shaped, coarsely toothed, and are either oppositely arranged or whorled three to a node. The pale pink or purplish flowers resemble the shape of an English policeman's helmet.

Impact: A garden escapee, this prolific, self-seeding plant is colonizing lowland riparian areas, which include moist forests, streambanks, and roadside thickets, where it dominates native plant communities.

Control: Do not distribute seeds at garden group exchanges, as this is a quarantined plant species. Policeman's helmet has a shallow root system, so this plant pulls easily. Selective herbicides can be effective if applied prior to flowering. Because seeds in the ground can remain viable for two years, follow up monitoring and control is recommended.

Fran Lucero

Class B Noxious Weed

thistles: slenderflower & Canada

Carduus tenuiflorus & Cirsium arvense

Identification: Both thistle species are spiny and have clusters of pinkish-purple flowers. **Slenderflower thistle** is an annual that can reach 6 feet tall. Stems have a fringe of spiny, leaf-like wings. Spiny leaves are lobed, and are white underneath with dense, wooly hairs. Flower clusters consist of 5-20 blossoms. **Canada thistle** is a perennial reaching 1-4 feet tall. Leaves are spiny, lobed, and shiny. It has small, weakly spined flowerheads, and seed heads form cottony tufts.

Impact: Like other invasive thistles, these species reduce forage quality of rangeland and pastures. Dense infestations of Canada thistle can severely damage croplands.

Control: For small patches, dig up and discard slenderflower thistle before flowers set seed. Selective herbicides can be effective for larger populations. Canada thistle's extensive root system produces numerous shoots, making control difficult. For small infestations, frequent tilling or mowing can be effective. Larger infestations may be more effectively controlled with selective herbicides or with biocontrol.

slenderflower thistle - Class A noxious weed

Canada thistle - Class C noxious weed

thistles: milk & Scotch

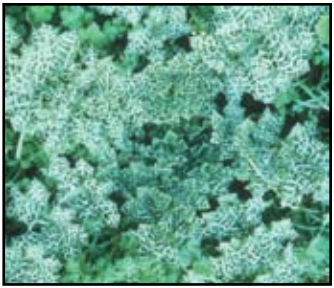
Silybum marianum & Onopordum acanthium

Identification: **Milk thistle** is a large winter annual or biennial ranging 2-6 feet in height. It has distinctive white marbling on its shiny green leaves. Purple flowerheads are 2 inches wide with spine-tipped bracts. **Scotch thistle** is a biennial that can grow to 10 feet tall. The entire plant is covered in felt-like hairs, giving it a silvery appearance. Leaves are long and wide, with the basal leaves reaching 2 feet long. Flowerheads are up to 2-inches wide and are covered in spines.

Impact: Both species form dense stands in pastures and rangelands, reducing forage for livestock and wildlife and creating impenetrable thickets. Ingestion of milk thistle by grazing animals causes nitrate poisoning, which can be lethal.

Control: Digging before flowers set seed can effectively control these thistles. Mowing can prevent seed production but does not reduce infestations. Selective herbicides can be used to treat larger infestations. Goats will graze Scotch thistle.

milk thistle - Class A noxious weed



Scotch thistle - Class B noxious weed

Sue Winterowd

Spokane County NWCB

Sue Winterowd

How can people help prevent and control invasive noxious weeds?

- Be careful what you plant. Since half of all our noxious weeds are escapees from gardens, ask questions before you buy plants or seeds. The State Noxious Weed Control Board can send you a publication (also available online at www.nwcb.wa.gov) called GardenWise that lists alternatives to common garden plants known to be invasive.
- Be careful when you travel. Seeds ride along in wheels, stick to your shoes, boots, clothing and pets. Take care not to take invasive plant seeds with you when you go hiking.
- Clean your boat thoroughly between trips. Aquatic invaders are spread by even the smallest plant fragments.
- If you have invasive plants on your property, do your part to control or eradicate them. If you need help or advice, contact your County Weed Board.
- Volunteer to participate in weed pulls and native plant restoration projects. Many organizations sponsor these events.

Production Credits

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For more information call (360) 902-2082 or e-mail noxiousweeds@agr.wa.gov

Native Deer Fern

Protecting Washington's resources

Staircase Trail, Lilliwaup, WA
photo by Jill Severn

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PUB 820-264W (N/6/09)