

16th Annual Invasive Species Workshop

New Washington State noxious weeds of concern to Southeastern Alaska

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The Washington State Noxious Weed Control Board annually considers new species for addition to the Washington State Noxious Weed List. Several of these listed species, primarily those that are problematic in northwestern Washington, are also troublesome plants in Alaska. Garlic mustard (*Alliaria petiolata*), Bohemian knotweed (*Polygonum cuspidatum*), orange hawkweed (*Hieracium aurantiacum*) and reed canarygrass (*Phalaris arundinacea*) are already well-known in the state, although they may be considered especially well-suited to conditions in southeastern Alaska. In recent years, several species have been added to the Washington list that are capable of negatively impacting homeowners and land managers in Alaska, particularly in the Alaska Panhandle where the climate is similar to northwestern Washington and southwestern British Columbia. Species to watch for include common fennel (*Foeniculum vulgare*), Italian arum (*Arum italicum*), yellow archangel (*Lamium galeobdolon*), hairy willowherb (*Epilobium hirsutum*), false-brome (*Brachypodium sylvaticum*), pampas and jubata grass (*Cortaderia selloana* and *C. jubata*), European common reed (*Phragmites australis*), ravenegrass (*Saccharum ravennae*), Oriental clematis (*Clematis orientalis*), tree-of-heaven (*Ailanthus altissima*) and spurge laurel (*Daphne laureola*). Many of these are ornamental species in Washington that have spread from purposeful plantings and, therefore, are likely to arrive in Alaska in the same way.

New Washington State Noxious Weeds of Concern to Southeast Alaska

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Common Fennel

- *Foeniculum vulgare*
- A weed of **well-drained**, open sites
- In western Washington, it seems to be mostly associated with marine areas
- Class B in Washington



Stems are hollow, with a smooth surface and a waxy bloom



Foliage is lacy and with a pronounced licorice fragrance

Common fennel plants bear **yellow flowers** in **flat-topped, umbrella-shaped clusters** up to 6 inches across



Italian Arum

- *Arum italicum*
- Grows from **full sun** to mostly shade, often fully crowding out other vegetation
- It generally spreads slowly unless cultivated
- Class C in Washington





Leaves are glossy green, arrowhead-shaped, and usually variegated with white markings



Plants primarily reproduce from tubers produced among the roots





Italian arum produces a spadix and spathe that bears tight clusters of 3-seeded, bright orange berries in late summer and fall

Yellow Archangel

- *Lamium galeobdolon*
(sometimes also as *Lamium galeobdolon*)
- Commonly-planted **ground cover** with attractive **variegated foliage**
- Grows well in **half shade** to **full sun**
 - Can grow under Douglas fir and western hemlock, and even some under western red cedar (!!)
- Class B in Washington





Adventitious rooting

Bright yellow flowers in
axillary whorls

What About Yellow Archangel Seeds?

Yes!



Hairy Willow-herb

- *Epilobium hirsutum*
- This is a **rhizomatous perennial** species that can form very dense stands
- It is usually **close to water**, growing on banks and in seasonally shallow water
- Class B in Washington



Leaves and stem are close-fuzzy and often nearly opposite

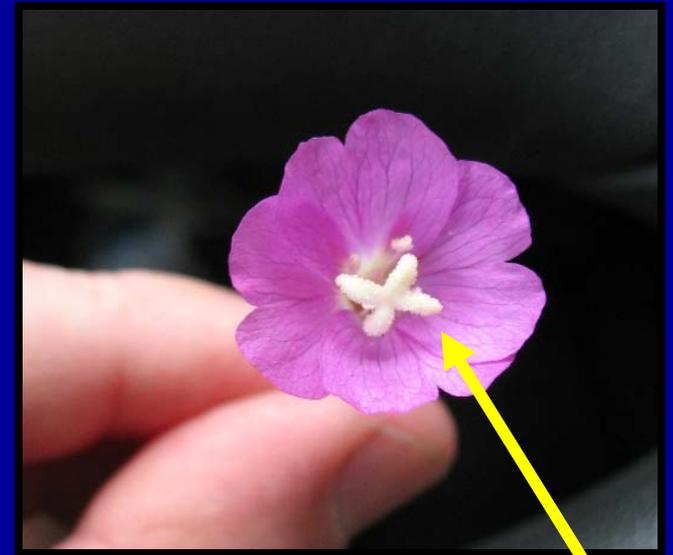


Flowers appear to be spread through the entire canopy (different than for the closely-related fireweed)

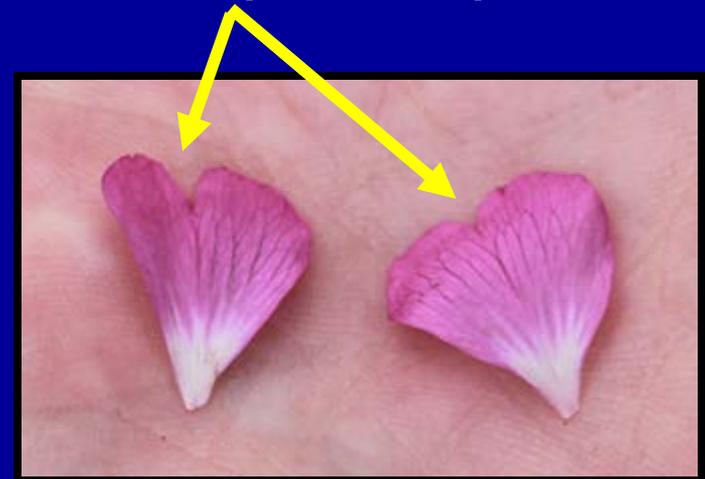




Like fireweed, hairy willow-herb seeds are blown far and wide by the wind



Flowers are pink-purple with cross-shaped stigma and bilobed petal tips



False-Brome

- *Brachypodium sylvaticum*
- Perennial, bunch grass that can achieve near-monotypic stands in understory
- Slender blades and stems make this grass difficult to identify
- Class A in Washington





Leaf blades and sheaths are fuzzy

Ligules are long, erose-tipped, with a few long hairs on the surface





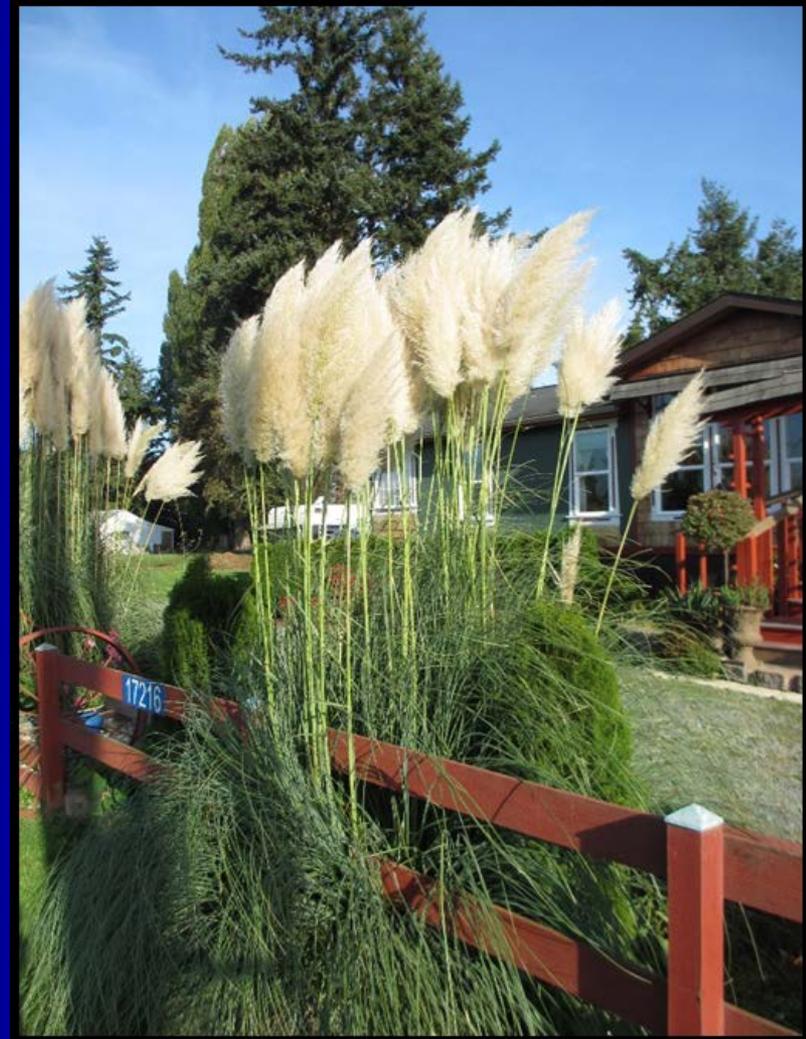
False-brome
plants are from
1 to 3 feet all

Slender spikelets do not
spread away from the
main stem although the
inflorescence tends to
droop, giving the
inflorescence a "broken"
appearance



Pampasgrass and Jubatagrass

- *Cortaderia selloana* and *C. jubata*
- Widely planted, these are **very large bunchgrasses** native to South America
- Up to 13 feet tall
- Class C in Washington





Leaf blades are sharply serrated





Spikelets are silky smooth, from white to ivory or cream in color

Seedlings are beginning to be seen in Washington from seed produced on female plants



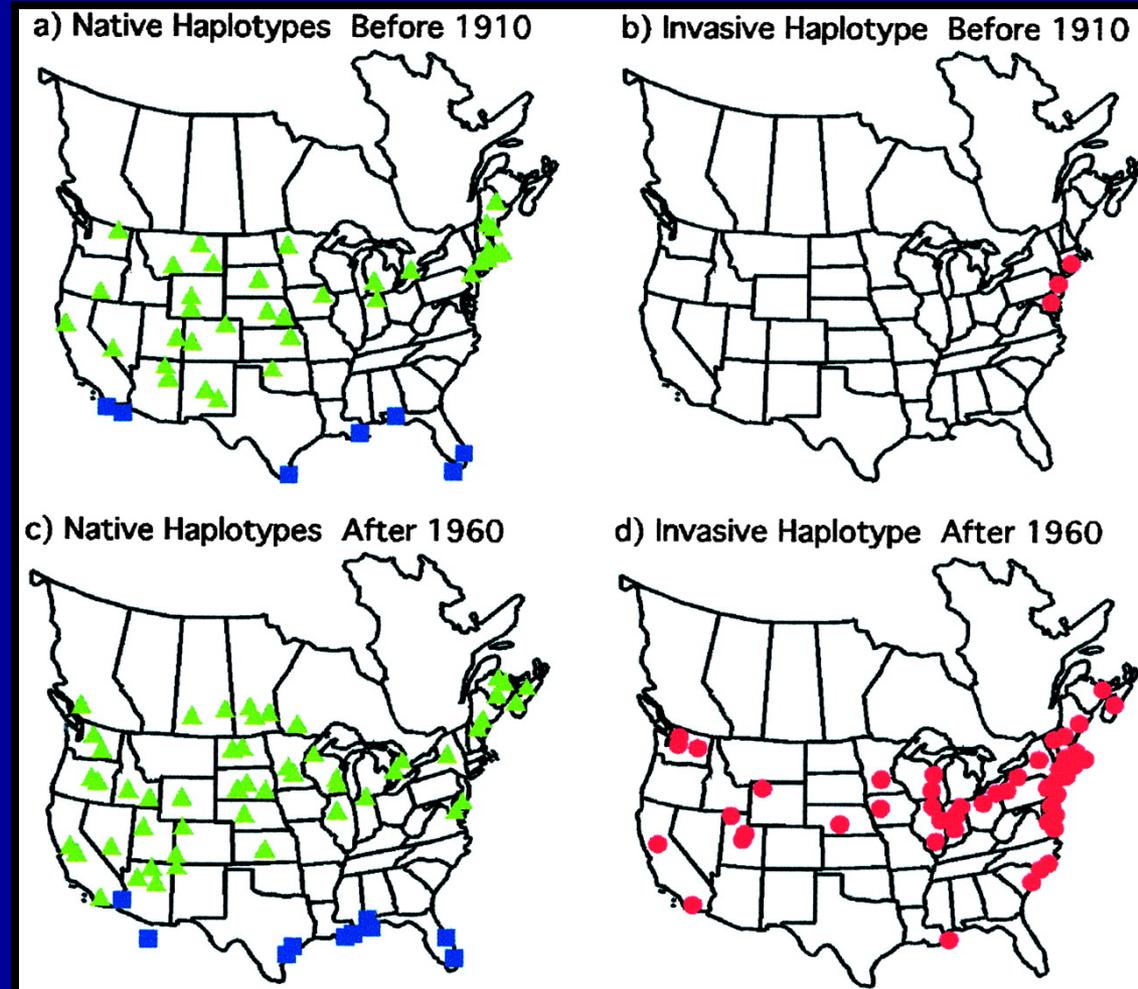
Common Reed

- *Phragmites australis*
- Densely growing wetland **perennial** with creeping rhizomes, growing to 15 feet tall (or more!)
- Not toxic, and is often grazed
- Class B in Washington



Strains of Common Reed

- There are several known strains (**haplotypes**) of common reed that look and grow differently
- It is the introduced common reed haplotypes that are the problem in the US
- Probably introduced as a **contaminant in ship's ballast**



Common reed is usually found in disturbed and non-disturbed wetlands, including roadside ditches and depressions



Leaves are grass shaped and are up to 16 inches long and 1.5 inches wide with hairy collars



Panicles are feathery and crowded, bearing silky-hairy spikelets and seeds



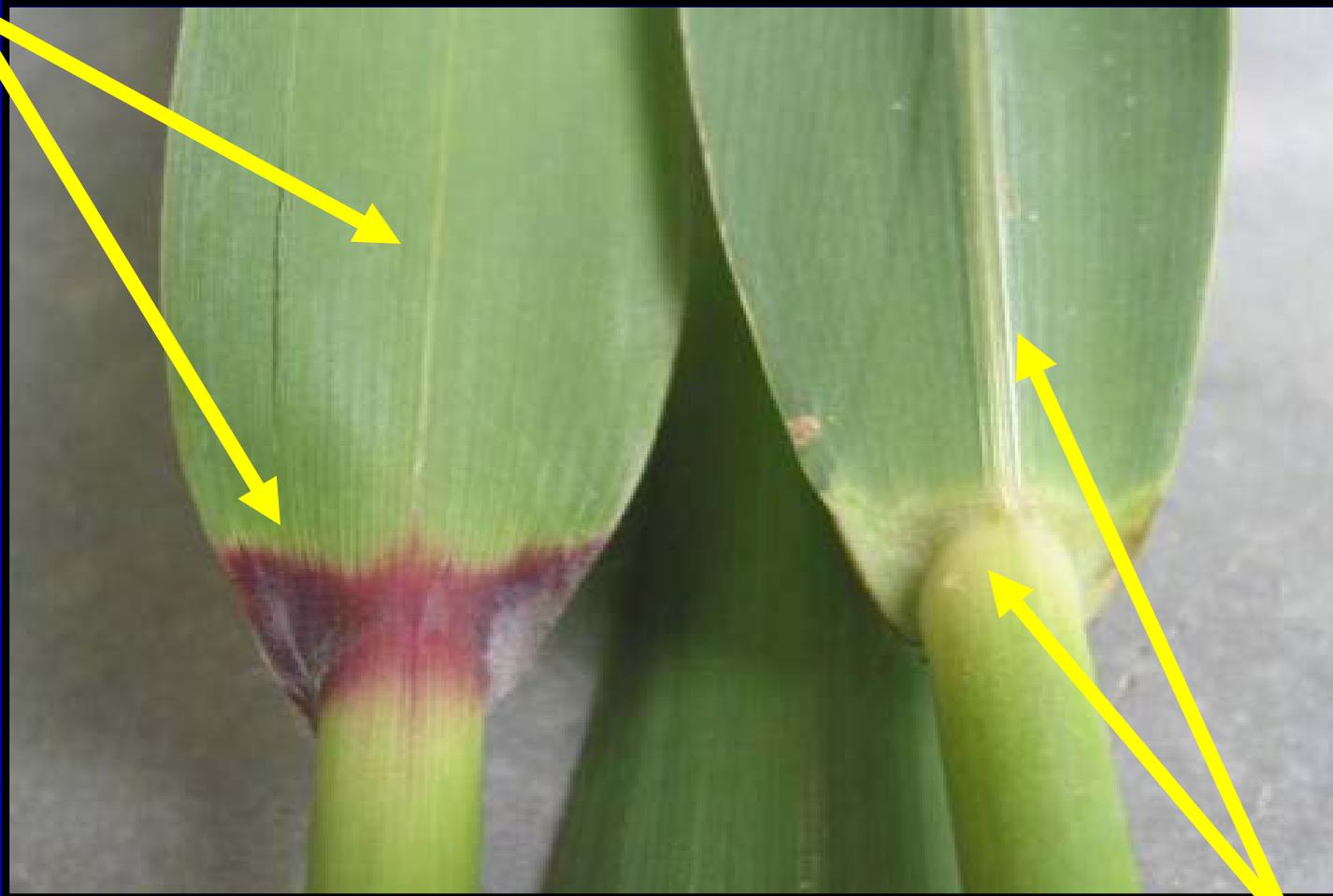
Thick rhizomes are a chief means of spread

Native reed foliage is light green in color and usually provides food for a number of insects



Introduced reed foliage is dark green in color and usually insect-free

Native reed leaf collars are purple and have a faint midrib



Introduced reed leaf collars are white and have a prominent midrib

Native reed produces panicles and stems that are less robust than introduced reed



Native reed stems are off-white in winter and mixed green and red in the summer and are smooth and shiny



Introduced reed stems are tan in winter and bright green in summer and are rough and dull

Ravennagrass

- *Saccharum ravennae*
- Perennial bunchgrass that spreads primarily by seed
- Plants grow to 13 feet tall
- Can survive even in very dry climates
- Class A in Washington



Leaf sheaths and lower blade margins are extremely hairy



Leaf blades have prominent midribs, easily seen on the upper surface

Ravennagrass leaf sheaths often display a reddish-purple color



Infestation along dirt road in sagebrush country

Oriental Clematis

- *Clematis orientalis*
- Perennial, deciduous **vine** or scrambling shrub
- Multiple stems can grow **20 to 30 feet long** and **2 to 3 inches thick**
- Class A in Washington

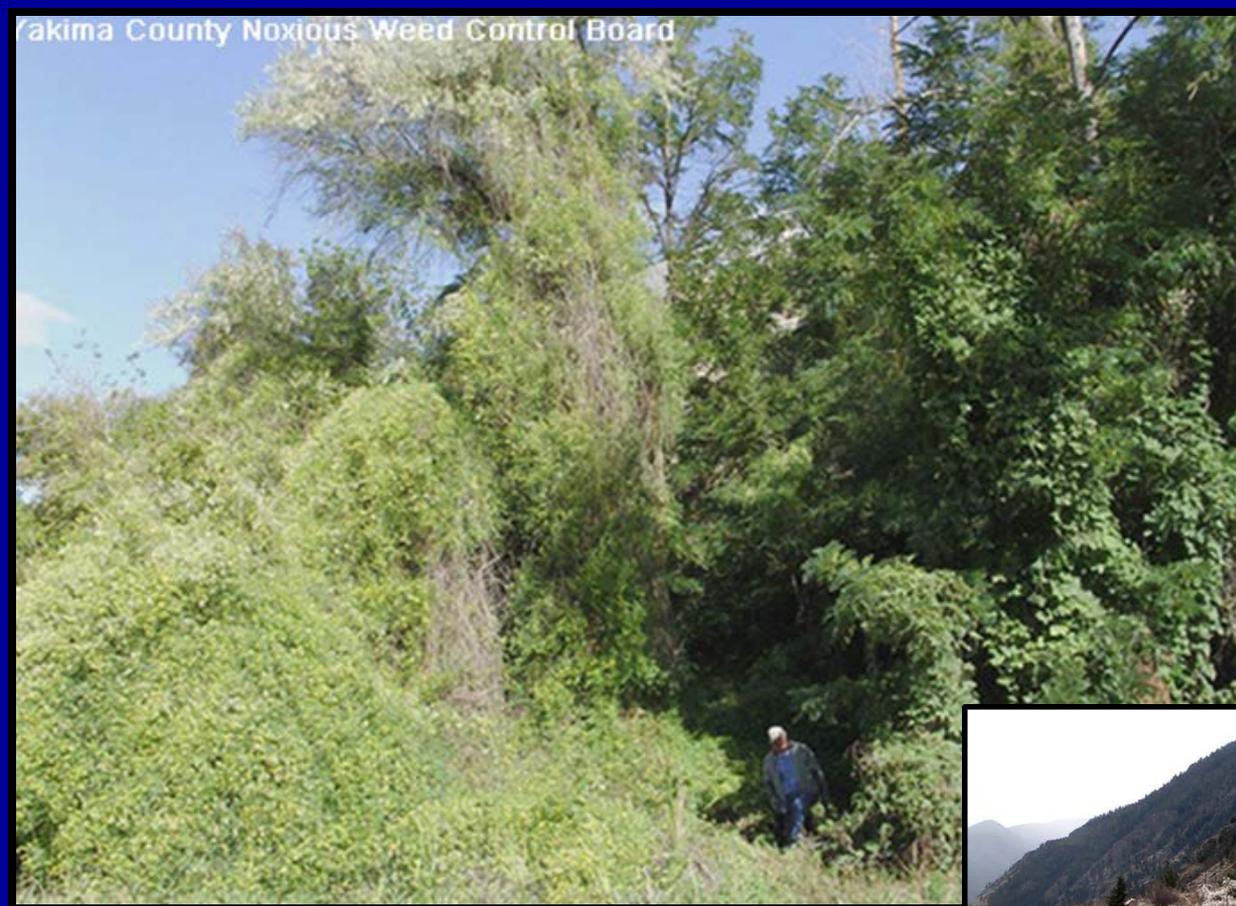


Pinnately-
compound leaves
have 3 to 7
leaflets with
petioles that wrap
around things like
tendrils



Petals (sepals, actually)
are yellow, and the styles
continue to lengthen as
the fruit ripens





Once well-established,
vines are capable of
engulfing other vegetation



Tree-of-Heaven

- *Ailanthus altissima*
- Commonly-planted ornamental tree native to China
- Grows well in **full sun**
- Class C in Washington



In standard Chinese, it is called **chouchun** (臭椿) literally "foul smelling tree"

Deciduous tree to **50 feet tall**

Bears attractive foliage and clusters of yellow and red fruits (maple-like samaras)



Reproduces by root suckering and by seed

Spurge Laurel

- *Daphne laureola*
- A shrub in the family Thymelaeaceae (so it is neither a spurge nor a laurel)
- Up to about 5 feet tall, it is found primarily in **shady areas**
- Class B in Washington





Flowers are yellow-green and small found among the evergreen leaves; fruits are bluish-black, 1-seeded drupes





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