

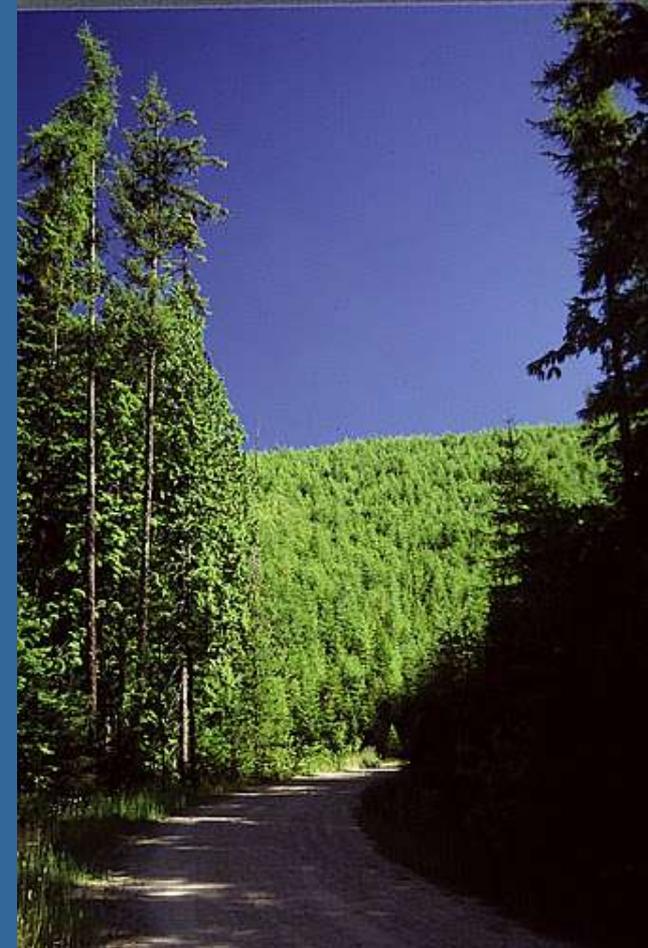
A photograph of a person wearing a backpack sprayer and a hat, working in a dense forest. The person is surrounded by tall, green weeds with white seed heads. The background shows a thick forest of trees and more vegetation. The title 'Weeds in the Woods' is overlaid in large, bold, orange letters.

Weeds in the Woods

Presented by Cathy Lucero
Clallam County Noxious Weed Control Program



Foresters have a stake in maintaining productive forests, as well as protecting fish and wildlife, clean water



A map of Oklahoma with a light green background and white county boundaries. A large, irregular cutout on the left side of the map reveals a lush green forest scene with tall trees and a path. The cutout has a dark green border. The text "Many companies SFI certified" is centered on the map.

**Many companies
SFI certified**

SUSTAINABLE FORESTRY INITIATIVE

2010-2014 STANDARD

- 14 Principles

- 1. *Sustainable Forestry*

- To practice *sustainable forestry to meet the needs of the present* without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates *reforestation and the managing, growing,*
- *nurturing and harvesting of trees for useful products and ecosystem services such as the **conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitats, recreation, and aesthetics.***

- 2. *Forest Productivity and Health*

- To provide for regeneration after harvest and maintain the productive capacity of the forest land base, and to protect
- and maintain *long-term forest and soil productivity. In addition, **to protect forests from economically or environmentally undesirable levels of wildfire, pests, diseases, invasive exotic plants** and animals and other damaging agents and thus maintain and improve *long-term forest health and productivity.**

- Developing measures to deal with Invasive Plants are mentioned repeatedly in SFI

National Forest Service Invasive Species Management Policy

- **SUMMARY:** The FS has finalized the development of an internal directive to Forest Service Manual (FSM) 2900 for invasive species management.



Scotch broom

Cytisus scoparius

In Washington-
\$47 million annual
reduction in timber
production

Class B select



A photograph showing a dense thicket of knotweed plants. The plants are tall and thin, with many green leaves and some brown, dried leaves. They form a tunnel-like structure, with the ground covered in fallen leaves and twigs. The lighting is bright, suggesting sunlight filtering through the canopy.

Knotweed prevents tree seedling recruitment and biodiversity

Invasive Trees



English Hawthorne

Crataegus laevigata



English Holly

Ilex aquifolium

Tree of Heaven

Ailanthus altissima



Introduced in 1700s
Preferred host of
spotted lantern fly-
which attacks many
agricultural crops



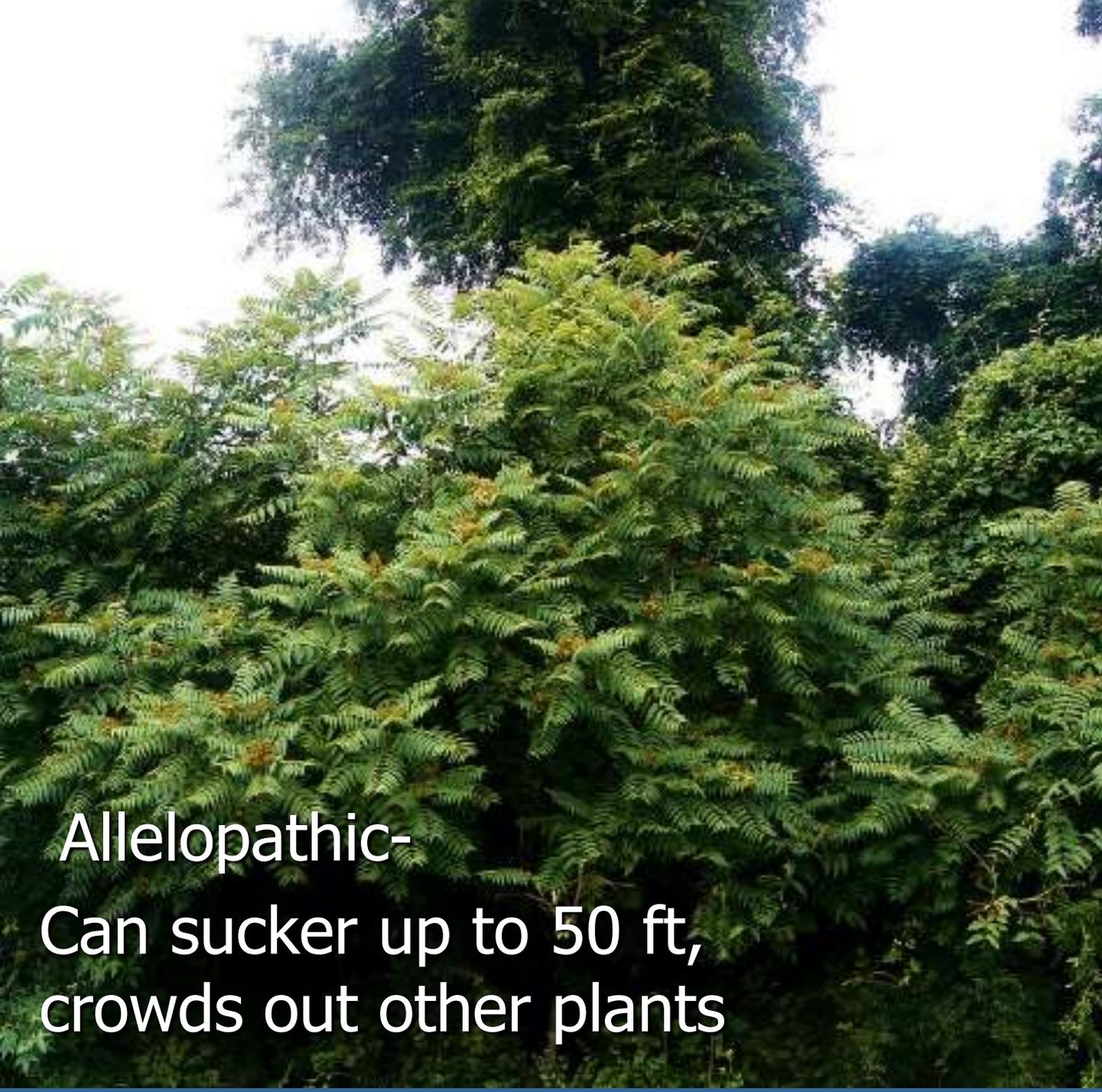
Compound leaves up
to 4 feet long



Smooth margin, teeth at base of leaf



- V or Heart-shaped leaf scars
- Bark light grey, texture like cantaloupe skin



Allelopathic-
Can sucker up to 50 ft,
crowds out other plants

European Mountain Ash aka Rowan

Sorbus aucuparia



Used medicinally, as food
and leaves for livestock

Fruit was used to lure
birds-but they don't digest
the seeds, spread.

European Mountain Ash-not really an ash

Sorbus aucuparia



Cold tolerant, found at higher elevations than other non-native trees, grows in shade

Native Mountain Ash

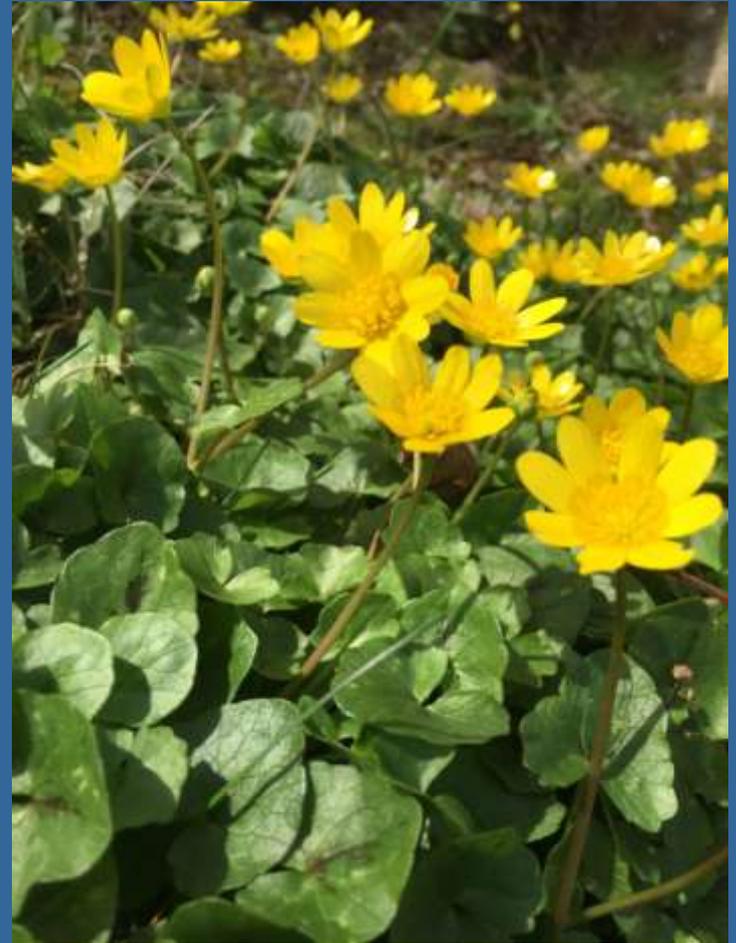
- Western Mountain Ash (*Sorbus scopulina*)
- Sitka Mountain ash (*Sorbus sitchensis* var *grayi*)





Lesser Celandine

Ficaria verna





Lesser Celandine vs. Marsh Marigold

(invasive)

(native)

Lesser Celandine (*Ficaria verna*) can sometimes be confused with Marsh Marigold (*Caltha palustris*). However, since Lesser Celandine is so invasive, it is more likely to be seen here in the Pacific Northwest. Please note the differences and if you have (or are thinking of bringing home) Lesser Celandine, please see our Lesser Celandine fact sheet Control Options here:



7-12 petals



tubers



5-9 petals



Fibrous roots



bulbils on stems



NO bulbils on stems



Spurge Laurel

Careful! Wear gloves! Leaves, sap, stem contain irritating toxins



Spurge Laurel



poisonous

Berries poisonous to people, cats and dogs. Birds can eat and spread



Grayish bark, prominent leaf scars
Rhizomodous

Wild Basil Savory

Clinopodium vulgare



- Square stem
- Hairy
- Shade tolerant
- Calciphile- loves lime-rich soil



Garlic Mustard

(*Alliaria petiolata*)



Infestations are being discovered in more counties every year.





Money Plant

Lunaria annua

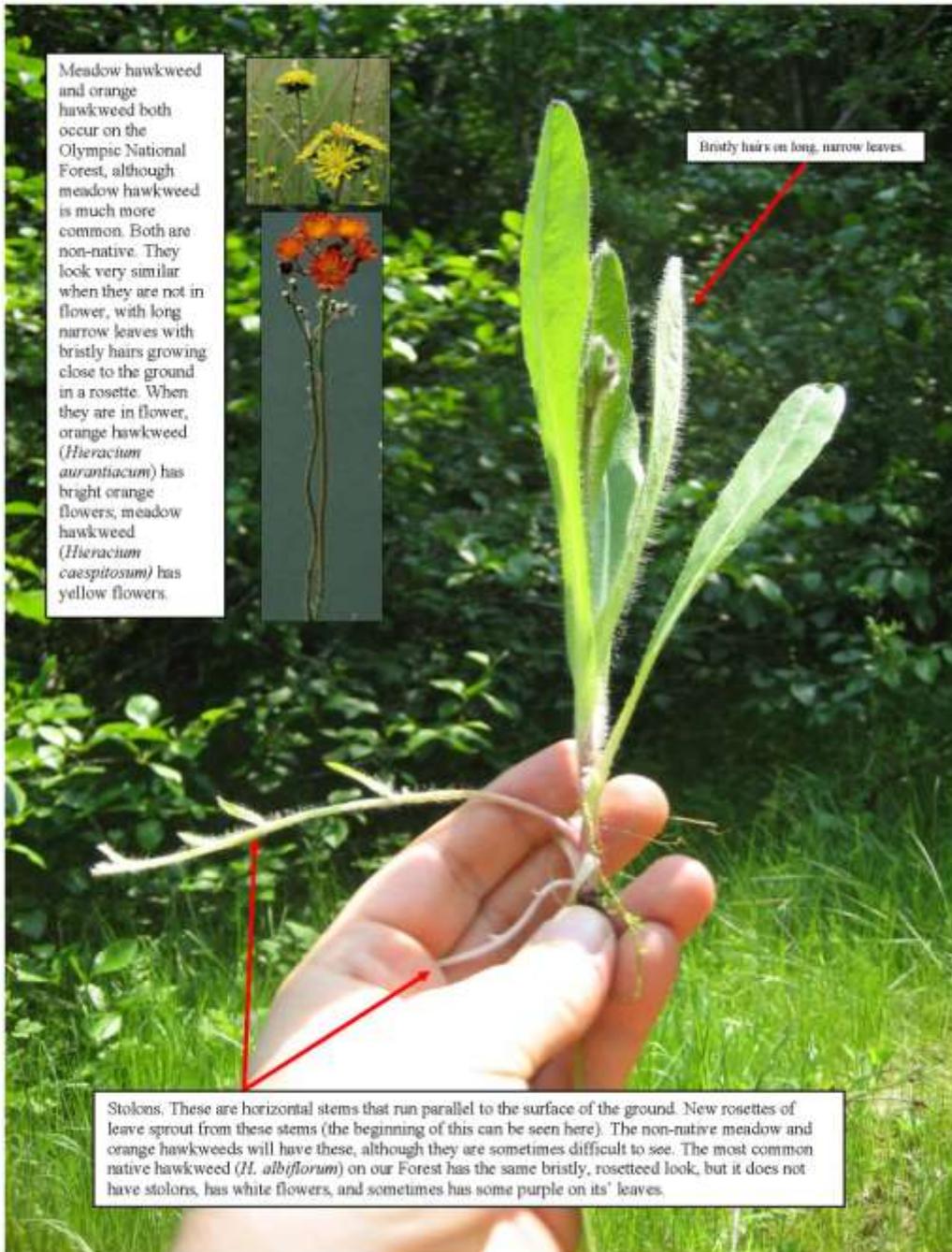


Meadow hawkweed and orange hawkweed both occur on the Olympic National Forest, although meadow hawkweed is much more common. Both are non-native. They look very similar when they are not in flower, with long narrow leaves with bristly hairs growing close to the ground in a rosette. When they are in flower, orange hawkweed (*Hieracium aurantiacum*) has bright orange flowers; meadow hawkweed (*Hieracium caespitosum*) has yellow flowers.



Bristly hairs on long, narrow leaves.

Stolons. These are horizontal stems that run parallel to the surface of the ground. New rosettes of leaves sprout from these stems (the beginning of this can be seen here). The non-native meadow and orange hawkweeds will have these, although they are sometimes difficult to see. The most common native hawkweed (*H. albidiflorum*) on our Forest has the same bristly, rosetteed look, but it does not have stolons, has white flowers, and sometimes has some purple on its' leaves.





Meadow hawkweed has a cluster of yellow flowers that are crowded at the end of a very long, stout leafless stem. Some of the bristly hairs on the flower stems are black. These black hairs are particularly dense on the pappus (green bracts that enclose the base of the yellow flowers) and on the stems just below the flowers. Orange hawkweed has the same characteristics, the only difference is the deep orange flowers.



Because both meadow and orange hawkweed have stolons, they most often are found growing in dense colonies of plants where it is difficult to distinguish individual plants from each other. Individual native hawkweeds can look similar (grow in rosettes, oblong leaves with bristly hairs), but they almost never grow in colonies like the one shown here because they do not have stolons.

How do noxious weeds get around?

People Move Weeds!!

- Sneaky Hitchhikers
- Moving Commodities
- Traffic
- Contaminated Soil
- Restoration
- General Maintenance
- Nature takes over!





Holy
Hogweed
Batman,
what
should we
do?

Weed Control Checklist

- ✓ Does it significantly interfere with management goals or land use?
- ✓ Is it invasive, displacing desired vegetation or interfering with forest regeneration?
- ✓ Is it a priority weed for other land owners?
- ✓ Is it a noxious weed?
- ✓ What plants do you want instead?
- ✓ What is the short and long term control strategy?

Are there others?



yellow archangel



everlasting peavine

Things to think about:

- Does it self seed or spread easily?
- Is it out-competing other plants?
- Does it form a monoculture?
- EDR&R!



Keep equipment weed free



Heavy equipment never gets dirty



Make sure rock sources or stock piles are weed free.

Broom, herb Robert, knotweed, and tansy required control in and around pits.



Use weed free erosion control materials and mulch.

CERTIFIED WEED-FREE
STRAW & FEED REQUIRED
ON NAT'L FOREST LANDS

6.2.197

A photograph of a forest path with sunlight streaming through the trees, creating a lens flare effect. The sun is positioned in the upper left, and its rays fan out across the scene, illuminating the path and the surrounding foliage. The trees are tall and dense, with their leaves creating a textured canopy. The overall atmosphere is serene and natural.

Questions?