# Watercress (Nasturtium officinale)

**Watercress** — Native to Asia, Europe, and North Africa. It is an aquatic or semiaquatic perennial herb with bright white flowers that resemble the shape of a cross; hence, an old name (*Cruciferae*) for the mustard family, to which watercress belongs.

### Habitat

- Commonly found in cold, slow running, alkaline waters of springs, spring runs, and similar streams.
- Noxious and invasive

### Reproduction

- Plants spread by seed and vegetatively by stems and stem fragments that root at the nodes.
- Flowers from April through October.
- Grows all winter long.





# Watercress Management/Control Options

#### **Non-Herbicide**

- Handpull fragments can re-establish.
- No biological method currently known.
- Should remove before flowering and allow to dry.



### Herbicide

- Glyphosate –
- Liquid glyphosate formulations have been effective on watercress above the water line
- Ineffective on plants in the water. They are broad spectrum, systemic herbicides. Systemic herbicides are absorbed and move within the plant to the site of action. Systemic herbicides tend to act more slowly than contact herbicides.
- Surfactant recommended.
- Rodeo, Aquamaster, Eraser AQ, Touchdown Pro, AquaNeat, Refuge



# Jewelweed (Impatiens capensis)

**Jewelweed** -An annual plant in the balsam family (*Balsaminaceae*) native to northern and eastern North America that also goes by other common names including orange balsam, orange jewelweed, spotted jewelweed, and spotted touch-me-not. It grows two to 5 feet tall.

#### Habitat

- found in forests, lake and pond edges, riverbanks, sloughs, disturbed wetlands and sunny roadside ditches or canals.
- Spreads in lowlands and form dense stands along shorelines.
- New noxious weed in 2018.

### Reproduction

- Spreads by seed.
- Competes with native species and is difficult to control.
- Capsules can explode and expel seeds a short distance.
- Blooms in late summer months.



### Jewelweed Management & Control Options

#### **Non-Herbicide**

- Easily hand-pulled.
- Pull before seed capsule production (or bag them).
- Do not remove during pollination season.
- Try to remove root system as well.
- Use other native plant competition.
- No biological control known.

### Herbicide

- Chemical control works best on large infestations.
- Check with local weed board for best control.



# Golden Willow (Salix lasiandra)



**Golden Willow** – A large, deciduous, spreading multi-stemmed tree or shrub which grows in riparian areas. This plant grows from Alaska to California (including British Columbia), and east to Manitoba and New Mexico. This plant grows on both sides of the Cascades crest, and at the coast in Washington. It ranges from 15 to 45 feet (3 to 14 m) in height.

#### Habitat

- Prefers full sun to part shade and wet environments.
- Can withstand seasonal flooding.



### Reproduction

- Seeds and sprouting
- Seeds are widely dispersed through air.



# Willow Management & Control

#### **Non-Herbicide**

- Cutting and digging root system, but difficult due to re-sprouting.
- Potential to use mechanical and chemical.
- No known biological method.



### Herbicide

- Glyphosate (Rated: Excellent)
- Imazapyr (Rated: Excellent)
- Triclopyr (Rated: Excellent)
- 2,4-D (Rated: Excellent)

