The WORST Noxious Weeds
(and how to handle them)

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What is a Noxious Weed?

Difficult to Manage

Carrier or host for insects or disease

Toxic or Poisonous

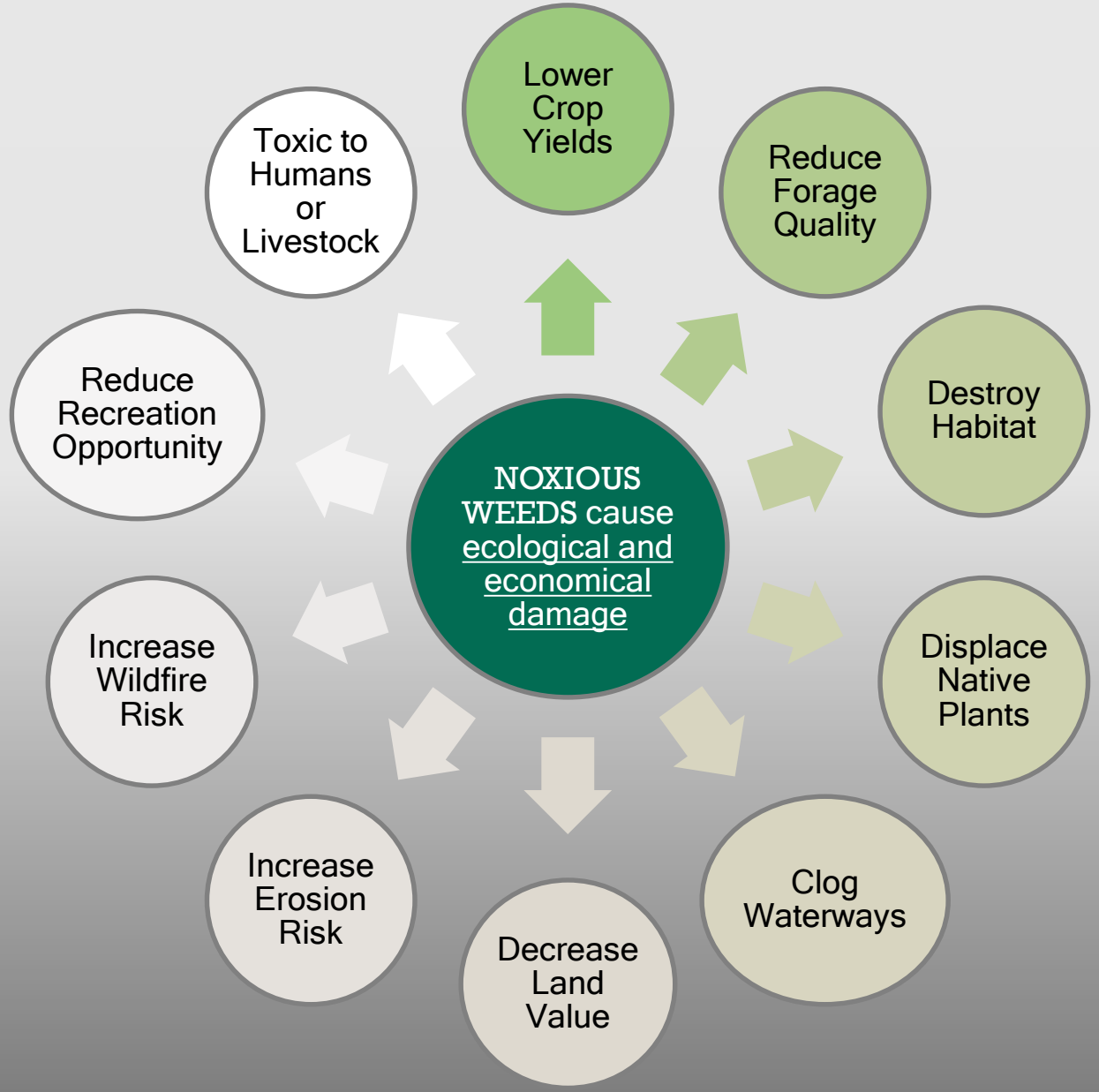
Highly Destructive

Aggressive

Competitive

NOXIOUS WEEDS:
Non-native plants that cause <u>ecological and economical damage</u>

Why Control Noxious Weeds?



…and because it's the Law.

RCW 17.10

PURPOSE: to limit economic loss and adverse effects to Washington's agricultural, natural, and human resources due to the presence and spread of noxious weeds…

Chapter 16-750 WAC

The adopted state noxious weed list with the names of those plants which the state noxious weed control board finds to be highly destructive, competitive, or difficult to control by cultural or chemical practices

Noxious Weed Classification

CLASS A

37 Species

Non-native species with limited Distribution

Eradicating existing infestations and preventing new infestations are the highest priority

Eradication of all Class A plants is required by law

CLASS B

66 Species

Non-native species with limited distribution in portions of WA

Designated for mandatory control where they are not widespread. Containment and prevention of new infestations is the goal

Some Class B weeds are designated for mandatory control per County

CLASS C

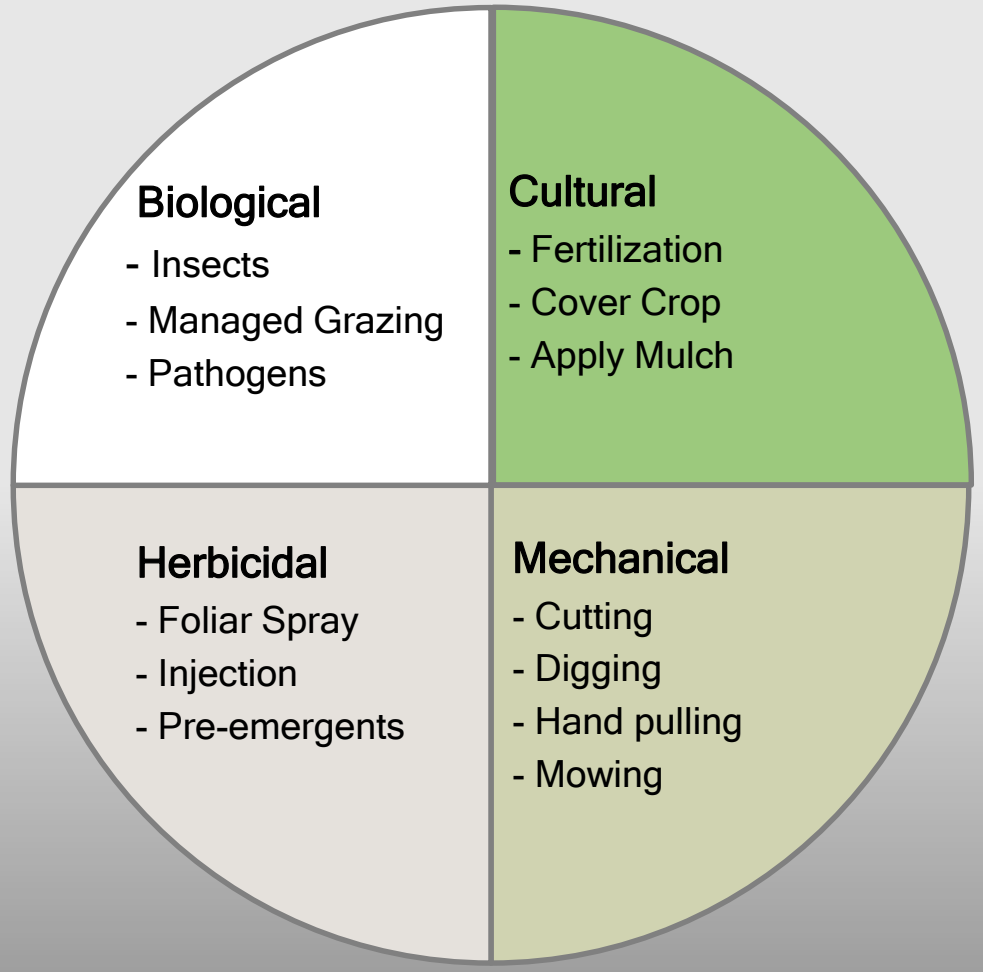
51 Species

Widespread in WA or are of interest to Agriculture Industry

Class C status allows a county to enforce control if it is beneficial to that county

Integrated Pest Management

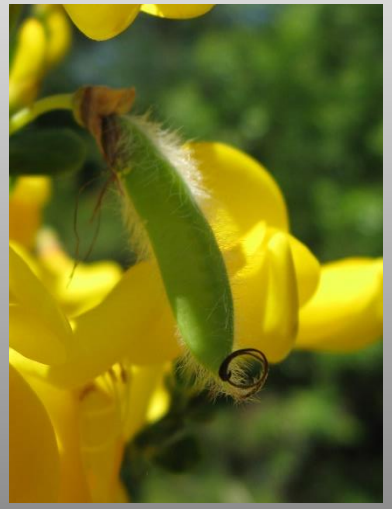
- The combined use of various control methods to manage pests.
- Improve the efficiency of pest control while reducing negative environmental impacts.
- IPM Planning considers site characteristics, timing, plant phenology, monitoring and other factors

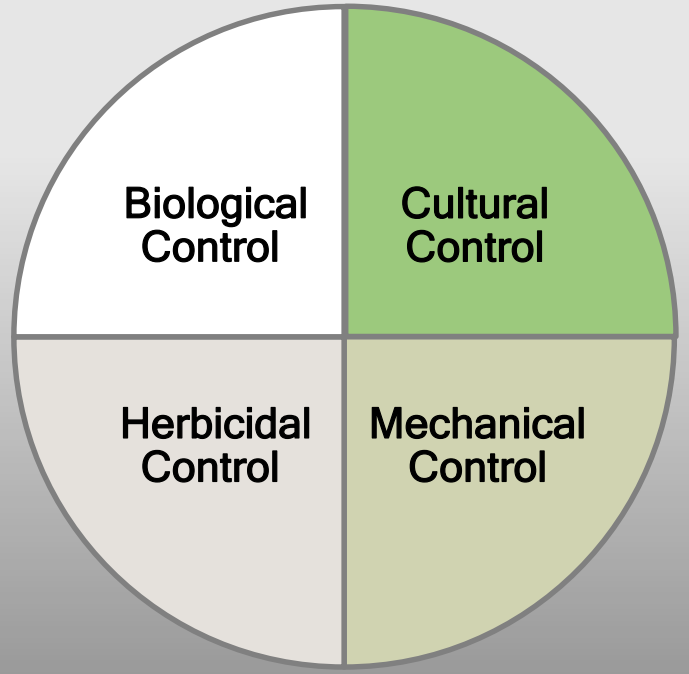


What ARE the WORST NOXIOUS WEEDS? And how to control them…









Knotweeds

B

- Aggressive Perennial
- Spreads by rhizome, fragmentation

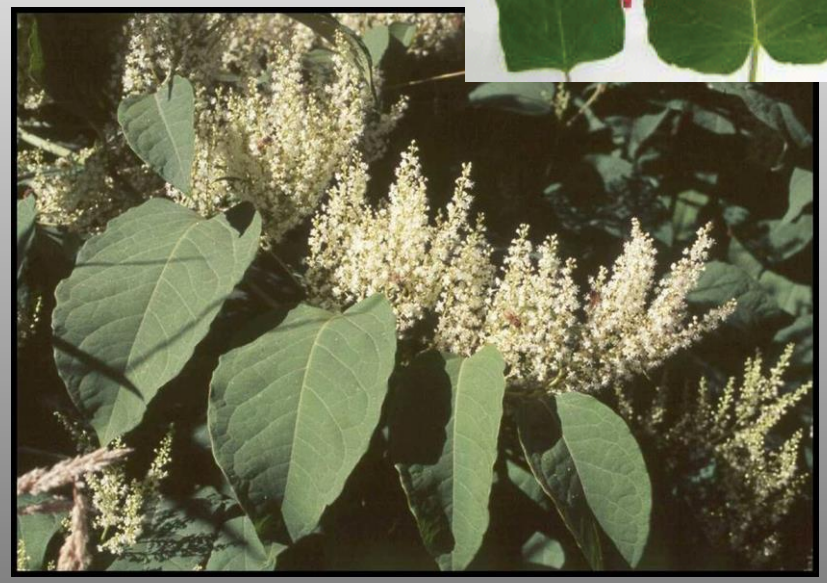
Knotweeds

B

Japanese Knotweed

Himalayan Knotweed

Bohemian Knotweed



Giant Knotweed

Japanese Knotweed - *Polygonum cuspidatum* B

Listed in 1995
Native to Asia

Giant Knotweed - *Polygonum sachalinense*

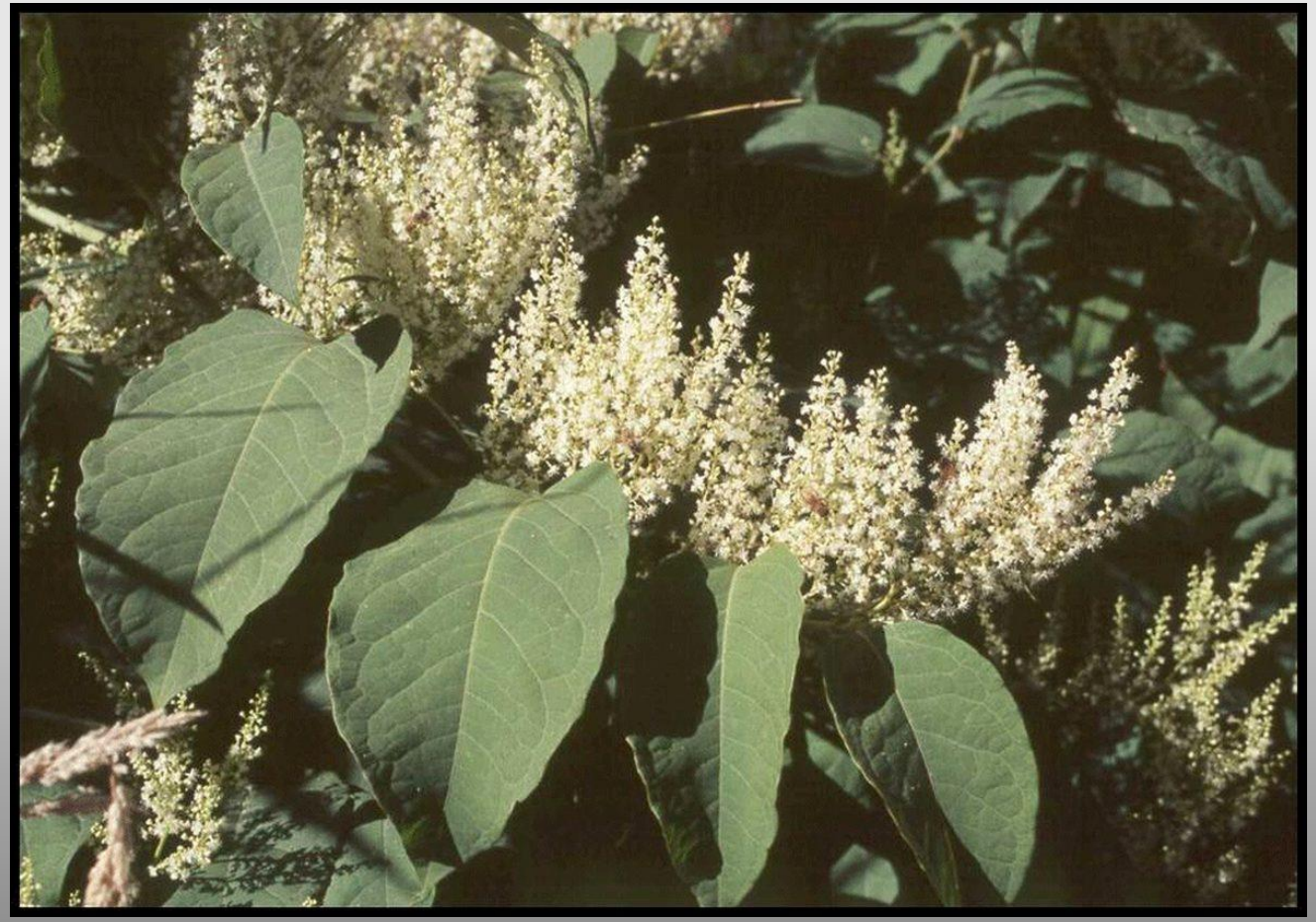
B

AKA Sakhalin knotweed
Listed in 1999
Native to Asia

Bohemian Knotweed - *Polygonum x bohemicum*

B

Listed in 2004
Native to Asia



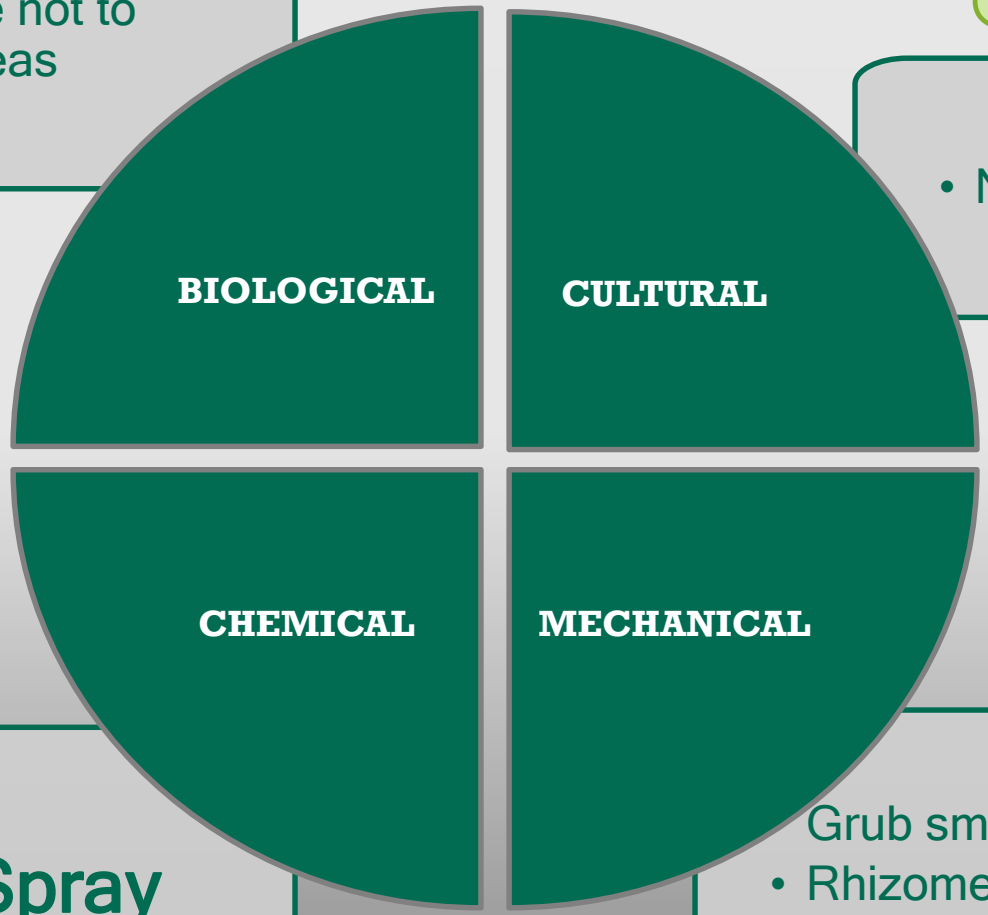
Himalayan Knotweed - *Persicaria wallichii*

B

AKA Bell shaped knotweed
Listed in 2003
Native to Asia

Knotweed

- NEW Knotweed psyllid, *Aphlara itadori*
- Grazing only in combination with other methods, care not to damage riparian areas



Persistence & Monitoring

- Native competition may help

DO NOT CUT

- **Foliar Spray**
- Stem Injection

Grub small infestations

- Rhizomes/fragments can regenerate
- Remove entire root system
- Frequent cutting (<2 weeks) for many years
- Cut & loosely cover with thick landscape fabric, flatten & monitor

Knotweeds

1. DO NOT CUT/MOW
2. Enjoy the flowers

3a. Spray with a foliar spray

3b. Inject with herbicide using an injection gun

4. Monitor & follow up as needed

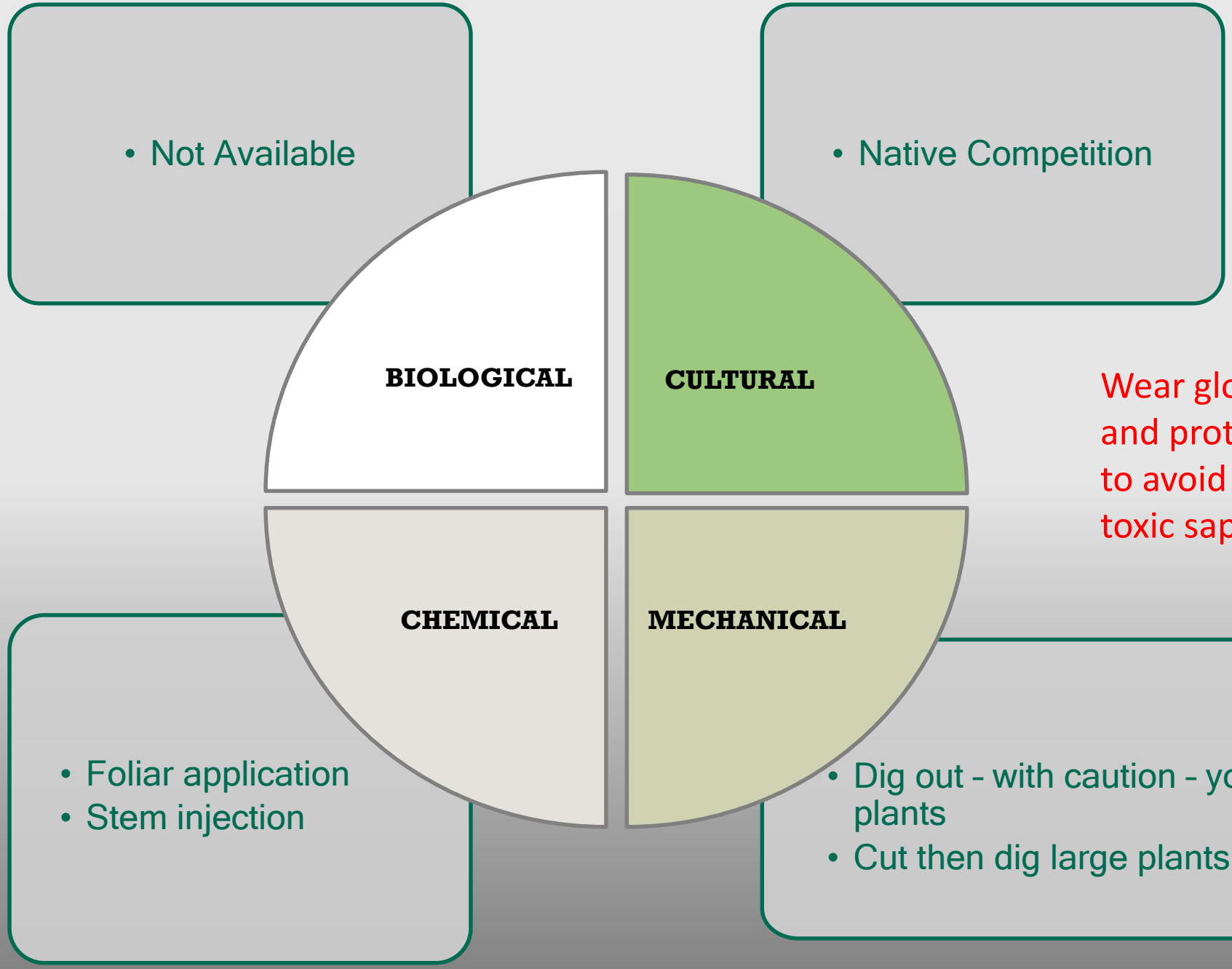
B

Giant Hogweed - *Heracleum mantegazzianum*

A

- Perennial *~biennial*
- Reproduces by seed, perennating buds
- Toxic – exudes a clear watery sap which sensitizes the skin to ultraviolet radiation, resulting in severe burns
- flat-topped flower clusters of small white flowers, clusters grow to a diameter of 2.5 feet

Giant Hogweed



Wear gloves
and protective clothing
to avoid contact with its
toxic sap.

Giant Hogweed - *Heracleum mantegazzianum*

A

1. Small plants: remove or spray
2. Large plants: cut then dig or spray
3. Flowering stage: cut flower stalk, spray remaining vegetation

Tansy Ragwort - *Jacobaea vulgaris*

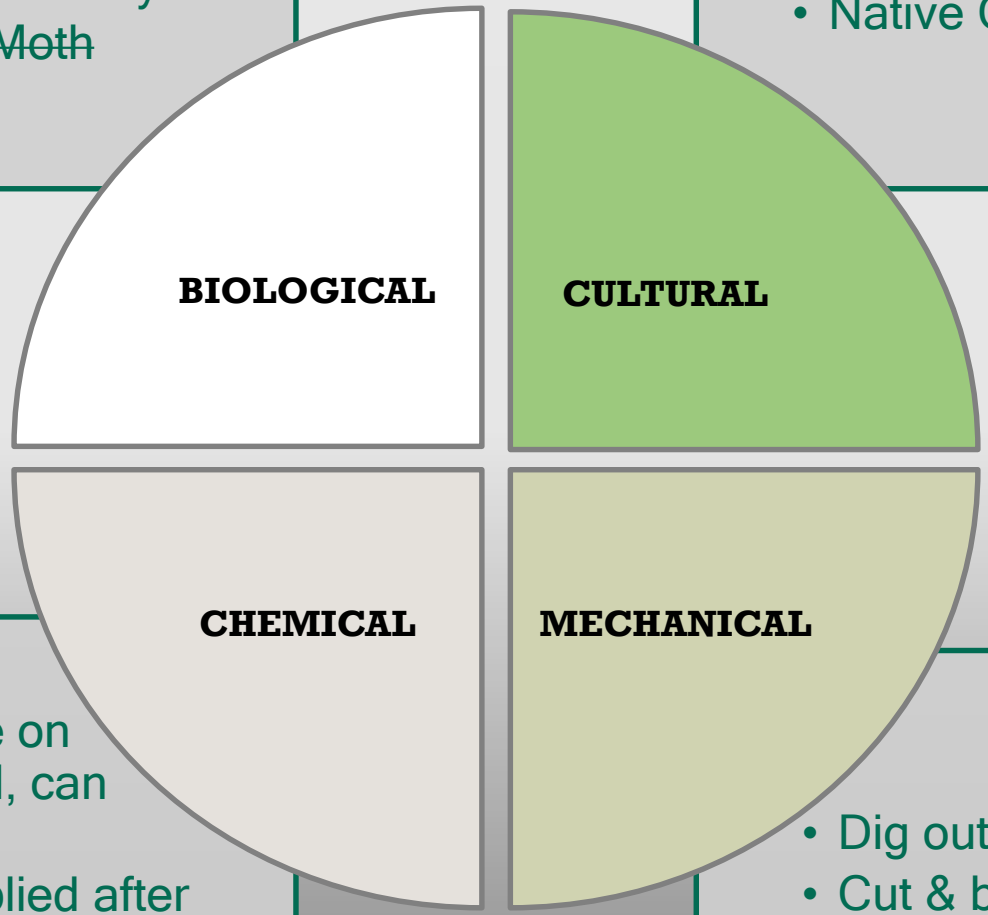
B

- Taprooted Biennial *~perennial*
- Reproduces by seed
- Toxic – high in alkaloids
- Many disk flowers, only 13 Ray flowers

Tansy Ragwort

- Ragwort Flea Beetle
- Ragwort Seed Fly
- ~~Cinnabar Moth~~

- Healthy Pastures
- Native Competition



- Most effective on rosettes in fall, can treat in spring
- Herbicide applied after flowers will not stop seed production

- Dig out - with caution
- Cut & bag
- Repeated Mowing

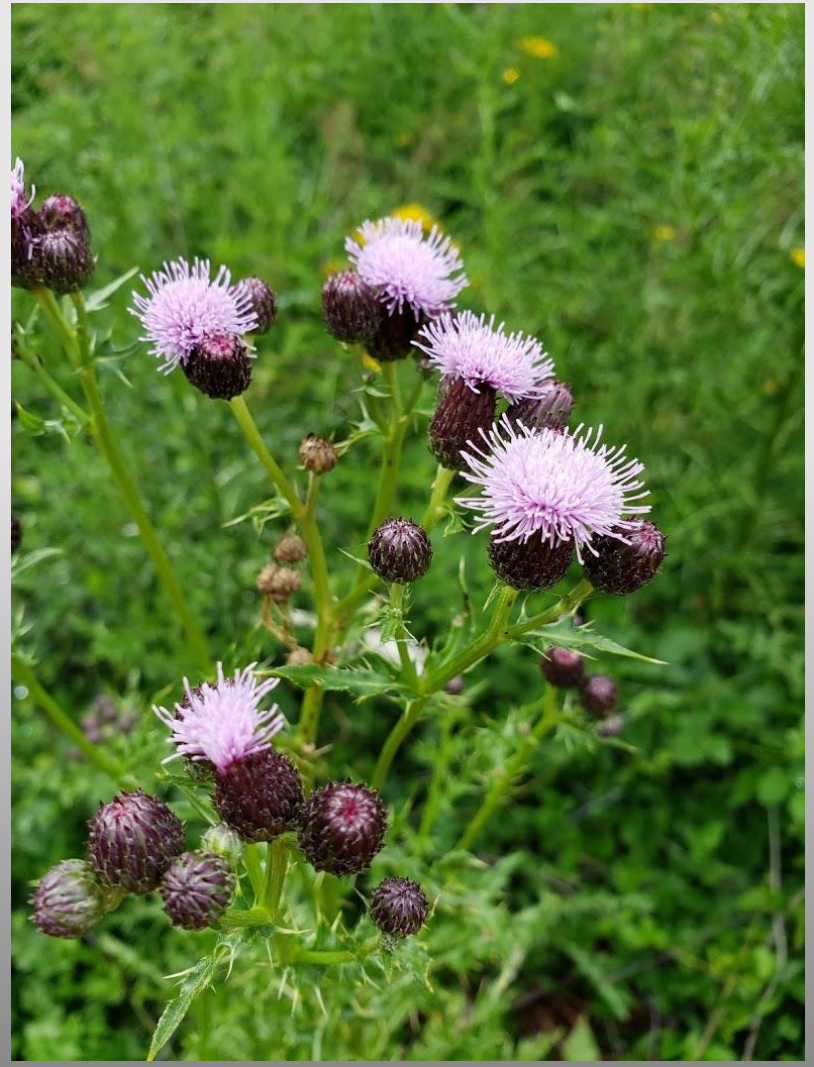
Tansy Ragwort - *Jacobaea vulgaris*

B

1. Rosette stage (remove or spray)
2. Bolting stage, before buds develop (remove or spray)
3. Flowering stage (DO NOT SPRAY, hand pull or cut and trash!

Canada Thistle – *Cirsium arvense*

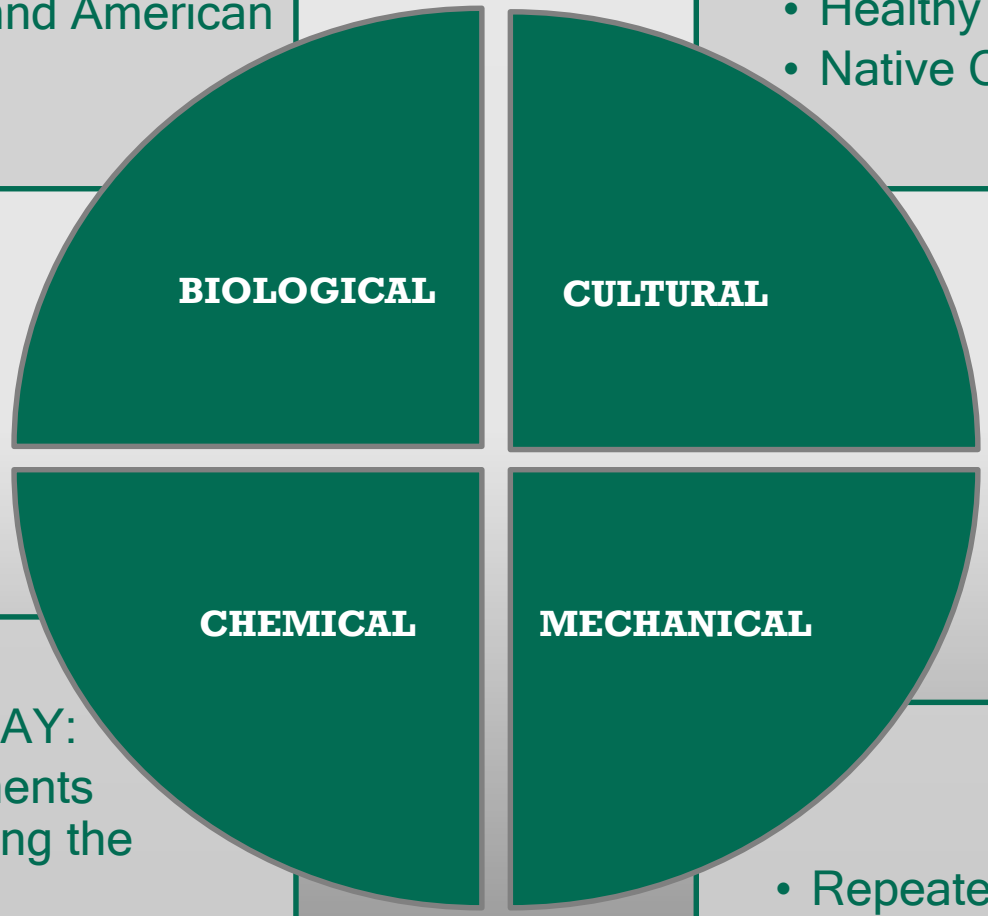
- Rhizomatous perennial
- Quickly invades, outcompeting native plants
- Reduces crop yields



Canada Thistle

- Stem Gallfly
- Little damage by Insects, Nematodes and American Goldfinch

- Competitive Crops (alfalfa, forage grasses)
- Healthy Pastures
- Native Competition



- FOLIAR SPRAY:
- Spring treatments before or during the bud stage
- Fall treatments before frost

- Repeated tillage 7 to 28 day intervals
- Repeated mowing weakens stems (late spring)

Canada Thistle – *Cirsium arvense*

1. Prevent from flowering - repeat cut if needed
2. Spray in fall or spring (or both)
3. Plant desirable vegetation & monitor

Scotch Broom – *Cytisus scoparius*

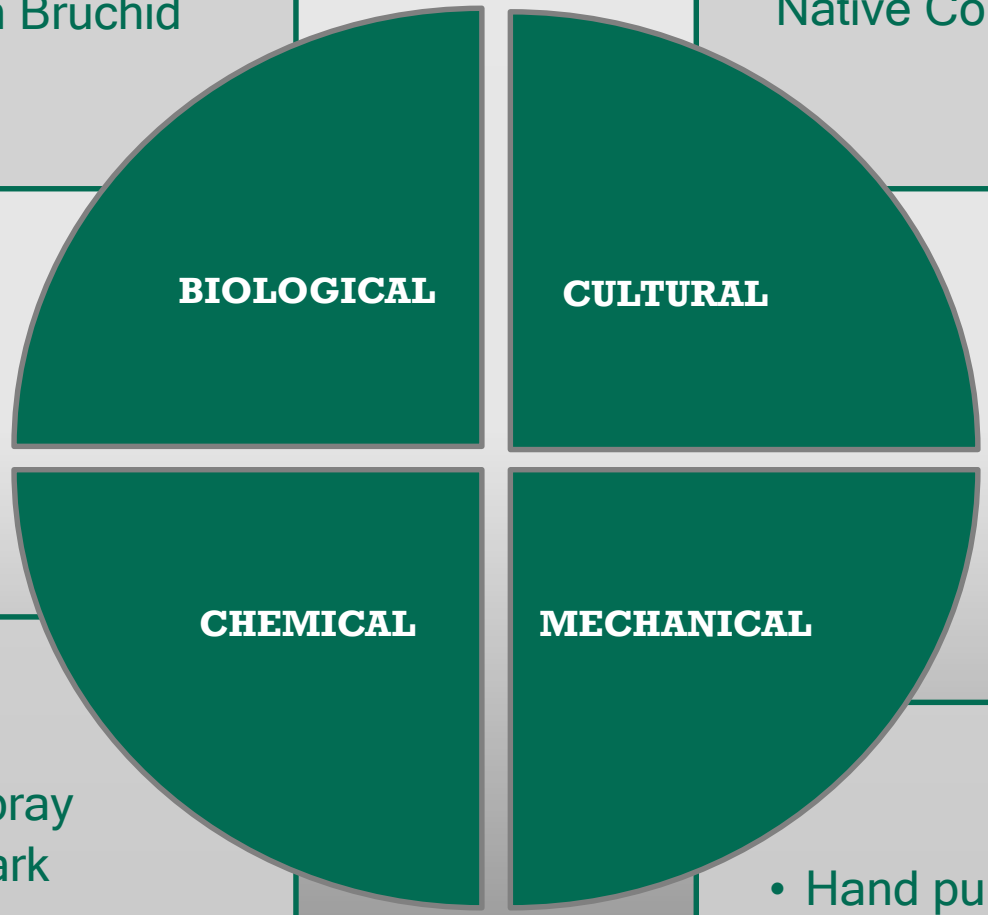
B

- Perennial shrub, reproduces by seed
- Aggressively forms monocultures
- Seeds toxic to livestock & horses

Scotch Broom

- Scotch Broom Seed Weevil
- Scotch Broom Bruchid

- Reduce soil disturbance
  Native Competition



- Foliar spray
- Basal bark
- Cut stem

- Hand pull small infestations (weed wrench)
- Chop/Cut/Mow - esp drought for 2 inch stems

Scotch Broom – *Cytisus scoparius*

B

1. Control plants before seed pods develop (generally a 3 year period)
    - Pull seedlings

2a. (Small infestations) Cut larger plants during drought, or cut-stem treatment

2b. (Large infestations) brush hog & apply herbicide

3. Monitor the area for new plants - and repeat above steps

4. Plant competitive (not invasive) plants

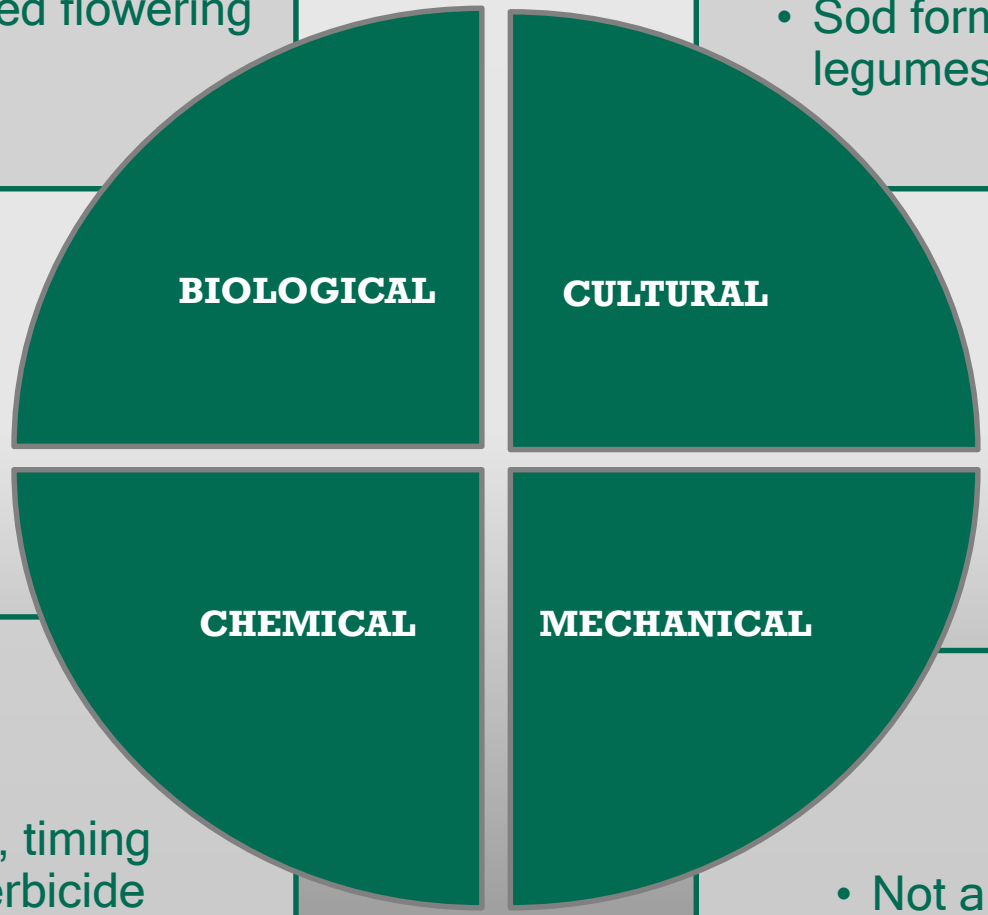
Field Bindweed – *Convolvulus arvensis*

- Perennial herb
- *Once established, nearly impossible to eradicate*
- Reproduces from roots, rhizomes, stem fragments and seed

Field Bindweed

- Bindweed Gall mite stunts plants, reduced flowering

- Increase shade with other plants
- Increase moisture
- Sod forming grasses, bunch grasses, legumes can smother



- Foliar spray, timing varies by herbicide

- Not a good option

Field Bindweed – *Convolvulus arvensis*

1. Prevent from seeding (pull/cut)
2. Spray
3. Shade out
4. Increase soil moisture

English Ivy - *Hedera helix 'Baltica', 'Pittsburgh', and 'Star'; Hedera hibernica 'Hibernica'*

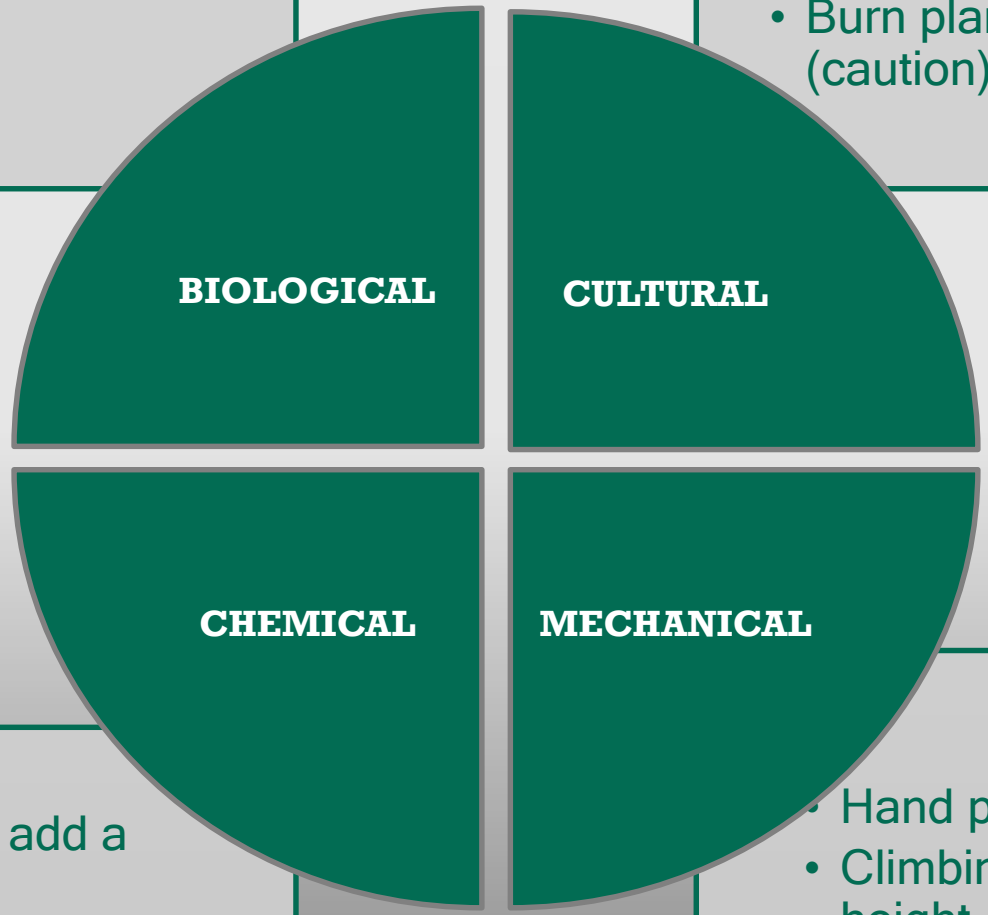
C

- Evergreen Perennial vine
- Spreads by vegetative stem growth and by seed
- Stem and root fragments can resprout

English Ivy

- Not available

- Monitor after removal
- Sheet mulch following removal
- Burn plants repeatedly with a blow torch (caution) eventually depletes plants



- Foliar spray, add a surfactant
- Cut stem application

- Hand pull or dig when soil is moist
- Climbing vines can be cut waist/chest height & pull away lower stem from tree
- Remove to prevent re-rooting

Wear Gloves

English Ivy - *Hedera helix 'Baltica', 'Pittsburgh', and 'Star'; Hedera hibernica 'Hibernica'*

C

1. Cut vines climbing trees
2. Remove vegetation mat of Ivy
3. Sheet mulch
4. Replant
5. Monitor

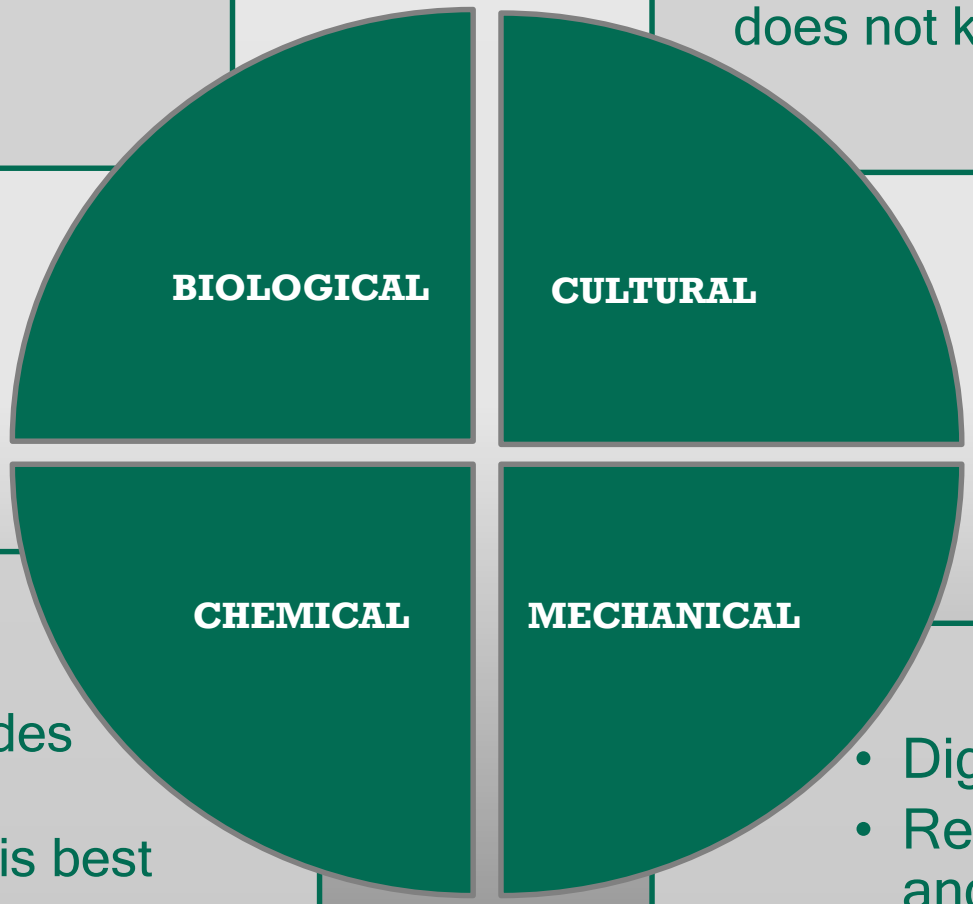
Himalayan Blackberry– *Rubus armeniacus*

- Evergreen perennial
- Reproduces by seed and vegetatively

Himalayan Blackberry

- Grazing by Goats, follow with other methods

- Prescribed burning to remove above ground vegetation – does not kill roots



- Variety of herbicides available
- Late summer/fall is best time to treat

- Dig up plants – remove all roots
- Remove & dispose of stems and roots

Himalayan Blackberry– *Rubus armeniacus*

1. Enjoy the berries one last time - the more you pick, the fewer seeds left for the birds to spread
2. When the berries are done, cut plants back to the ground, remove canes (optional)
3. Wait 2-3 weeks
4. Spray with a systemic herbicide
5. Monitor & replant

Stop the Weeds, Catch the Seeds!

Thank You

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