

Invasive Weed Treatments

Wild Parsnip

⇒ Mechanical/Cultural

- Hand pulling wearing long sleeves, gloves, and large hat to protect the head. Preferably use a spade to cut the root below the first node right below the soil surface.
- Mowing before seed set followed by a herbicide application on the resprouting plants.

⇒ Chemical

- Wand spray flowering plants with 2,4-D and Escort XP until wetted to the point of runoff. 0.8oz. of 2,4-D, 0.02oz. of Escort XP, and 0.16oz. of Preference per gallon of water.
- Broadcast spray at a walking pace (3-4 mph) with the same mixture for wand spraying, but double the rates to 1.6oz 2,4-D, 0.04oz Escort XP, and 0.32oz Preference per gallon of water.

Queen Anne's Lace

⇒ Mechanical/Cultural

- Hand pull, wearing gloves, pulling up the entire tap root out of the ground, cutting the root below the soil surface on larger plants may be needed.
- Mow before seed set and follow up with a herbicide application on the new growth. Grazing by cattle, sheep, and goats can be effective also.

⇒ Chemical

- Wand spray flowering plants with 2,4-D and Escort XP until wetted to the point of runoff. 0.8oz. of 2,4-D, 0.02oz. of Escort XP, and 0.16oz. of Preference per gallon of water.
- Broadcast spray at a walking pace (3-4 mph) with the same mixture for wand spraying, but double the rates to 1.6oz 2,4-D, 0.04oz Escort XP, and 0.32oz Preference per gallon of water.

Leafy Spurge

⇒ Mechanical/Cultural

- Mow before flowering, again follow with herbicide.
- Biological control with spurge beetles may be needed for large infestations. Can be combined with sheep and goat grazing.

⇒ Chemical

- Wand spray with 2,4-D and Tordon 22K until wetted about to the point of runoff. 0.8oz 2,4-D, 0.28oz Tordon 22K, and 0.16oz Preference per gallon of water.
- Broadcast spray at a walking pace (3-4 mph) with the same mixture for wand spraying, but double the rates to 1.6oz 2,4-D, 0.56oz Tordon 22K, and 0.32oz Preference per gallon of water. Tordon 22K is restricted and has a 90 day half life, use with caution around crops and water. May need to use interlock for insurance against spray drift.

Spotted Knapweed

⇒ Mechanical/Cultural

- Mow plants prior to seed set, and follow up with herbicide.
- Use seed head weevils and root weevils on infestations larger than two acres. Can get the bugs from Ottertail County, and Becker County or from Montana. Seed head weevils suppress seed head expansion, and root weevils turn plants “wimpy”, and brown colored, reducing seed population.

⇒ Chemical

- Broadcast spray at walking pace (3-4 mph) using Milestone, Opensight, or Overdrive. 0.3oz Milestone and 0.32oz Preference per gallon of water. Use in conjunction after a clipping for improved performance on regrowth plants.

Thistles

⇒ Mechanical/Cultural

- Mowing with a follow up herbicide treatment.
- Chopping of plants one to two inches below the soil. Cutting flower heads off and bagging them.

⇒ Chemical

- Wand spray Milestone at 0.05oz per gallon of water, and 0.16oz Preference per gallon of water, until the point of runoff.
- Broadcast spray Milestone at 0.1oz per gallon of water, and 0.32oz Preference per gallon of water at walking pace (3-4 mph).

* When spraying around sensitive crops (soybeans, alfalfa, sugar beets), or any other non-target plants, add 5oz of Interlock for every 20-25 gallons of spray solution. Add last after the surfactant.

Chemical Mixing Order

1. Fill halfway with water, have the bypass valve running through the entire mixing process
2. Add wettable powders
3. Add dispersible granules
4. Add flowables (Escort XP), predissolve in a one gallon jug of water. Fill half water, add granules, fill most of the way up with water, shake until dissolved, and then add to tank.
5. Add Emulsifiable Concentrates
6. Add liquid solutions (2,4-D, Milestone, Tordon)
7. Add surfactants and adjuvants last (Preference NIS)
8. When needed, add Interlock and other drift control agents after everything else
9. Finally finish filling with water