



Asotin County Noxious Weed Control Board

P.O. Box 881
Asotin, WA 99402
(509) 243-2098

Poison Hemlock *Conium maculatum*

Description: Poison hemlock is an impressive biennial sometimes reaching 8 feet in height. During its first year it produces a basal rosette of leaves. Its hollow stem has distinctive purple blotches. The lower leaves clasp the stem while the upper leaves have short stalks. The leaves are divided 3 to 4 times giving them a lacy appearance. When crushed, the leaves and stems exude an unpleasant odor. The white flowers lack sepals and grow in an umbel cluster. The seed bank of poison hemlock can be severely reduced after 3 years of control.

Habitat: Although poison hemlock grows well in damp areas with deep soils, it also tolerates poorly-drained soils. It can be found bordering pastures and croplands, along ditch and stream banks, and in waste areas. In SE Washington it has been found on dry, north-facing slopes with fairly deep soils. Poison hemlock may be a significant problem with the first cutting of alfalfa. It may also contaminate grain seeds when it invades croplands. It is more often a problem with grazing animals when it invades pastures and meadows and may be ingested in early spring or with harvested hay.

Poison hemlock is a highly toxic weed that is successful at out-competing native vegetation in riparian habitats. It quickly colonizes disturbed sites and forms monocultures that exclude native species, both plant and animal.

Mechanical: Hand pulling or hoeing can control a small infestation.

Biological: The hemlock moth (*Agonopterix alstroemeriana*) was first introduced into the United States in 1973. The larvae consume leaves, flowers, and the developing seeds. A heavily infested plant will not produce seeds. In many areas of Asotin County the first flush of poison hemlock is generally defoliated. In June 2005, later maturing larvae were introduced with the hope that they will attack the second flush of hemlock.

Fire: Burning would probably not be successful because of the lack of fuel in those areas.

Cultural control: Repeated cultivation controls hemlock. Repeated mowing has been shown to be effective at reducing plant vigor and reducing seed production.

Chemical: These chemical recommendations are for noncropland areas and are summarized from the "Biology and Management of Noxious Rangeland Weeds" written by Roger Sheley and Janet Petroff. Label requirements need to be followed for restrictions, concentrations, timing, and nontarget interactions. Chemical control can be effective, but must be maintained for at least three years until the seed bank is depleted.

- **2,4-D:**
Rate; 1.0 to 2.0 lb ae/acre

Time; early spring
Remarks; A wetting agent increases the efficiency
Caution; The 2,4-D may make the hemlock more appealing to livestock,
but still does not change the toxicity.

- **Glyphosate:**

Rate; 1.0 lb ae/acre

Time; early spring

Remarks; Cool temperatures reduce the effectiveness of the herbicide.

Recommended treatment: Since there is a legal setback for certain herbicides along waterways, care needs to be taken in any riparian area. 2,4-D gives good control of hemlock when sprayed in the early spring. The *Agonopterix* moth should be released in those areas that cannot be sprayed.

Distribution: The Grande Ronde River corridor has the densest colonies in Asotin County. Small infestations are found throughout the county except in the Blue Mountain area.

ACNWCB Policy: The Weed Office distributes biocontrols free of charge and encourages herbicide control in areas of dense concentrations.

