

## POISON HEMLOCK

*Conium maculatum*

Carrot or Parsley Family (Apiaceae)

**Warning! Poison hemlock can kill humans if eaten and may cause dermatitis, nausea, and headaches if touched or inhaled after continual cutting or mowing!**

### DESCRIPTION

Poison hemlock is an erect biennial, sometimes perennial, related to fennel, often found in scrub, riparian areas, and wetlands, as well on open slopes, disturbed sites, and roadsides.

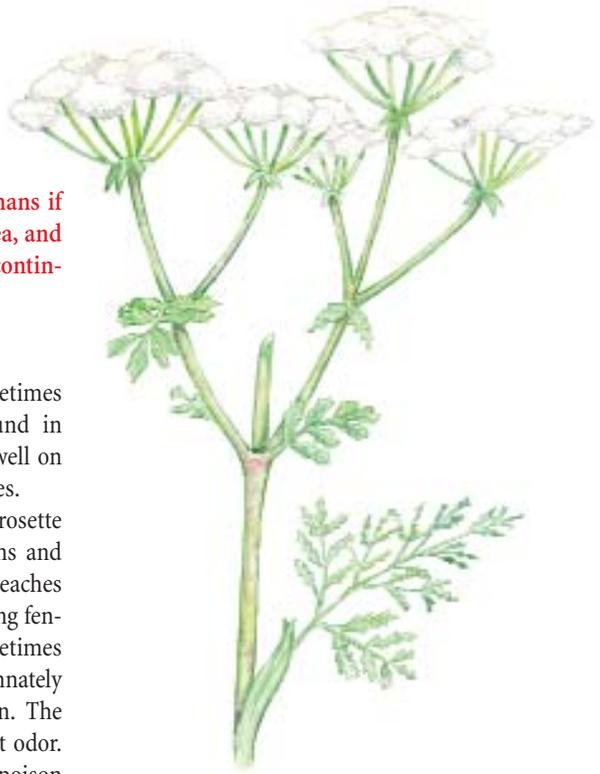
Poison hemlock grows from seed to a rosette in the first year, then develops tall stems and flowers in the second year. It generally reaches 3–8 feet in height. The stalks—resembling fennel—are tall, ribbed, hollow, and sometimes purple-spotted. Leaves are opposite, pinnately compound, triangular, and bright green. The foliage, when crushed, has an unpleasant odor. Unlike wild carrot (Queen Anne’s lace), poison hemlock has no hairs on its leaves and stems.

### REPRODUCTION

Poison hemlock reproduces by seed only, with each plant producing roughly 1,000 of them. Small, 5-petaled, white flowers appear in umbels mainly in June–July, although there are reports of poison hemlock flowering almost year-round in the East Bay. Fruits generally set in August–September. The seeds are spread most effectively by birds, animals, and water, but passing machinery and vehicles also aid seed spread. Dispersal occurs between September and February, and germination takes place from late summer to early spring.

### IMPACT

A fast-growing species, poison hemlock can reduce native plant cover by shading other species. It is poisonous to wildlife and can cause paralysis and death in livestock.



### KEY FACTORS

- u Poison hemlock is toxic to the skin and respiratory system, so wearing gloves and a mask is advised. One recommendation is to take frequent 5-minute breaks because of the potential for irritation. Some people feel ill even with protective gear!
- u Usually a biennial, so no need to remove entire root system.
- u Seeds are thought to be viable for up to 5 years.
- u Grows best in rich soils in moist conditions.

### TREATMENT OPTIONS

- u Practitioners have reported difficulty in removing large stands of poison hemlock by hand and have tended to focus on small infestations. Some practitioners advise removing hemlock before seed set, while others remove poison hemlock year-round.

- u **Pull** plants by hand, preferably during the rainy season when moist soils allow you to get more of the root. (You can use a soil knife or trowel to minimize direct handling of the plant.) Large clumps can be dug with a shovel.
- u **Cut** using a hand pick to hit below the root crown and remove the upper portion (as opposed to the whole root).
- u **Mow** to height of 3–4 inches in early April and then repeat a month later to follow up on any regrowth and new seedlings. Repeat for several years. Mowing won't eradicate poison hemlock, but it will help reduce the size of infestations by weakening the plant. It can deplete the seedbank if pursued regularly.

### **FOLLOW-UP**

Some practitioners have reported little success with mulching in areas where plants have been pulled, as large seedlings can bolt straight

through. Others recommend laying a thick mulch (about 4 inches deep). Follow up on any regrowth, pulling seedlings by hand or with hand tools. Flaming with a propane torch during the rosette stage is another technique that deserves experimentation.

### **DISPOSAL**

Cut vegetation may be left on-site. However, cut and wilting hemlock plants can be palatable to wildlife and yet remain poisonous. Some attention to disposal or fencing may be necessary to protect deer and other animals.

### **INTERESTING FACTS**

Native to Europe, West Asia, and North Africa, poison hemlock was introduced from Britain as an ornamental in the late 1800s. It is a plant traditionally associated with European witchcraft. The Ancient Greeks used poison hemlock to execute political prisoners, including Socrates.

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## **Notes**