

Poison Hemlock

Conium maculatum



FAMILY	Apiaceae - carrots & parsleys	ORIGIN	Europe
LIFE CYCLE	Perennial or Biennial	OTHER NAMES	Poison parsley, Deadly hemlock, Spotted hemlock, Wild hemlock, Carrot fern, California fern, Devil's bread, and Devil's porridge.

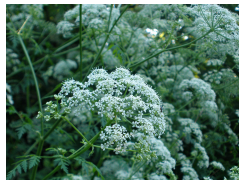
QUICK FACTS

- Poison hemlock is one of the **deadliest** weeds in the U.S., often mistaken for wild carrots or parsley. Key identifiers include purple blotches on smooth, hollow stems and a foul odor when crushed. **Ingesting even a small amount can be fatal.**
- Introduced in the 1800s, this **toxic** plant spreads rapidly in moist, disturbed soils like roadsides and ditches, producing up to **40,000 seeds** per plant. It displaces native species and threatens ecosystems, livestock, and public health.
- There is no cure for **hemlock poisoning**, which causes **respiratory failure** within hours. Protective gear is essential when handling it, and the most effective control method is manual removal with root and seed destruction

An infamous legend in the world of plants. The trespasser that lurks in the shadows of wetlands, awaiting its next victim. Poison hemlock is one of the most dangerous weeds in the United States, having taken countless lives from those who mistake it for an edible forage. Poison hemlock closely resembles wild carrots or cow parsley, leading many people to mistakenly consume it. The key distinguishing feature between the two is the presence of purple splotches on the stem of the hemlock, which serve as the only clear indication that it is not an edible member of the carrot family.

What does it look like?

When attempting to identify poison hemlock, it's important to remember that it closely resembles wild carrot or cow parsley. However, there are key differences that can help you distinguish poison hemlock from these similar plants. One noticeable feature is the presence of purple streaks or splotches on the stems of poison hemlock, which other carrots lack. Additionally, while wild carrot leaves and cow parsley stems have fine hairs, the leaves and stems of poison hemlock are smooth and hairless. Another distinction is that the stems of poison hemlock are hollow, whereas the stems of similar plants are solid. Due to these similarities, many people unknowingly ingest poison hemlock, mistaking it for wild carrot, which can have fatal consequences.



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Plant: The plant itself can grow 6ft-10ft tall, and the stems are usually ribbed, hollow, and have purple splotches/streaks. The stems are smooth and hairless, a distinguishing feature. When the plant is broken up, it releases a rank-smelling odor. Poison hemlock will appear shorter and more carrot-like in its first year of growth.

Roots: The long taproot resembles a white carrot, characterized by its thick base and typically white color. This root primarily grows in winter and can sometimes branch.

Leaves: Have a fern-like appearance and are finely pinnately divided. They closely resemble leaves from other members of the carrot family, with their dark green parsley-like leaves.

Flowers: Flowers are usually small and white or yellowish. They have a broad base but narrow tips. They grow in a half-dome of small umbrella-like clusters at the ends of branched stems. Each tiny flower has five petals.

Seeds: Green, round, and deeply ridged fruits develop from each tiny flower. These will dull into a grey-brown color as the plant dies. Each fruit contains several small seeds, which are flat with ridges.

Impact and Management

Ecosystem Health

Once established, poison hemlock effectively displaces native vegetation, leading to a significant reduction in floral and faunal biodiversity. This decline can further diminish forage availability for game species, particularly during winter months, and may even alter migratory patterns. Due to its high toxicity, poison hemlock is unfit for consumption by any wildlife. The displacement of native plants ultimately leaves wildlife with insufficient food resources, prompting them to relocate in search of foraging options. The visual similarity between poison hemlock and wild parsnip heightens the risk of accidental ingestion by wildlife.

Health and Safety

Poison hemlock is highly toxic; less than 0.5% of an individual's body weight can be lethal within 2 to 3 hours. The plant causes respiratory paralysis, which can ultimately be fatal without immediate medical intervention. Tragically, there have been numerous incidents of poisoning among children, often arising from their use of the hollow stems as makeshift flutes.



Bruce Ackley, The Ohio State University, Bugwood.org

Livestock

When livestock consume poison hemlock, it can lead to respiratory paralysis, ultimately resulting in cessation of breathing and, consequently, death. In pregnant livestock, ingestion of this toxic plant not only poses a lethal risk but may also endanger the developing fetus, leading to severe congenital deformities such as skeletal malformations or cleft palate. These deformities can severely compromise the health and viability of the offspring. Furthermore, the toxicity of poison hemlock extends beyond direct consumption; milk from cows that have ingested this plant can pose health risks to humans.

When managing this specific weed, it is essential to wear appropriate personal protective equipment, including safety glasses, gloves, and a face covering, particularly when handling or cutting the plant. The most effective method for controlling this weed is to remove it entirely from the ground, ensuring that the entire root system and all seeds are eradicated. Currently, there are no known biological control methods available for poison hemlock due to its extreme toxicity. Alternatively, the use of herbicides can be considered for the complete elimination of the plant.

DO's

- Always wear gloves, long sleeves, long pants, and eye protection. Toxins can be absorbed through the skin or mucous membranes.
- Control poison hemlock in **early spring** before it flowers and sets seed to prevent spreading.
- Recheck treated areas regularly, as seeds can remain viable for several years in the soil.

DON'Ts

- Mow or weed-whack live plants, as cutting live poison hemlock can aerosolize toxins, posing a serious inhalation hazard.
- Allow livestock or pets near it, even small amounts ingested by animals can be fatal. Fence off known patches if animals are nearby.
- Avoid burning the plant, as burning can release toxic fumes.



For more information on managing poison hemlock, please visit www.nmweeds.org

