

Wild Chervil

Anthriscus sylvestris
Apiaceae

**Class B Noxious Weed
Control Required**

Legal Status in King County: Wild chervil is a Class B Noxious Weed (non-native species harmful to environmental and economic resources that landowners may be required to control based on distribution in the county and local priorities) according to Washington State Noxious Weed Law, RCW 17.10. In accordance with state law, the King County Noxious Weed Control Board requires property owners to control wild chervil on private and public lands throughout the county (control means to prevent all seed production and to prevent the dispersal of all propagative parts capable of forming new plants). In addition, state quarantine laws prohibit transporting, buying, selling, or distributing plants, plant parts or seeds of wild chervil.



BACKGROUND INFORMATION

Impacts and History

- Native to Eurasia. Found throughout the United States and Canada. Considered a serious weed in Vermont, British Columbia, Nova Scotia, and Ontario. Wild chervil is a prohibited species in New York and Massachusetts
- First recorded occurrence in Washington was in Spokane in 1988
- Thought to have arrived in North America in seed mixes

- Can rapidly invade a field and produces poor quality forage and hay
- Outcompetes native or desired vegetation, forming dense monocultures
- Host for a virus that attacks cultivated carrots, parsnips and celery

Description

- Biennial or short lived perennial producing numerous compound umbel-shaped clusters of white flowers.
- Flowers in late April through June. Seeds appear June through July.
- Umbels 1-3 inches wide; white flowers with 5 notched petals 0.1-0.2 inches long.
- Seeds in pairs often black or dark brown, elongate and narrow with the beak comprising about 1/3 the total length; pairs joined with small antenna-like structures at the top.
- Stems are entirely green, ridged and hollow with alternative leaves.
- Upper portions of the stem are smooth while lower portions are hairy.
- Leaves are pinnately compound and finely divided, fern like and sometimes slightly hairy.
- Stem leaves tend to be reduced in size higher up the stem.
- Has a thick taproot that can grow 3-6 feet deep.
- Plant attains a height of 3-5 feet, sometimes higher with flowering stalks.



- Wild chervil resembles other plants in the carrot/parsley family including other non-native weeds such as bur chervil (*Anthriscus caucalis*), rough chervil (*Chaerophyllum temulum*), poison-hemlock (*Conium maculatum*) and wild carrot (*Daucus carota*) and native species such as water parsley (*Oenanthe sarmentosa*).



- Rough Chervil (*Chaerophyllum temulum*): stems have rough hairs and purple color or spotting and leaf segments are more rounded like cilantro, compared with the more elongated segments on wild chervil



- Bur Chervil (*Anthriscus caucalis*): plant is smaller than wild chervil, the leaves are lighter green, flowers are smaller and seeds are covered with burs



- Poison-hemlock (*Conium macularum*): much taller plant, stems hairless, with distinct reddish-purple markings (streaks or spots), leaves larger than the other similar species, pointy-segments



- Wild Carrot (*Daucus carota*): Flowers larger, more densely packed, stems hairy, leaf segments long and narrow



- Water Parsely (*Oenanthe sarmentosa*): native plant, generally not as upright, grows in damp areas, flowers larger than chervils, stems not hairy and entirely green

Habitat

- Wild chervil invades disturbed and open areas; prefers moist sites.
- Often found in hay fields, meadows, open woodlands, roadsides, and ditches.
- Persists under part-shade conditions and forest edges.



Reproduction and Spread

- Reproduces by seed and clonal buds
- One plant can produce 800-1200 seeds per flowering plant
- Seeds are **not** long lived (1-2 years) and do not form a persistent seed bank
- Seeds typically germinate the following spring
- Plants die completely after producing fruit
- Clonal buds become detached from parent plant after death of parent plant

- In highly disturbed sites reproduction by seed is the driver of spread/expansion; in less disturbed areas or where monocultures exist vegetative reproduction (clonal buds) is the driver of spread/expansion
- Seeds lack obvious dispersal mechanism but dispersal is often aided by human activities along roads, in pastures, and natural areas
- Seeds are easily spread through contaminated mowing equipment and movement of contaminated soil

Local Distribution

- Found primarily in south King County, with concentrated populations around Enumclaw and Auburn. Along roadsides, in fields and pastures.

CONTROL INFORMATION

Integrated Pest Management

- The preferred approach for weed control is Integrated Pest Management (IPM). IPM involves selecting from a range of possible control methods to match the management requirements of each specific site. The goal is to maximize effective control and to minimize negative environmental, economic and social impacts.
- Use a multifaceted and adaptive approach. Select control methods which reflect the available time, funding, and labor of the participants, the land use goals, and the values of the community and landowners. Management will require dedication over a number of years, and should allow for flexibility in method as appropriate.

Planning Considerations

- Survey area for weeds, set priorities and select best control method(s) for the site conditions and regulatory compliance issues (refer to the [King County Noxious Weed Regulatory Guidelines](#)).
- Control practices in critical areas should be selected to minimize soil disturbance or efforts should be taken to mitigate or reduce impacts of disturbance. Any disturbed areas need to be stabilized for erosion and sediment control.
- Erosion and sediment control (ESC) means any temporary or permanent measures taken to reduce erosion, control siltation and sedimentation, and ensure that sediment-laden water does not leave the site or enter into wetlands or aquatic areas. Refer to the **King County Surface Water Design Manual, Appendix D** for ESC Standards (<http://www.kingcounty.gov/environment/waterandland/stormwater/documents/surface-water-design-manual>).
- Minimizing soil disturbance also reduces germination of weed seeds.
- Generally work first in least infested areas, moving towards more heavily infested areas.
- Properly dispose of all parts of the plant (see Disposal Methods section below).
- If possible, control should be done before plants are flowering to prevent seed production.

Early Detection and Prevention

- Be sure to obtain a positive identification of wild chervil since it has several look-alikes that grow in King County (see list of similar species and photos in Description section above).
- Be sure to check which plants are included in flower mix seed packets
- May to June is the best time to survey for plant since it is in flower
- Prevent spread by cleaning equipment, clothing, and boots after in areas infested with wild chervil

Manual Control

- For small populations pulling is appropriate especially in areas with soft soil
- Despite a deep taproot it can be pulled when soil is moist
- Remove as much of the taproot as possible
- If plants are in seed, cut and bag seed heads first before digging up the remaining plant

Mechanical Control

- Mowing is not very effective for wild chervil with the following exceptions:
 - Cutting the flowering stems when they are at their maximum height *may* prevent secondary flowering from auxiliary stems
 - Mowing early at the start of flowering will often produce secondary flowering; however, it can reduce formation of clonal buds
 - Multiple years of mowing and patience would be needed to gain control of wild chervil using mowing alone
- Tilling offered excellent control of wild chervil in Miller and D'Auria (2011)

Chemical Control

- For control of large infestations, herbicide use may be necessary.
- Apply herbicide on warm, dry days when winds are low. Check label for specific information on wind and rain guidelines.
- Both selective and non-selective herbicides are effective. However, if there is grass present on site, using a selective broadleaf herbicide will improve long-term control because competitive grass cover will reduce weed seed germination and re-growth.
- Spraying when wild chervil is in pre-flower bud stage or in bloom seems to provide the most effective control. Fall applications of herbicide were found to be least effective.

Precautions:

- Herbicides should only be applied at the rates and for the site conditions and/or land usage specified on the label of the product being used. **Follow all label directions.**
- For herbicide use in critical areas and their buffers, certain restrictions apply depending on the site and jurisdiction. In unincorporated King County, refer to the [King County Noxious Weed Regulatory Guidelines](#) for a summary of current

- restrictions and regulatory compliance issues. Elsewhere, check with the local jurisdiction.
- For your personal safety, at a minimum wear gloves, long sleeves, long pants, closed toe shoes, and appropriate eye protection. Follow label directions for any additional personal protection equipment needed.

Specific Herbicide Information

- Both glyphosate and imazapyr offer excellent control of wild chervil. Both herbicides are non-selective so care must be taken to prevent injury to off target plants. Both herbicides will kill most grass species as well as broadleaf plants so re-seeding or planting with suitable species may be necessary after treatment.
- Pacific Northwest Weed Management Handbook recommends glyphosate at a rate of 2.25 lb acid equivalent per acre and imazapyr at a rate of 0.75 lbs of active ingredient per acre for control of wild chervil.
- Tardiff et al (2011) found a tank mix of aminocyclopyrachlor and Escort XP (Metsulfuron methyl) offered excellent season long control.
- Beaton (2014) found excellent control using aminocyclopyrachlor plus metsulfuron-methyl as well as aminocyclopyrachlor plus chlorsulfuron without injury to grass.
- Based on initial trials by King County Noxious Weed Control Program, control with Perspective (aminocyclopyrachlor and chlorsulfuron) looks promising for control of wild chervil at rate of 3.0 oz per acre. Care should be taken with this product around the root zone of conifers.
- Numerous studies found that selective herbicides with triclopyr, aminopyralid, and 2-4D as active ingredients were **not** effective for control compared with other herbicides and no control treatments.

The mention of a specific product brand name in this document is not, and should not be construed as an endorsement or as a recommendation for the use of that product. Chemical control options may differ for private, commercial and government agency users. **For questions about herbicide use, contact the King County Noxious Weed Control Program at 206-477-9333.**

Biological Control

- No biological control agents have been researched for wild chervil

SUMMARY OF BEST MANAGEMENT PRACTICES

Small Infestations in Native and/or Desirable Vegetation

- Dig up individual plants by hand. Use a trowel or spade shovel to remove entire taproot from ground.
- Cut and bag seed heads to prevent spread.
- Spot treat with glyphosate (see Chemical Control section above for more information).
- Mark all desired vegetation prior to control to prevent accidental injury.

Large Infestations/Monocultures

- For large infestations a chemical treatment is the only effective method for reducing and eliminating infestations (see Chemical Control section above for more information).
- Mowing is not likely to significantly reduce large infestations but may help suppress and prevent expansion of wild chervil on site.
- Monitor for wild chervil along fence lines and under shrubs and blackberries along forest edges. Remove individual or satellite plants to prevent further spread.

Control in Riparian Areas

- Additional permits may be required for control of infestations in riparian areas. See the [King County Noxious Weed Regulatory Guidelines](#) for more information or contact your local jurisdiction.
- In some cases, the cleared area will need to be replanted with native or non-invasive vegetation and stabilized against erosion. See the **King County Surface Water Design Manual, Appendix D** for Erosion and Sediment Control Standards (<http://www.kingcounty.gov/environment/waterandland/stormwater/documents/surface-water-design-manual>).
- Focus on manual removal for small infestations if possible.
- For larger areas where herbicide use is warranted, spray using low pressure and large droplet size to reduce drift. If herbicide could potentially drift into the water or a wetland area, use only approved aquatic herbicides and surfactants after obtaining the necessary permits.

Control along Road Rights-of-Way

- Dig up small infestations if possible.
- Spray infested areas with a systemic herbicide (see Chemical Section above for recommendations), taking care not to spray beneficial vegetation.
- In grassy areas, use a selective broadleaf herbicide such as metsulfuron or aminocyclopyrachlor; if controlled with a non-selective herbicide, such as glyphosate, re-seed after control is completed.

Disposal Methods

- Bag all flower heads. If the plants are in seed, carefully cut off the seed head and place in a bag without dispersing the seeds.
- Dispose of flower heads and plants in household garbage or take to a transfer station for disposal. Do not compost or put in yard waste.
- Never dump plant material because weeds can spread from yard waste piles.

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