

Common Tansy

Tanacetum vulgare
Asteraceae

**Class C Noxious Weed
Control Recommended**

Legal Status in King County: Common tansy is a Class C noxious weed according to Washington State Noxious Weed Law, RCW 17.10 (non-native species that can be designated for control based on local priorities). The State Weed Board has not designated this species for control in King County. The King County Weed Control Board recommends control of this species where feasible, but does not require it.

BACKGROUND INFORMATION

Impacts and History

- Toxic to livestock and humans. Animals rarely ingest common tansy due to its strong smell. Human consumption of concentrated plant extracts for medicinal purposes has resulted in illness and death.¹
- Often confused with the Class B Noxious Weed tansy ragwort (*Senecio jacobaea*) due to its highly visible yellow flowers that bloom at the same time.
- Can spread in pastures, reducing overall pasture productivity because animals are reluctant to eat it.²
- Introduced to the United States from Europe as a garden plant and for medicinal purposes⁴ as early as the 1600s. Reported in Kansas in 1912 and widespread in California by 1952.⁵
- Although some insects feed on the plant in Europe, there are few natural predators to control it in the United States.²
- Foliage contains the insecticide pyrethrin, neurotoxin thujone, toxic oil tanacetin, and camphor. Unpleasant tasting milk results when dairy cattle eat the leaves.²



Description

- Aromatic perennial with 2 to 6 foot tall purplish stems topped with dense clusters of bright yellow "button" flowers.⁷
- Each flower head has 20-200 button-like disk flowers that do not have petals.² Flower heads turn brown and maintain their shape at seed set.
- Distinguished from tansy ragwort by lack of ray petals and more sharply toothed leaves

- Alternate leaves are deeply toothed and appear fern-like when emerging in the spring.
- Tenacious, fibrous root system produces creeping rhizomes; cannot be easily pulled out.

Habitat

- Generally found in full sun along trails and roadsides, on streambanks, in waste areas and vacant lands, and pastures.
- Commonly seen in vacant lands and along roadsides in King County.

Reproduction and Spread

- Reproduces by seed and rhizomes, often forming dense vegetative colonies.²
- Often found in areas lacking human disturbance where natural disturbance may be a factor in its spread.⁸
- Plants can flower from July to September.
- New plants can be produced from earth-moving operations that spread the rhizomes.²
- Seeds can be transported by birds and animals, in hay and on equipment and vehicles, in ballast water and small distances by wind. Seeds likely float and spread through movement of water such as streams and stormwater.⁸
- Greater than 1000 viable seeds produced per square meter and the duration of seed viability is unknown.⁸

Local Distribution

Found throughout King County. The heaviest concentrations are in vacant lands and roadsides in south and central King County, especially in the areas surrounding Auburn, Enumclaw, Maple Valley, Kent, Covington and Vashon/Maury Islands.

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 that 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 or local jurisdiction regulations**).
- 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 to control erosion and sediment deposition. Refer to the King County Surface Design Manual for further information about sediment and erosion control practices (call 206-296-6519 or go to <http://kingcounty.gov/wlr/Dss/Manual.htm> for more information).

- Small infestations can be dug up. Follow-up is important to control regrowth from severed roots.
- For larger infestations, the strategy will depend on the land use of the site. In pastures, good grazing practices and management of grass and forage species will greatly improve control of common tansy. Specific suggestions are given in the Best Management section.
- Generally work first in least infested areas, moving towards more heavily infested areas.
- Minimize disturbance to avoid creating more opportunities for seed germination.

Early Detection and Prevention

- Common tansy is easy to find in spring when the fern-like leaves start growing and in summer once it flowers. Monitor pastures, areas used by livestock, vacant lands and roadsides for new populations in June and July, and contact your local noxious weed board or extension office for help with identification.
- Dig up isolated or small populations. If the colony is more than you can remove manually, it may be necessary to treat the area with an appropriate herbicide in the summer or the following spring.⁶
- Prevent plants from spreading away from existing populations by washing vehicles, boots and animals that have been in infested areas.
- If animals are being moved from an infested pasture to an uninfested pasture, if possible, first isolate them for at least five days so that the seeds pass out of the animals' digestive system.

Manual

- **Dig out plants when they emerge in the spring.** Typically this is from April to June. Because this is a toxic plant, gloves and protective clothing should be worn.
- Plants in flower can form viable seeds even after they are pulled, so carefully bag and dispose of all flowering plants.
- Roots break off easily and re-sprout with new plants, so be sure to remove as much root as possible. Completely removing plants is easiest when the soil is loose or moist.
- Return to the same location in the following summer and spring to remove plants coming up from broken roots and seeds already in the soil. Continue to monitor the area for several years.
- The use of hand tools is allowable in all critical areas in unincorporated King County, check with your local jurisdiction for further information about weed control in critical areas.

Mechanical

- Mowing will not control common tansy effectively. Plants are able to re-sprout and flower again in the same season when mowed.
- Regular mowing can reduce seed production but must be repeated to eliminate regrowth from rootstock.
- Common tansy can be effectively controlled through cultivation.⁹

Chemical

- **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.
- For control of large infestations on roadsides and other non-pasture areas, herbicide use may be necessary. For common tansy, it is most effective to apply selective broadleaf herbicides in the spring.⁶ Infested areas should not be mowed until after the herbicide has had a chance to work and the weeds are brown and dead.
- For several years following treatment, monitor areas for new plants germinating from the seed bank or resprouting from rootstock.

Specific Herbicide Information

Glyphosate: can effectively control common tansy when applied in the early flower bud stage. Glyphosate is non-selective and will kill non-target vegetation. Treatment with glyphosate needs to be combined with effective re-vegetation of the site to prevent common tansy from re-infesting the area.

Selective Broadleaf Herbicides: most effective when common tansy is growing in a grassy area. Re-treatment the following year is necessary to control resprouting plants. Continue to monitor for new plants for at least four years after the initial treatment and following any disturbance to the soil such as tilling or construction.

Selective herbicides that are effective on common tansy include dicamba (e.g. Vanquish™ or Banvel®), metsulfuron (e.g. Escort®), chlorsulfuron (e.g. Telar®).⁶

Apply selective herbicides in the spring before any flowers appear. The best control is early in the spring after growth begins. Dicamba can be effective at the early bud development to bloom stage as well.⁷ Apply herbicide on warm days when winds are low. Check label for specific information on wind and rain guidelines.

Dicamba can harm certain grasses, alfalfa, clover and other legumes. The addition of a suitable surfactant may improve the control results. Do not apply chlorsulfuron to cropland.⁶

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 206-296-0290.**

Biological

Biological control is the deliberate introduction of insects, mammals or other organisms that adversely affect the target weed species. Biological control is generally most effective when used in conjunction with other control techniques.

- No known biological control for common tansy exists at this time.⁵

SUMMARY OF BEST MANAGEMENT PRACTICES

Small Infestations in Native and/or Desirable Vegetation

- Dig out plants when soil is moist.
- Replace any divots created when removing the plants to lessen the amount of disturbed soil.
- If digging is not possible due to site conditions or available labor, apply an appropriate herbicide by wiping on leaves and stems, by spot spraying plants or by applying herbicide to cut stems to minimize off-target damage.
- Monitor site throughout growing season and remove any new plants.
- If using an herbicide in a grassy area, use a selective herbicide to avoid injury to the grass.

Large Infestations in Grassy Areas

- Mowing is not effective for eradicating common tansy. Mowing can be used if the infestation is found later in the year to keep the plants from flowering until an approved control method can be used. Do not mow common tansy that has gone to seed.
- Large infestations can be controlled with selective herbicides. (See the Chemical section of this BMP).

- Suppression of large infestations of common tansy with a selective herbicide will help to increase grass production, which in turn increases the suppression of the common tansy.
- Promote healthy grassy areas by seeding and fertilizing. Use a mix of grass and clover species to improve resistance to common tansy. Fertilize according to the soil needs.
- If grassy area is used for grazing, the area should be managed to promote grass and clover vigor. Graze uniformly and move animals from area to area in a planned sequence. Avoid grazing when soil is very wet because holes can be opened up to new weed infestations. Some winter grazing by smaller animals can stimulate growth of clover and improve grass health.
- Be sure to monitor for common tansy on edges of pastures and disturbed areas around fences and watering holes. Remove isolated colonies before they flower.
- In fields densely infested with common tansy, remove all cattle and horses until the common tansy is reduced to isolated colonies.
- If needed, apply a nitrogen fertilizer after the selective herbicide application and then manage grazing so that 4 to 6 inches of grass re-growth remains at the end of the growing season so that grasses can effectively resist re-invasion by the common tansy.
- For more information on pasture management, contact the King Conservation District (<http://www.kingcd.org>).

Control in Riparian Areas

- Additional permits may be required for control of infestations in riparian areas. See the 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 for further information about sediment and erosion control practices (<http://www.kingcounty.gov/environment/waterandland/stormwater/documents/surface-water-design-manual> or call 206-296-6519).
- 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.
- Mowing will not eradicate common tansy but it can serve to contain it in the interim until more effective control measures can be utilized.
- If a non-selective herbicide is used in grassy areas, the area should be re-seeded to prevent reinvasion by weeds.
- Infested areas will need to incorporate a management plan lasting for several years to control plants germinating from the seed bank and regrowth from rootstock.

Control in Road Rights-of-Way

- Dig out small infestations if possible.
- Spot spray with glyphosate if weeds are in areas with no desirable grasses.
- If plants are in grassy areas, use a selective broadleaf herbicide and re-seed after control is completed.

- If plants are about to flower, they can be mowed until a more effective control strategy can be used.

Disposal Methods

- Flowering or seeding stems should be collected and discarded with the yard waste or trash or taken to a transfer station for disposal. Back yard composting of seeds is not generally recommended unless it can closely monitored.
- Non-flowering plants can be composted, although there is a risk that root balls may contain seeds that would survive in the compost and that roots and rhizomes may produce new plants. If this is a concern, plants may also be discarded with yard waste.
- If disposing of plants on site, leave plants roots up and chop up with a shovel to reduce risk of plant re-rooting. Plants should be left well away from waterways, shorelines, roads and un-infested areas.
- Never dump yard waste in parks or natural areas, as weeds may spread from yard waste piles.

References

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