



Control Options for Knapweeds

General information

Control efforts for knapweed are best initiated before the plants flower. Do not compost buds or flowers. Regardless of which control option is chosen, sites must be monitored and control repeated for the weed to be eradicated. If soil is disturbed during control efforts, it is best to reseed the disturbed area with a desired species, to prevent further establishment of weeds. Encouraging grass growth through the use of applied fertilizers and/or rotational grazing will help prevent the reestablishment of weed species.



Manual/Mechanical Techniques

Both spotted and meadow knapweed can be controlled through hand digging. Spotted knapweed can also be controlled through hand pulling. Plants are easiest to pull after plants have bolted (elongation of flowering stem has started), and when the soil is moist. When digging or pulling, try to remove as much of the root as possible to prevent regrowth. Gloves should be worn when pulling spotted knapweed.

Mowing can be used for knapweed control only if mowing is continued regularly throughout the flowering season. Mowing can start in May or whenever bud formation is first noticed on the plants. Mowing must then be repeated at least once a month until the first hard frost of winter. If mowing is discontinued before the plants go dormant for the winter, the knapweed will flower. Mowing will not kill the plants, and flowering may occur to a smaller extent. This method of control is best suited to small, easily mowed lots, where the knapweed can be mown as if a lawn.

Chemical Recommendations

Knapweed can be controlled using specific herbicides. Knapweed should be sprayed in spring or early summer before flower buds appear to ensure plants do not produce seed after being sprayed. Spraying can also be done in the fall, to target rosettes that will overwinter. When using herbicides, always read and follow label directions for rates, spraying conditions, personal protective equipment and grazing intervals. Do not spray when it is windy or raining or when rain is forecast. Do not mow sprayed plants for at least 2 weeks after herbicide application.

For most infestations of knapweed, plants should be treated individually (spot-sprayed). Spray plants until they are just wet. For large or dense infestations, it may be necessary to broadcast spray the entire area. Herbicides should not be sprayed within 60 feet of water bodies and creeks, without further consultation with the Noxious Weed Board. Remember, it is the herbicide applicators responsibility to apply the product in accordance to the instructions on the label.

For chemically treating knapweed, the Whatcom County Noxious Weed Board recommends using a selective broadleaf herbicide. Glyphosate (the active chemical in herbicides such as Roundup) is generally not recommended for most sites, as it will kill any vegetation it hits, including surrounding grass. A 2% solution of a glyphosate product (with at least 41% active ingredient) can be used on knapweed in the fall with good results. Maintaining grass and other forbs will assist in weed control efforts by shading any weed seeds in the soil, making it more difficult for weeds to germinate.

2,4-D

There are many herbicides containing 2,4-D. Best results are obtained when flower stems are beginning to elongate in the spring. Plants can also be treated in the fall.

2,4-D + Dicamba

This combination of chemicals is contained in herbicides such as Weedmaster, All-in-One Weed Killer and some Weed-B-Gon. It can be applied to knapweed at any time up to flowering, and again in the fall.

- **Always read and understand the label of the herbicides you choose to use.**
- **More is NOT better when using herbicides, and may actually hinder the ability of the herbicide to injure the target plant if the solution is too strong. This wastes money and effort and puts more product into the environment than is necessary. ALWAYS follow the recommended rates on the label.**
- **With all herbicides, when you apply them is as important as how you apply them.**

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. Herbicide information is taken from the WSU Pacific Northwest Weed Management Handbook 2010.

