

CONTROLLING noxious weeds

Tips to control some of the perennial

Noxious weeds are non-native, invasive species that harm the environment and the economy. These destructive plants are invading thousands of acres **every day** and wreak havoc on native ecology. On public lands, many federal, state, and local entities work hard to fight these invaders.

But what if plants like Canada thistle and leafy spurge are on YOUR land? How do you control them and become part of the solution?

Identify the weed

At the top of the "Least Wanted Alive" list for perennial (live more than two years) noxious weeds would probably be Canada thistle, leafy spurge, Russian knapweed, Dalmation toadflax, whitetop (hoary cress), perennial pepperweed, and field bindweed (morning glory). All are from other continents, have the ability to invade

occupied plant communities and have the ability to out-compete existing plants.

Select a Method

There are six general methods to control some of the problematic and more common noxious weed species in Wyoming. Each method may work by itself with most weeds, but controlling the top seven noxious weeds is best

achieved by combining as many components as possible. Developing an integrated weed management (IWM) system will constantly stress the weed and leave your property healthier and more valuable. The spring issue of *Barnyards&Backyards* outlined how to create an IWM plan consisting of education, prevention, mechanical, chemical, biological, and cultural control.

Assistance is available at a local weed and pest district. A listing of Wyoming weed and pest districts is available at http://www.wyoweed.org/wp_dist.html.

Prevention

This is the cheapest weed control and should always be a part of an IWM system. Avoid bringing in fill dirt, topsoil, or non-composted manure unless it's **known** the source was weed-free. Real-life examples abound. My own newly planted lawn was

HOW TO GET A WYOMING PRIVATE APPLICATOR LICENSE (WYPAL)

Annual workshops for training and testing for a WYPAL are conducted in many locations throughout the state. This license will enable you, as a private landowner, to use restricted use herbicides and pesticides. Contact a local University of Wyoming Cooperative Extension Service office for training in your area. A listing of offices is available online at <http://www.uwyo.edu/UWces/Counties.asp>



on YOUR place

noxious weeds in Wyoming

infested with field bindweed from a “topsoil mix” sold in bulk from a local business. Avoid feeding “weedy” hay to livestock. Certified weed-free hay can be purchased although it will typically sell for a premium. Be a good neighbor and work together to control weeds.

Mechanical Control – Cultivating, tilling, pulling, digging up, mowing, burning

All of the listed perennial noxious weeds have extensive root systems. Many have roots that can reproduce by themselves. Leaving any part of the root in the ground can result in unwanted regrowth of that plant. Cultivating and tilling Canada thistle and leafy spurge tend to spread the plant. Many landowners have had a neglected pasture with a small infestation of Canada thistle, decide to replant, till the pasture before controlling the thistle, reseed – and end up with a **huge** Canada thistle problem! However, mowing Canada thistle several times during the growing season followed by chemical treatment in the fall provides good control. Mechanical control methods for small infestations of Dalmatian toadflax and whitetop include hand pulling as soon as they appear in spring and ensuring all the roots are removed as well. This method should be repeated for **five to six years** to result in some effective level of control.

Chemical – Herbicides

These listed perennial weeds all have extensive roots systems that allow the plant to recover from most stresses. These plants are often treated with a herbicide that moves into the



Russian knapweed – *This weed is poisonous to horses and has an ability to form dense stands that exclude all native and desirable plants.*

root system. The following inclusion or exclusion of a specific herbicide brand does not imply endorsement.

Dow’s Tordon® 22K (picloram) is a restricted use herbicide and requires a Wyoming private applicator license to buy and to apply. The “Restricted Use” classification restricts a product, or its uses, to use by a certified and/or licensed pesticide applicator or under the direct supervision of such an applicator. It is labeled for rangeland and pasture and can provide good to excellent control of Canada thistle and Russian knapweed when used properly. It will also provide fair control of leafy spurge and Dalmatian toadflax.

Dow’s Redeem® R&P is labeled for range and pasture. This herbicide is NOT a restricted use



Dalmatian toadflax – *This plant came from the same region of the Balkans as the Dalmatian dog breed. The dog is welcome, but the weed is destroying many of our native plant communities.*

pesticide (non-restricted use), and it can provide good to excellent control of Canada thistle and Russian knapweed.

BASF's Plateau® is a non-restricted use herbicide that can provide good control of Russian knapweed, leafy spurge, Dalmatian toadflax, and field bindweed. This is a very rate-specific and timing-critical herbicide so contact a local weed and pest control district for specific recommendations and application techniques.

DuPont's Escort® XP and Telar® DF are non-restricted, labeled for range and pasture, and the "go-to" herbicides for perennial mustards such

as whitetop and perennial pepperweed. Telar® can also provide control for Russian knapweed and Canada thistle.

Glyphosate (Monsanto's Roundup®) can be used in gardening, cropland, and pre-planting situations to provide some control of Canada thistle and field bindweed but only in late fall and at a high rate (4 quarts per acre).

Choosing and applying the best herbicide for controlling a given noxious perennial weed is NOT the end of story. Spot treatment in subsequent years and other control options are needed to completely control these plants. Always read and follow herbicide label instructions. Herbicide labels are VERY information-rich and take several readings to digest. Always use equipment that has been set to apply the correct amount of herbicides (a local county weed and pest district can help with calibrations).



Canada thistle
– *Canada thistle came to this continent in the early 1600s. It is the most widespread noxious weed in the world.*

Biocontrol – Using a plant's natural insect predators or pathogens

Biocontrol can be effective in certain situations and especially when used with other control methods in an IWM system. An example of a successful biocontrol method was seen on a huge, diffuse knapweed infestation in the southern Big Horn Mountains. Coupled with an aggressive and timely herbicide program, these insects have decimated the population of this weed and brought it under control.

Cultural – Using competition from desirable plants to suppress weeds

Many grasses provide excellent competition to these weeds. See "Taking back your pasture" in this issue (page 16). Contact a local UW CES office or federal Natural Resources Conservation Service for species selection and techniques for inter-seeding and reseeding options. A listing of county CES offices is available on-line at <http://www.uwyo.edu/UWces/Counties.asp>.

Conclusion

Wildlife, agriculture, and native plants are being severely impacted by these noxious plants in many areas of Wyoming. By controlling noxious weeds on OUR place, helping neighbors do the same, and reporting noxious weed infestations on public lands, the wonderful Wyoming landscapes can be preserved.

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