

## Noxious Weeds

### DEFINITION

"Noxious weeds" or "weeds" means any exotic plant species established or that may be introduced in the state that may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses or that may harm native plant communities and that is designated:

- as a statewide noxious weed by rule of the department; or
- as a district noxious weed by a board, following public notice of intent and a public hearing.

## Montana State Declared Noxious Weeds

EFFECTIVE: June 21, 2019

### PRIORITY 1A

These weeds are not present or have a very limited presence in Montana. Management criteria will require eradication if detected, education, and prevention:

- Yellow starthistle (*Centaurea solstitialis*)
- Dyer's woad (*Isatis tinctoria*)
- Common reed (*Phragmites australis ssp. australis*)
- Medusahead (*Taeniatherum caput-medusae*)

### PRIORITY 1B

These weeds have limited presence in Montana. Management criteria will require eradication or containment and education:

- Knotweed complex (*Polygonum cuspidatum*, *P. sachalinense*, *P. × bohemicum*, *Fallopia japonica*, *F. sachalinensis*, *F. × bohemica*, *Reynoutria japonica*, *R. sachalinensis*, and *R. × bohemica*)
- Purple loosestrife (*Lythrum salicaria*)
- Rush skeletonweed (*Chondrilla juncea*)
- Scotch broom (*Cytisus scoparius*)
- Blueweed (*Echium vulgare*)

### PRIORITY 2A

These weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts:

- Tansy ragwort (*Senecio jacobaea*)
- Meadow hawkweed complex (*Hieracium spp.*)
- Orange hawkweed (*Hieracium aurantiacum*)
- Tall buttercup (*Ranunculus acris*)
- Perennial Pepperweed (*Lepidium latifolium*)
- Yellowflag iris (*Iris pseudacorus*)
- Eurasian watermilfoil (*Myriophyllum spicatum*, *Myriophyllum spicatum x Myriophyllum sibiricum*)
- Flowering rush (*Butomus umbellatus*)
- Common buckthorn (*Rhamnus cathartica L.*)
- Ventanata (*Ventanata dubia*)



## PRIORITY 2B

These weeds are abundant and widespread in many counties. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts.

- Canada thistle (*Cirsium arvense*)
- Field bindweed (*Convolvulus arvensis*)
- Leafy spurge (*Euphorbia esula*)
- Whitetop (*Cardaria draba*)
- Russian knapweed (*Centaurea repens*)
- Spotted knapweed (*Centaurea stoebe* or *maculosa*)
- Diffuse knapweed (*Centaurea diffusa*)
- Dalmatian toadflax (*Linaria dalmatica*)
- St. Johnswort (*Hypericum perforatum*)
- Sulfur cinquefoil (*Potentilla recta*)
- Common tansy (*Tanacetum vulgare*)
- Oxeye daisy (*Chrysanthemum leucanthemum* or *Leucanthemum vulgare*)
- Houndstongue (*Cynoglossum officinale*)
- Yellow toadflax (*Linaria vulgaris*)
- Saltcedar (*Tamarix spp.*)
- Curlyleaf pondweed (*Potamogeton crispus*)
- Hoary alyssum (*Berteroa incana*)

## PRIORITY 3

Regulated Plants: (NOT MONTANA LISTED NOXIOUS WEEDS)

These regulated plants have the potential to have significant negative impacts. The plant may not be intentionally spread or sold other than as a contaminant in agricultural products. The state recommends research, education and prevention to minimize the spread of the regulated plant.

- Cheatgrass (*Bromus tectorum*)
- Hydrilla (*Hydrilla verticillata*)
- Russian olive (*Elaeagnus angustifolia*)
- Brazilian waterweed (*Egeria densa*)
- Parrot feather watermilfoil (*Myriophyllum aquaticum* or *M. brasiliense*)

# Flathead County Declared Noxious Weeds

## PRIORITY 2A

These weeds are common in isolated areas of Flathead County, Montana. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts.

- Baby's breath (*Gypsophila paniculata*)
- Russian thistle (*Salsosa tragus*)
- Tumble mustard (*Sisymbrium altissimum*)
- White campion (*Silene latifolia*)
- Musk thistle (*Carduus nutans*)



### PRIORITY 3

Regulated Plants: (NOT FLATHEAD COUNTY LISTED NOXIOUS WEEDS)

These regulated plants have the potential to have significant negative impacts. The plant may not be intentionally spread or sold other than as a contaminant in agricultural products. The state recommends research, education and prevention to minimize the spread of the regulated plant.

- Creeping Bellflower (*Campanula rapunculoides*)
- Scentless Chamomile (*Matricaria perforate*)
- Absinth Wormwood (*Artemisia absinthium*)
- Noble Yarrow (*Achillea nobilis*)
- Kochia (*Kochia scoparia*)

## Prevention, Control & Eradication

### THE IMPORTANCE OF A WEED MANAGEMENT PLAN

A carefully formulated Weed Management Plan is crucial to maintaining the natural and economic value of property.

Noxious weeds have many negative effects on the environment: they reduce the aesthetic and income potential of property; provide poor and often poisonous forage for animals; reduce crop value; and decrease biological diversity. For these reasons, it is in the landowner's best interest to keep noxious weeds in check!

A Weed Management Plan is a written statement from the landowner that explains the methods of control that are or will be used at the appropriate time in the growing season. A form is available at the Weed Department. Also available is a variety of weed and weed control information which is a helpful tool to gain insight on various methods a landowner can choose. A Weed Management Plan remains valid for three years provided the stated control measures are followed. Once put into practice, if the methods chosen do not appear to have the desired effect a new plan of action may be required.

Weed control is unfortunately not a quick process and will require years of diligent work to achieve control and/or eradication of weeds. Using multiple properly timed methods of control will affect the success rate.

### INTEGRATED WEED CONTROL

Utilizing what the industry calls *integrated weed management* encourages landowners to select multiple appropriate methods to achieve weed management goals. Whether plotting out a vegetable garden, creating or maintaining range for cattle, preserving native plant and wildlife habitat, or even clearing all plants for a parking lot, the end goal needs to be determined prior to selecting how to properly manage the property.

Begin with tracking the growth of old and new weed patches by touring the property with a map in hand to mark areas that contain weed patches and their approximate size. In addition, the County Weed Education and Compliance Officer is available to meet onsite to help identify weeds and make suggestions for effective control measures. Next, prioritize infestations and eliminate *smaller* infestations before they spread and become more expensive to manage; followed by containing larger patches, while working towards eventual elimination of all weeds.

Utilize proper land management practices at all times. These practices include reseeding when soil disturbance occurs to encourage desirable forb growth as competition to any new weeds that attempt to germinate (refer to [Reveg Policy](#)); wash equipment after use to prevent spread of undesirable seeds; avoid overgrazing as it eliminates the competition provided by native and desirable grasses; and most importantly be willing to adapt and evolve the management plan as seasons pass to include new management techniques.



## METHODS OF WEED CONTROL

### Prevention

Prevention as a form of weed control will *always* save money and time.

- If equipment is entering or moving around the property, clean it to prevent seed dispersal.
- Plant only certified, weed-free seed.
- Transport only weed-free hay to your property.
- Screen irrigation water to prevent seeds from traveling along irrigation ditches. Keep irrigation ditches free of weeds.
- Crop rotation, particularly between crops that have different growing periods, helps reduce weed density.
- Fertilization is both preventative and cultural, encouraging healthier desirable grasses/crops, while increasing some weeds susceptibility to herbicides.
- Do not allow animals to move between weed infested and clean areas without first spending a period of time in a holding pen to prevent seed transfer from manure.
- Revegetation is crucial to preventing new weed patches from establishing. Whenever ground disturbance occurs, reseed according to the Reveg Policy. Contact this Department or one of the local farm and ranch product supply stores for identifying the proper seed to use.

### Mowing

Mowing can be a useful method for certain noxious weeds if applied properly. Multiple trimmings can alter the weed's competitive ability by forcing the plant to rely on nutrients stored within the root at critical growing stages, but **timing and frequency of the mowing is very important**. The most effective time to mow most noxious weeds is when they are bolting, right before the plant flowers. Long-term repeated mowing during this stage can eventually deplete root reserves. Do not mow while the weeds are seeding because to do so will essentially plant next years' crop of weeds. Some weeds spread via rhizomes and while mowing can decrease seed production it will not limit expansion of the weed and sometimes can exacerbate the problem by stimulating more plant growth. Weeds that don't respond well to mowing are, yellow toadflax, leafy spurge, meadow and orange hawkweed, and oxeye daisy. Mowing is not recommended for weeds such as spotted knapweed and Houndstongue, because they will continue to bloom shorter and shorter with each additional mowing.

### Burning

The effectiveness of burning depends on the duration and intensity of heat produced, plus the maturity and location of the undesirable seeds. Mature, dry seeds are more heat resistant than green seeds. Although intense heat will destroy most seeds remaining in plant heads, it will also damage desirable plant growth. An appropriate use of burning is to selectively burn patches of weeds that have headed out by using a propane torch. The flame can be directed at the mature heads of the weeds, avoiding negative effects on desirable plants. It is also beneficial to burn off dead material from the previous season, clearing the area in preparation for an herbicide application that would occur when the weeds had sufficiently begun to regrow for the season. *Use caution when burning as a control method. **Due to potential damage of desirable plants this practice should be implemented infrequently.***

### Biocontrol

Biocontrol is a resource utilized by landowners with very large acreage and is usually not appropriate for smaller acreage properties. Many different noxious weeds in the State of Montana respond to biocontrol with varying degrees of success. Generally, it is most effective to utilize several different insect species combined with other means of weed



control over a period of time in order to see a decrease in weed population. Biocontrol results fluctuate over the years and will not result in eradication of weeds.

## Herbicides

Herbicides are an integral tool in the arsenal of weed control methods. Although some people may be inclined to avoid this tool, following the use instructions will minimize the possibility of negative impact. Land use goals, property location, and environment type are all factors which will help determine the appropriate herbicide to use. The County Weed Department staff is available to answer questions regarding concerns about what herbicide to use, how much to apply, the method of application, what protective clothing to wear while applying the product, or any other questions. When selecting an herbicide product, keep in mind that there are both selective and non-selective products on the market. Selective herbicides kill only specific weeds listed on the product label and will not harm grasses that are in the vicinity of the application. These products are generally used in lawns, pastures, along roadsides, and other areas where vegetation is desired. Non-selective herbicides will kill any living plant where the product is applied, and is typically used on areas such as sidewalk cracks, driveways, or on cropland when a field is fallow.

**Herbicides can provide short-term to multi-season weed control.** The most effective time for herbicide application is when plants are actively growing and translocating nutrients from the roots to the green growth and vice versa. This timing allows the herbicide to kill both the root *and* the green growing plant. Some weeds such as hawkweed and toadflax respond better to herbicides when a surfactant is added to the spray mix. A surfactant helps the mix adhere to the plant allowing for more uniform absorption of the herbicide. Other weeds can be mowed prior to an herbicide application to encourage a new bout of green growth, increasing the effectiveness of the application. Herbicides may also be used during the regrowth phase that occurs in late summer or fall, in addition to a short period in the fall after the first hard frost has occurred.

## Grazing

Grazing as weed control entails the removal of weed top growth by foraging animals and is similar to mowing as it prevents seed formation and gradually weakens the root system of the grazed plants. Animals should not be turned out to pastures too early in the spring as damage can be done to the desirable pasture grasses, preventing them from providing competition for weeds as well as from providing continued fodder throughout the summer. **Do not allow overgrazing to occur!** Keep in mind that many noxious weeds are poisonous to horses and/or cattle and are not suitable for grazing. Goats can be utilized to control noxious weeds such as spotted knapweed, leafy spurge, and St. Johnswort. Other weeds simply cannot be grazed effectively such as hawkweed, Houndstongue, and yellow toadflax due to either poisoning concerns or plant structure. Horses can help control seed production of Canada thistle but will not reduce a thistle patch due to aggressive rhizome expansion.

Please visit Flathead County Weed Department at <https://flathead.mt.gov/weeds/WhatAreNoxiousWeeds.php> for further information.

Reference:

Flathead County Weed Department (2019), *What are Noxious Weeds?*, accessed August 13, 2021, <https://flathead.mt.gov/weeds/index.php>