

## Herbicide Recommendations for Weed Control

The following information is provided only as a general guide to weed control. Size of infestations and site conditions will determine what method would best suit your needs. Trade names have been used to simply instructions and do not constitute a guarantee or warranty of the product.

**Always read and follow label instructions on the products you select and use!**

For more information, please refer to our website: [www.SpokaneCounty.Org/WeedBoard](http://www.SpokaneCounty.Org/WeedBoard)

Weed	Growth Type	Recommendations:		
		April, May <i>Seedling/Rosette</i>	June, July <i>Bolting, Bud, Bloom</i>	Aug, Sept, Oct <i>Seeding, Fall Regrowth</i>
<b>Absinth Wormwood</b>	<i>Perennial</i>	WeedMaster Prescott Milestone Transline	WeedMaster Milestone	Banvel
<b>Annual Bugloss</b>	<i>Annual</i>	PasturePro WeedMaster Tordon + 2,4-D	WeedMaster Tordon + 2,4-D	WeedMaster Tordon + 2,4-D
<b>Blueweed</b> <i>(Always add a silicone surfactant to spray mix)</i>	<i>Biennial</i>	PasturePro WeedMaster Prescott Telar	PasturePro WeedMaster Prescott Tordon + 2,4-D	Tordon + 2,4-D <b>Regrowth after mowing:</b> WeedMaster Telar
<b>Buffalobur</b>	<i>Annual</i>	Transline Overdrive Tordon	Transline Tordon Roundup (spot spray)	Transline Tordon
<b>Bull Thistle</b>	<i>Biennial</i>	2,4-D Trimec Range Star Prescott Milestone	Tordon + 2,4-D Trimec Range Star Milestone	Tordon + 2,4-D <b>Fall Regrowth:</b> 2,4-D Prescott
<b>Canada Thistle</b>	<i>Perennial</i>	WeedMaster Curtail Tordon Prescott Milestone	Tordon + 2,4-D Roundup ( <i>spot spray</i> ) Telar Milestone	Tordon + 2,4-D <b>Fall regrowth:</b> Telar Banvel Milestone
<b>Common Bugloss</b> <i>(Always add a silicone surfactant to spray mix)</i>	<i>Perennial</i>	Pasture Pro Prescott Telar Method + Telar	Pasture Pro Prescott Tordon + 2,4-D Method + Telar	Tordon + 2,4-D <b>Regrowth after mowing:</b> Pasture Pro Method + Telar Telar
		<b>Recommendations are supplied with the understanding that no discrimination is intended and no endorsement by the Weed Board is implied. Trade names have been used to simplify instructions.</b>		

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<b>Common Mullein</b>	<i>Biennial</i>	Escort Milestone Tordon + 2,4-D	Escort Tordon + 2,4-D Method + Telar	Tordon + 2,4-D Method + Telar
<b>Dalmatian Toadflax</b> <i>(Always add a silicone surfactant to spray mix)</i>	<i>Perennial</i>	2,4-D Range Star Tordon + 2,4-D Telar	Tordon + 2,4-D Tordon + Telar Telar	<b>Fall regrowth:</b> Tordon Telar Range Star
<b>Field Bindweed</b>	<i>Perennial</i>	2,4-D Trimec Range Star Prescott	2,4-D Trimec Range Star Prescott Telar	Tordon +2,4-D LandMaster <i>(spot spray)</i>
<b>Garlic Mustard</b>	<i>Biennial/ Perennial</i>	Escort + 2,4-D Garlon 4 Opensight	Escort + 2,4-D Garlon 4	Escort + 2,4-D Garlon 4 Opensight
<b>Hawkweeds</b>	<i>Perennial</i>	2,4-D Trimec WeedMaster Curtail Prescott Milestone	Tordon +2,4-D Trimec Transline Milestone	Fall treatments of Tordon, Transline or Curtail may be effective, but research is limited.
<b>Hoary Alyssum</b>	<i>Annual/to Short-lived Perennial</i>	2,4-D WeedMaster Prescott Opensight	WeedMaster Prescott Opensight	<b>If there is fall regrowth due to mowing:</b> WeedMaster Opensight
<b>Hoary Cress</b> <i>(White Top)</i>	<i>Perennial</i>	2,4-D Range Star Telar Escort Method + Telar	Range Star Telar Escort	<b>Fall regrowth:</b> 2,4-D Telar Escort
<b>Houndstongue</b> <i>(Always add a silicone surfactant to spray mix)</i>	<i>Biennial / Perennial</i>	Pasture Pro WeedMaster Escort Method + Telar	Pasture Pro Escort Method + Telar Tordon + 2,4-D	Tordon + 2,4-D <b>Regrowth after mowing:</b> 2,4-D Method + Telar
<b>Knapweeds</b>	<i>Biennial / Perennial</i>	2,4-D WeedMaster Milestone Tordon + 2,4-D	Tordon + 2,4-D Roundup <i>(spot spray)</i> Transline Milestone	Tordon + 2,4-D <b>Regrowth after mowing:</b> 2,4-D Milestone
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		April, May <i>Seedling/Rosette</i>	June, July <i>Bolting, Bud, Bloom</i>	Aug, Sept, Oct <i>Seeding, Fall Regrowth</i>
<b>Kochia</b>	<i>Annual</i>	Method + Telar WeedMaster Trimec Vista PasturePro	Telar Trimec Vista Roundup ( <i>spot spray</i> )	PasturePro Vista + 2,4-D WeedMaster Roundup ( <i>spot spray</i> )
<b>Leafy Spurge Myrtle Spurge</b>	<i>Perennial</i>	2,4-D Banvel Range Star Prescott Tordon + 2,4-D	Tordon + 2,4-D Banvel Method + Telar	Tordon + 2,4-D Method + Telar Plateau + Hasten Oil ( <b>12 oz/ac applied in Sept</b> )
<b>Medusahead Ventenata</b>	<i>Annual</i>	Roundup ( <i>spot spray</i> ) Plateau	Roundup ( <i>spot spray</i> )	Milestone Outrider Plateau
<b>Musk Thistle</b>	<i>Biennial</i>	2,4-D WeedMaster Milestone Telar	Transline Escort Tordon + 2,4-D	Tordon + 2,4-D <b>Regrowth after mowing:</b> WeedMaster Roundup (Spot Spray)
<b>Oxeye Daisy</b>	<i>Perennial</i>	2,4-D Trimec Tordon + 2,4-D Milestone Nitrogen Fertilizer	Tordon + 2,4-D Trimec Transline Method + Telar	Nitrogen Fertilizer Telar
<b>Poison Hemlock</b>	<i>Biennial</i>	2,4-D MCPA Method + Telar Roundup ( <i>spot spray</i> )	2,4-D Escort	2,4-D
<b>Puncturevine</b>	<i>Annual</i>	PasturePro Trimec RangeStar Method + Telar	PasturePro Trimec Method + Telar	Telar Method + Telar
<b>Purple Loosestrife</b>	<i>Perennial</i>	Escort Garlon Rodeo	Escort Garlon Rodeo	Garlon Rodeo
<b>Rush Skeletonweed</b>	<i>Perennial</i>	2,4-D WeedMaster Prescott MCPA Milestone	Tordon + 2,4-D Milestone Method + Telar	Tordon + 2,4-D <b>Fall Rosettes:</b> 2,4-D Transline Milestone
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		April, May <i>Seedling/Rosette</i>	June, July <i>Bolting, Bud, Bloom</i>	Aug, Sept, Oct <i>Seeding, Fall Regrowth</i>
<b>Russian Thistle</b>	<i>Annual</i>	2,4-D Prescott Curtail Milestone	Tordon + 2,4-D	Tordon + 2,4-D
<b>Scotch Thistle</b>	<i>Biennial</i>	2,4-D Telar Prescott Range Star Milestone	Tordon + 2,4-D Transline Escort	Tordon + 2,4-D <b>Fall rosettes:</b> WeedMaster Roundup
<b>St. Johnswort</b>	<i>Perennial</i>	2,4-D WeedMaster Milestone	Escort Tordon + 2,4-D	Tordon + 2,4-D
<b>Sulfur Cinquefoil</b>	<i>Perennial</i>	Tordon + 2,4-D Trimec Escort Milestone	Tordon + 2,4-D Trimec Escort Method + Telar	Tordon + 2,4-D
<b>Wild Four O'Clock</b>	<i>Perennial</i>	HiDep RangeStar Escort Telar	Rangestar Escort Roundup (spot spray)	Roundup (spot spray)
<b>Yellow Starthistle</b>	<i>Annual</i>	2,4-D WeedMaster Telar Transline Milestone	2,4-D Telar Tordon Prescott Method + Telar	<b>Fall regrowth:</b> Telar Tordon + 2,4-D Prescott

**Measurements and Conversions:**

**Qt or Pt / Acre to Oz/Gal**

**1 acre = 43,560 square feet**

½ qt/ac	=	¼ oz/gal
1 qt/ac	=	½ oz/gal
2 qt/ac	=	1 oz/gal
3 qt/ac	=	1½ oz/gal
1 pt/ac	=	¼ oz/gal
2 pt/ac	=	½ oz/gal

**Backpack Calibrations \***

(per 1 gallon of water)

2,4-D	2 oz
Curtail	1 oz
Milestone	0.1 oz
PasturePro	2 oz
Prescott	1 oz
Roundup	2 oz
Tordon	0.5 oz
Trimec	1.5 oz
WeedMaster	0.5 oz

**WHEN BACKPACK SPRAYING** be sure to fill the backpack halfway with water before you add the herbicide. Add the surfactant after you have finished filling the backpack with water.

\*Herbicide amounts are approximate. Accurate rates must be determined from the product label. Time of year and weeds to be sprayed are all factors when determining how much product to use.

# Recommended Herbicides for Noxious Weed Control

The following pages are provided only as a general guide for using herbicides to control noxious weeds. The size of infestation and site conditions will determine what method of control would best suit your needs. To purchase and apply restricted use herbicides, a pesticide license is required. Contact the WA Dept. of Agriculture or WSU/Spokane County Extension for information on the test and how to become licensed.

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## HERBICIDES (Always read the product label before applying any herbicide):

### 2,4-D:

Can be purchased without a pesticide license in quantities up to one gallon. It is sold under many names and formulations – Amine 4®, Hi-Dep®, Pasture Pro®, etc. 2,4-D is a selective, foliar absorbed, translocated phenoxy herbicide used in post-emergence applications. It is effective against many broadleaf weeds. Plants are most susceptible to 2,4-D when they are young and rapidly growing. Action in plant: Mimics natural plant hormones.

***It can persist in the soil for 2 – 4 weeks***

***Can be applied near water's edge; do not use where soils are permeable or shallow water table  
DO NOT use when temperatures will exceed 85 degrees Fahrenheit within 24 hrs of application***

Add Dicamba = WeedMaster®, Range Star® or Rifle-D®    Add Dicamba & MCPP = Trimec

### Aminocyclopyrachlor:

A selective herbicide that provides preemergence and/or postemergence control of broadleaf weeds, vines and brush species. Sold under the name **Method®** it is quickly taken up by the leaves, stems and roots of the plants. Action in plant: Mimics natural plant hormones.

***It can persist in the soil for more than one year***

***Can be applied to the water's edge***

***Do not apply within several feet of the root zone of desirable trees or shrubs***

***NOT labeled for turf***

***DO NOT use treated plant material for mulch or compost***

### Aminopyralid:

A selective, foliage-applied herbicide used to control broadleaf weeds called **Milestone®**. This herbicide has systemic plus residual activity that makes it equally effective at multiple stages of growth. Action in plant: Mimics natural plant hormones.

***It can persist in the soil for several months***

***Can be applied to the water's edge***

***Use caution under certain trees***

***NOT labeled for turf***

***DO NOT use treated plant material for mulch or compost; including manure from grazing livestock***

Add 2,4-D = GrazonNext®    Add Metsulfuron = Opensight®

## Chlorsulfuron:

A selective broadleaf herbicide **Telar®** used in range, pasture and industrial sites. It is a dry formulation that requires vigorous agitation to go into solution. Action in plant: Interferes with an enzyme, resulting in the rapid cessation of cell division and plant growth in both roots and shoots.

***It can persist in the soil for more than one year***

***Can be applied to the water's edge***

***NOT labeled for turf***

## Clopyralid:

A highly translocated, selected herbicide that is active primarily through the foliage of broadleaf weeds. It is not labeled for turf, but a great broadleaf herbicide for use in pastures and non-crop settings. Use **Transline®** when weeds are growing amongst conifers. Action in plant: Mimics natural plant hormones.

***It can persist in the soil for more than one year***

***Do not apply near water or in permeable soils or shallow water table***

***NOT labeled for turf***

***DO NOT use treated plant material for mulch or compost***

Add 2,4-D = **Curtail®**    Add Triclopyr = **Prescott®, Confront®**

## Dicamba:

Is the active ingredient in **Banvel®** and **Vanquish®**. It is a selective herbicide that is readily absorbed by plants and translocated by roots or foliage. Used in range, pasture, crops, rights-of-way and turf.

***It can persist in the soil for 2 - 3 months***

***Do not apply near water or in permeable soils or shallow water table***

***Stay at least twice the dripline away from trees or shrubs***

***DO NOT use when temperatures will exceed 85 degrees Fahrenheit within 24 hrs of application***

Add 2,4-D = **WeedMaster®, Range Star®, Brush Buster®, Rifle-D®**    Add 2,4-D & MCPP = **Trimec**

## Glyphosate:

Most commonly known as **Roundup®**. Glyphosate is a nonselective herbicide. Use caution when applying - it kills all plants, leaving bare ground for new weeds to establish. When it is applied to the foliage, it translocates to the roots and rhizomes of weeds. Action in plant: Inhibits three amino acids and protein synthesis.

***There is no apparent soil activity***

***Can be applied to the water's edge***

Aquatic Herbicide = **Rodeo is labeled for use in water** (Aquatic License Required to Use)

## **Metsulfuron:**

A selective broadleaf herbicide used for weed and brush control in pastures, rangeland and non-crop. Commonly known as **Escort®**. It is a dry formulation that requires vigorous agitation to go into solution. Action in plant: Interferes with an enzyme, resulting in the rapid cessation of cell division and plant growth in both roots and shoots.

***It can persist in the soil for several months***

***Can be applied to the water's edge***

***NOT labeled for turf***

***DO NOT apply under desirable trees and shrubs***

## **Picloram:**

**Tordon®** is the trade name and it is a **restricted-use herbicide, a pesticide license is required to purchase and to apply**. It is a highly translocated, selective herbicide that is active through the foliage and roots on broadleaf weeds and woody plants. For use in range, pasture, fallow cropland and non-cropland areas. Action in plant: Mimics natural plant hormones.

***It may persist in the soil for upwards of two years***

***Do not apply near water***

***NOT labeled for turf***

***DO NOT apply near desirable trees and shrubs***

***Residual activity will vary depending on the rate of application,  
soil conditions and rainfall***

## **SURFACTANTS:**

The primary purpose of a surfactant or "surface active agent" is to reduce the surface tension of the spray solution to provide more contact between the spray droplet and the plant surface. It brings the herbicide into closer contact with the leaf surface to provide quick wetting and uniform coverage and to aid in absorption.

They play an important role in the overall success rate of your control program regardless of what weeds you are trying to control, but they are especially important when trying to control plants that have waxy or hairy leaf surfaces such as Dalmatian Toadflax, Common Bugloss, Common Mullein and Blueweed.

Non-ionic surfactants are the most compatible with herbicides and sold under many names, including: **R-11®**, **Induce®**, **Activator 90®**, **Sylgard 309®** plus many others.