

Kootenai County



2015-16 Calendar

Noxious Weed Control

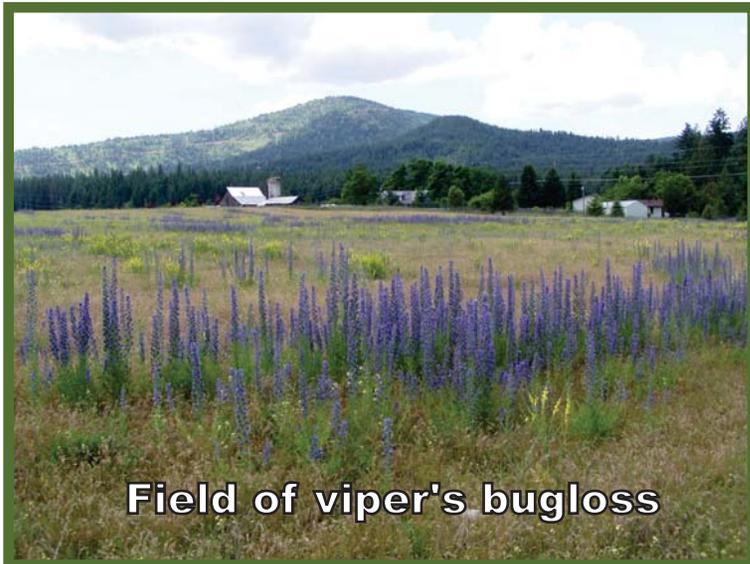
VIPERS BUGLOSS



Flowers



Rosette



Field of viper's bugloss

VIPER'S BUGLOSS (*Echium vulgare*) Also known as blueweed

The flowers are bright blue with hot pink stamens and bloom June to September. The leaves and stems are covered with stiff hairs.

Caution: Animals will normally not graze the plant; chronic ingestion (whether fresh or in hay) can cause liver failure in horses, cattle and sheep.

CONTROL: Best to control first year rosettes.

Non-Chemical Control:

- Blueweed cannot withstand regular cultivation.
- Prevent seed production by cutting and destroying flowers.
- Plants may be pulled or roots dug out - take special care to sever the roots below the root crown.
- Mowing is not a good control option because taproots are still viable and regrowth usually occurs.

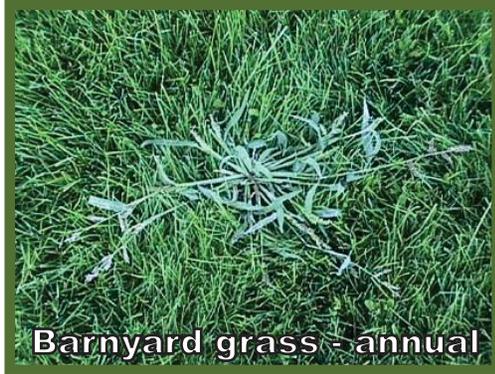
Chemical Control: Spray before bloom with dicamba + 2,4-D, metsulfuron, or glyphosate. Fall application of these products to new rosettes (before a killing frost) provides good control. A surfactant is recommended to increase the effectiveness of any of the herbicides used. **These products not recommended for home landscapes.**

WEEDY GRASS CONTROL

Crabgrass - annual



Barnyard grass - annual



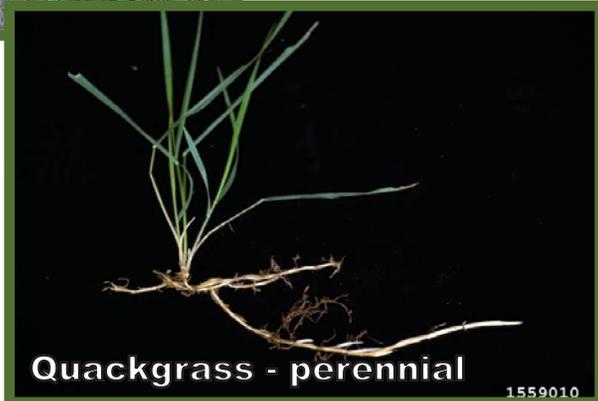
Foxtail grass - annual



Ventenata - annual



Quackgrass - perennial



1559010

The key to managing the weedy grasses is identifying them correctly. Quackgrass (a perennial) is often mistaken for crabgrass (an annual). What works for crabgrass won't affect quackgrass. If you are not sure what the identity of a plant is, bring a sample to our office or to the Extension office. A correct identification will tell you if it is an annual or perennial grass. An annual is a plant that dies at the end of its growing season; new plants are produced each year from seed. Preventing seed production in annual weeds by mowing or other means is often effective and so are pre-emergence herbicides. A perennial lives for more than one year and grows back from the roots each year. Perennials can also be produced from seeds. Perennials that have root systems more shallow than healthy grass roots can often be managed by good watering and mowing practices.

Non-chemical Control:

- Mow as high as practical during the summer months for the particular grass species present in your lawn - 2 ½ to 3 inches.
- Mow often enough so that no more than one-third of the grass blade is removed in a single mowing.
- Irrigate properly - light, frequent irrigation encourages weed seed germination, even if a pre-emergence herbicide has been applied
- Fertilize according to the needs of your lawn species.
- Core aerate the lawn at least once a year to reduce compaction and to control thatch.

Chemical Control: Pre-emergence herbicides control by preventing seedlings from becoming established. To be effective, they must be applied before the seed germinates. Post-emergence herbicides (applied **after** the weeds have begun growing in the lawn) are available and effective on some types of annual and perennial grasses.

WASHING VEHICLES



Vehicle washing is an effective strategy for preventing vehicular spread of weeds. A wash of 6 minutes was most effective for cleaning a vehicle.

Seeds can stow away on tires, bumpers, wheel wells or the underside of a vehicle. A recent study showed that once seeds become attached to a vehicle, they can travel for hundreds of miles under dry conditions before falling off, whereas seed loss is more rapid under wet conditions and on unpaved roads. As weed seed sprout and grow, they can crowd out native plants, disrupt native ecosystems and wildlife habitats and reduce crop yields when they spread to nearby fields.

To prevent the spread of weeds, researchers recommend that you wash your vehicle frequently, especially after driving off-road or off-trail or along roads bordered by high densities of weeds.

As an added measure of protection, land managers in areas where high-risk invasive species are growing are advised to close the area to traffic when the ground is wet. Doing so will dramatically reduce the risk of transporting weed seeds to new sites and also reduce future weed management costs.



NOXIOUS WEED CONTROL COSTS



Yellow hawkweed



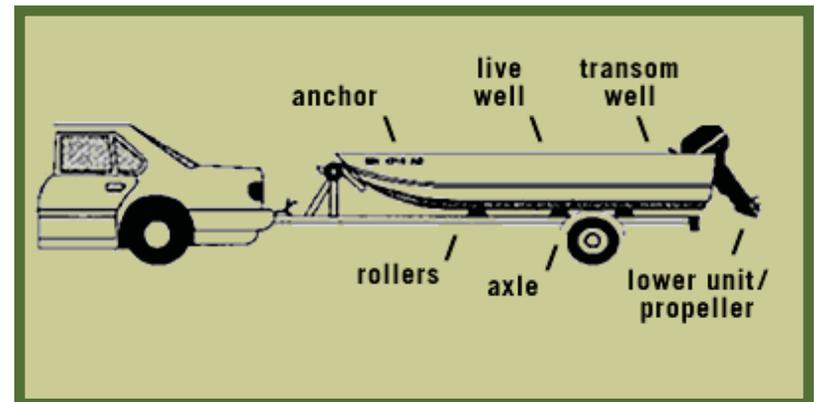
Dalmatian toadflax

Noxious and invasive plants are a serious threat to Idaho's economy causing an estimated \$300 million annually in direct damages. This includes the costs to fight fires on rangelands and forests due to the proliferation of invasive plants such as cheatgrass. Despite the fact that landowners and land management entities spend about \$25 million every year to directly control and manage noxious weeds, Idaho loses thousands of acres annually to the 66 varieties of noxious weeds that have been identified across the state. Approximately 15 percent of the entire state is now infested with noxious weeds.

Besides being poisonous, even deadly, for people, livestock, and wildlife, noxious weeds can rob game animals of their natural habitat or forage, destroy fish habitat, and reduce grazing opportunities for farm animals. Noxious weed infestations are now showing up with regularity in Idaho's wilderness backcountry areas. The aquatic noxious weed called Eurasian watermilfoil can bog down water craft, destroy fisheries, and even entangle and drown swimmers. Several of Idaho's most scenic lakes, have already been invaded by Eurasian watermilfoil and weed control experts are doing their best to reduce populations of this invader.

What you can do to help stop the spread:

- Learn to identify noxious and invasive weeds and report them to your county weed superintendent.
- Avoid travel through weed-infested areas with ATV's and other off-road vehicles.
- Don't pick and transport pretty flowers you cannot identify - you may be spreading seeds of noxious weeds.
- Check boats, trailers and watercraft after they are pulled from the water for signs of aquatic noxious weeds.



READING PESTICIDE LABELS

Pesticide labels are legal documents and any use inconsistent with the label is a federal and state offense. Besides that, there are countless other good reasons for reading and following the label and having it immediately accessible. Here are some of the unfortunate (and illegal) consequences that can happen when you don't:

1. **You may apply the wrong product - or the right product at the wrong rate.**
2. **You won't know if the label has changed since the last time you purchased the product.**
3. **The site you are treating might not be on the label.**
4. **You might apply a product that doesn't control your pest(s).**
5. **You might mix products that are incompatible.**
6. **You might make the application at the wrong time, in the wrong place, or too often.**
7. **You won't understand the toxicity concerns associated with the product.**
8. **You will not know the required personal protective equipment (PPE).**
9. **If you are accidentally exposed to the product, you won't know what to do and might not have the needed supplies on hand.**
10. **You won't understand the possible hazards to people, pets and the environment, and whether the pesticide may pose any fire, explosion or chemical hazards.**
11. **You won't know how to store and dispose of the product.**



If you still have questions after reading the label, call the pesticide manufacturer, your Extension Service or your State Pesticide Regulatory Agency.

Federal Resources

U.S. Bureau of Land Management
Weed Program: www.blm.gov/weeds

U.S. Dept. of Agriculture Plant
Database:

<http://plants.usda.gov>

Federal Weed List:
www.aphis.usda.gov

Idaho Resources

Idaho Noxious Weed Program:
[www.idahoag.us/Categories/PlantsInsect
s/NoxiousWeeds/indexnoxweedmain.php](http://www.idahoag.us/Categories/PlantsInsects/NoxiousWeeds/indexnoxweedmain.php)

Idaho Weed Awareness Campaign:
www.idahoweedawareness.org/

Idaho Weed Resources:
[http://www.cals.uidaho.edu/edComm/
catalog.asp](http://www.cals.uidaho.edu/edComm/catalog.asp)

Idaho Noxious Weed List:
[www.idahoag.us/Categories/PlantsIn
sects/NoxiousWeeds/watchlist.php](http://www.idahoag.us/Categories/PlantsInsects/NoxiousWeeds/watchlist.php)

December 2015						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February 2016						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

January 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 ☾ New Year's Day	2
3	4	5	6	7	8	9 ●
10	11	12	13	14	15	16 ☾
17	18	19	20	21	22	23 ○
	Martin Luther King Day					
24	25	26	27	28	29	30
31 ☾						

BEEES & NOXIOUS WEEDS



Bees - both native wild bees and the European honey bees that are managed by beekeepers - are in trouble. In recent years, bee populations have plummeted. Many beekeepers have been devastated by "colony collapse disorder" - a dying-off or disappearance of honey bees. A combination of problems is probably to blame.—

- One likely cause of bee mortality may be one or more bee diseases or parasites, such as mites.
- Pesticides, especially insecticides, used in the wrong place at the wrong time can also be part of the problem.
- The loss of habitat and nutritious forage plants is another reason for the decline of many bees.

One of the best things you can do is replace noxious weeds with non-invasive, pollinator friendly plants that bloom from spring through fall to provide bees and other pollinators with food throughout their active season.

Consider the control of existing noxious weeds as a first step in your long-term management plan. Developing a healthy plant community can help prevent the reestablishment of new weeds while providing habitat for wildlife and forage for pollinators. Consider planting native plants species along the field edges to increase wild bee diversity and support honey bees too.

Timing is important. Make sure to time your noxious weed control so that it minimizes disturbance to those busy bees.

- Do your control work in the morning or in the evening when bees are less active.
- Control as many noxious weeds as you can in early spring, fall, or even winter when plants are not in bloom.
- Plant desirable species in conjunction with the weed control so the bees still have a source of nectar and pollen.



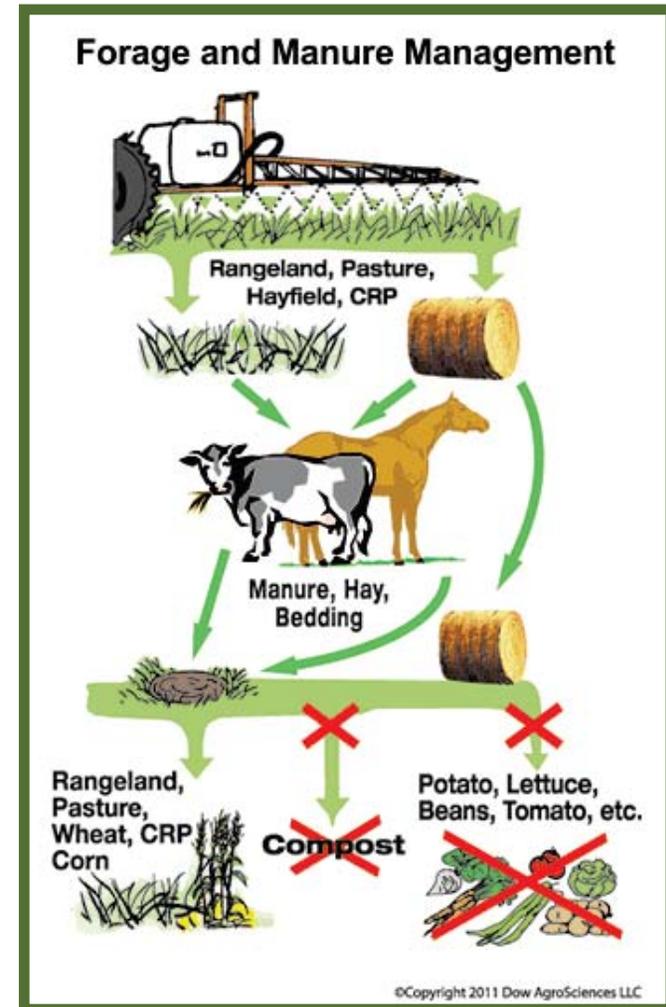
GRAZING RESTRICTIONS



Unless properly managed, broadleaf weeds can become a serious problem in grass pastures. Of greatest concern are perennial and biennial broadleaf weeds. Occasional mowing or grazing helps control certain annual weeds, but perennials can grow back from underground root reserves unless long-term control strategies are implemented.

In general, the use of good cultural practices such as maintaining optimum soil fertility, rotational grazing, and periodic mowing can help keep grass pastures in good condition and more competitive with weeds. There are a number of herbicides that can be safely used on grass pastures to control both annual and perennial broadleaf weeds.

If herbicide is to be used you must read the label carefully to check for grazing, hay harvest or manure management restrictions. Many herbicides have restrictions for lactating dairy animals and removal before slaughter times. The new Dow AgroSciences products also have precautions and restrictions for manure and urine disposal and the selling of hay crops.



LANDSCAPE ESCAPEES

About half of all invasive noxious weeds are escapees from gardens. Read plant descriptions before purchasing new plants for your garden. Beware of any that are described as "aggressive", "free seeding", "easy to grow" or even "ground cover" as they may very easily grow out of control.

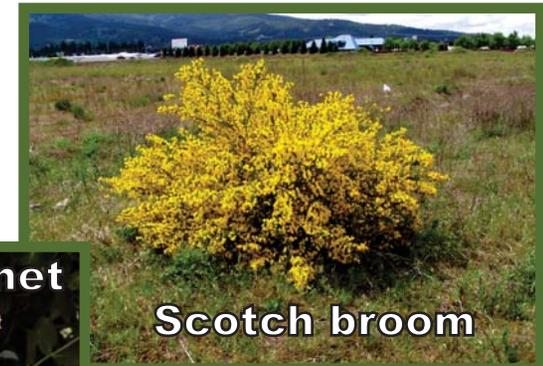
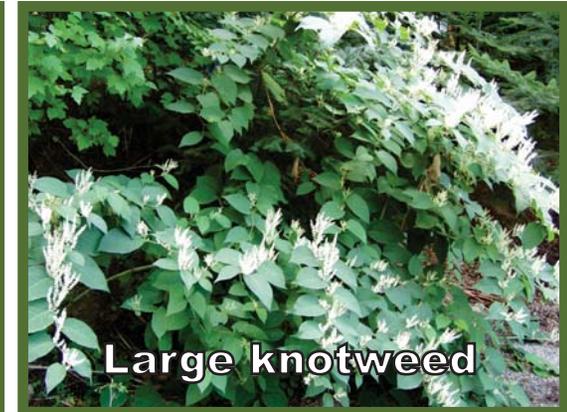
Some escaped plants are only temporary wanderers outside of our care and nurturing, some only occupy niches where nothing else wants to grow. Some become ecological bullies, crowding out native plants, poisoning livestock, and damaging local ecosystems.

Qualities of Common Ornamental Plants:

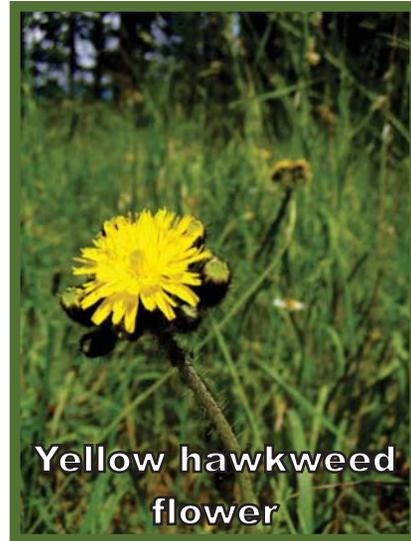
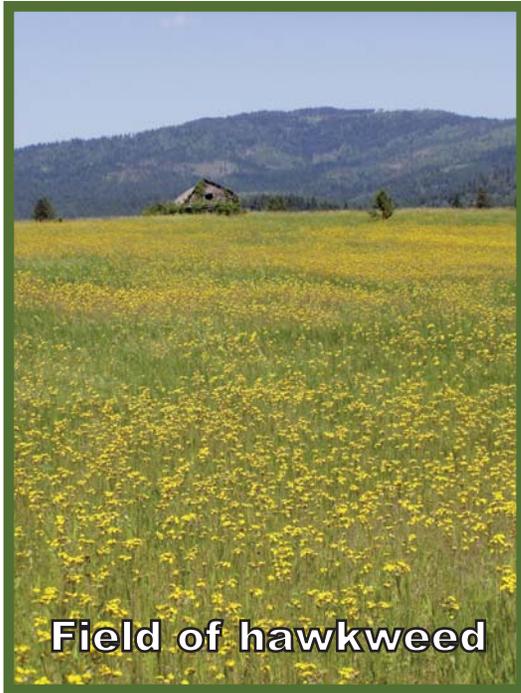
- Establish rapidly
- Grow fast
- Mature quickly
- Abundant flowers
- Adapted to environment
- Free of major insect or disease problems
- Easy to propagate

Characteristics of Noxious Weeds:

- Establish rapidly
- Grow fast
- Mature quickly
- Prolific seed producers
- Adapted or adapt quickly to environment
- No natural predators or diseases to keep populations in check
- Produce abundant propagules



HAWKWEEDS



YELLOW HAWKWEED (*Hieracium caespitosum*,
Hieracium pratense)

ORANGE HAWKWEED (*Hieracium aurantiacum*)

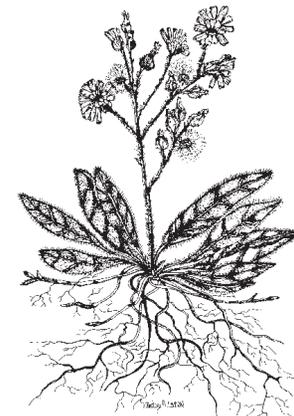
The flowers are yellow or orange, look similar to a hairy dandelion, but are slightly smaller and in clusters. They bloom from late May to mid June with seed set in August.

CONTROL: The control of hawkweeds will depend on a program that includes many management procedures such as fertilizers, herbicides and other techniques that increase the health of desired species.

Non-Chemical:

- Fertilizers can be used to increase competitiveness of perennial grasses and other beneficial plants.
- Annual pulling or digging in the spring may help control small infestations of hawkweed.

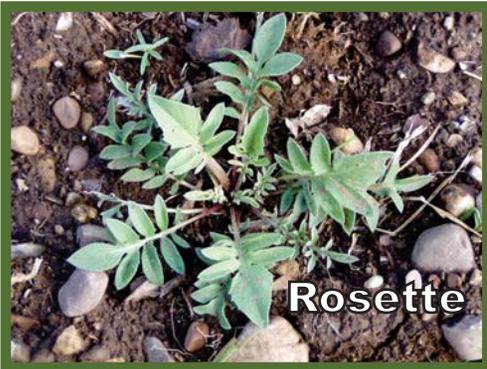
Chemical: Treat with aminopyralid, clopyralid + 2,4 D, aminopyralid + metsulfuron, clopyralid + triclopyr or 2,4-D before bloom. **These products not recommended for home landscapes.**



SPOTTED KNAPWEED



Spotted knapweed flower



Rosette



Root feeding moth

Spotted Knapweed (*Centaurea stoebe*)

WHAT DOES IT LOOK LIKE? Mature plants may be 1 to 3 feet in height. Each flower head has stiff bracts, which are black tipped, giving the flower its "spotted" appearance. Flowers are pink to purple and appear from midsummer to fall.

WHERE DOES IT GROW? This weed is found in open forests, waste areas and roadside ditches. Spotted knapweed readily establishes on any disturbed soil.

WHEN DOES IT BLOOM? Spotted Knapweed blooms from June to October and spreads entirely by seeds. Heads persist on the stiff stems through the winter.

TIMING OF CONTROL METHODS:

- Spring - Dig, Pull, and/or Spray
- Summer - Mow
- Fall - Dig, Pull, and/or Spray

NON-CHEMICAL CONTROL:

- Knapweed does not thrive in well watered and fertilized areas making it one of the easiest weeds to control without using chemicals.
- If possible, digging rosettes will kill the plant.
- Mow throughout the summer to keep the seed heads to a minimum.
- Several insect control agents are actively working on this plant in North Idaho.

CHEMICAL CONTROL: Using herbicides during the rosette stage (spring and fall) is most effective.

RUSH SKELETONWEED



RUSH SKELETONWEED (*Chondrilla juncea*)

WHAT DOES IT LOOK LIKE? Rush skeletonweed is a perennial whose branched stems may be 4 feet tall and appear leafless. The lower 4 to 6 inches of the stems are covered with coarse brown hairs. The dandelion-like rosettes that form in the fall die as the plant ages. When the plant is cut or broken, it oozes a milky white latex sap.

WHERE DOES IT GROW? This weed thrives in well drained, sandy textured or rocky soils, along roadsides, in rangelands, pastures and grain fields.

WHEN DOES IT BLOOM? Small yellow flowers begin in early summer and continue until frost in the fall.

HOW DOES IT SPREAD? Rush skeletonweed spreads primarily by seed, but rosettes can form from lateral roots at varying distances from the parent plant.

HOW DO I CONTROL IT? Skeletonweed is difficult to control. It will be necessary to use a number of different control methods.

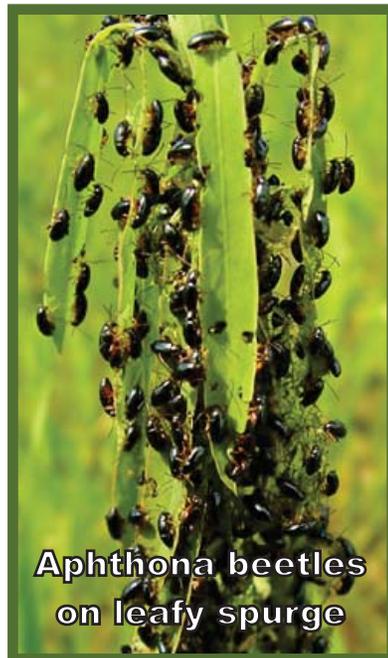
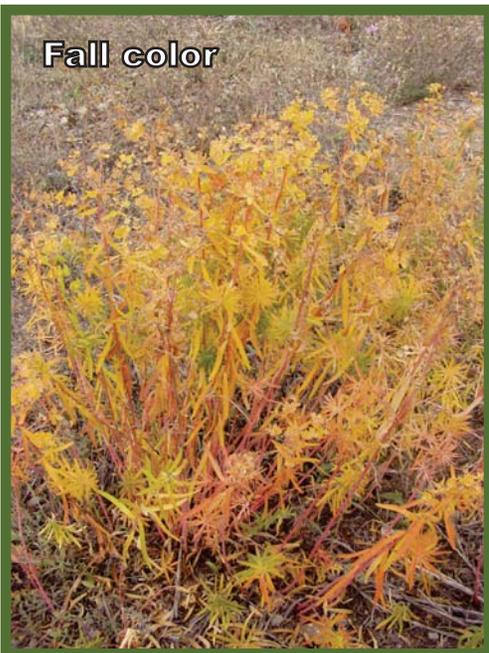
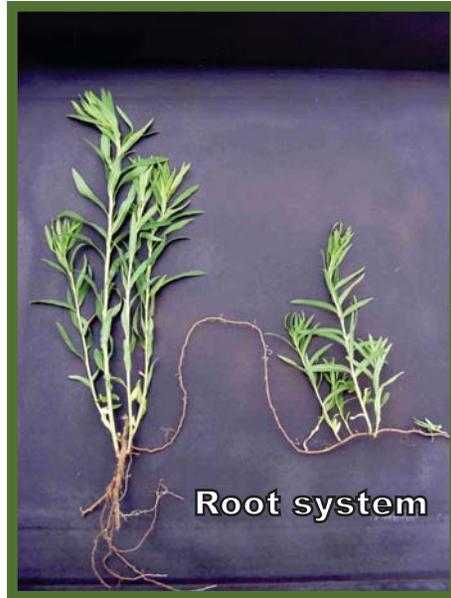
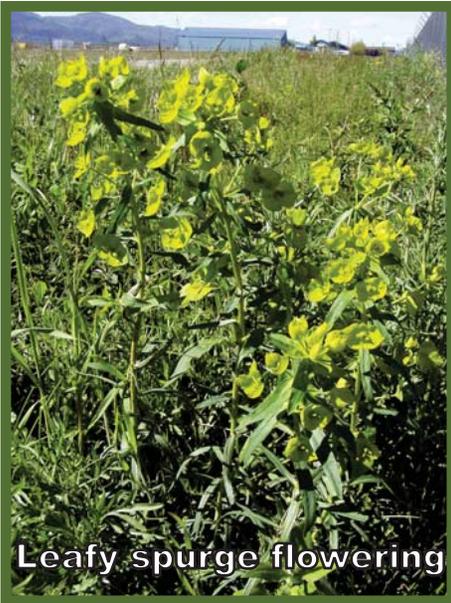
NON-CHEMICAL CONTROL

- Hand pulling or digging can provide effective control if done three times per year for 6 to 10 years.
- Cut flower heads to prevent them from producing seeds.
- Tilling is not recommended since new plants can begin from root pieces.
- Grazing by sheep has been shown to reduce or prevent production of rush skeletonweed rosettes and seeds.
- Biological control agents (a stem/leaf rust, a bud gall mite, and a stem/leaf gall midge) are available, occasionally providing good control of rush skeletonweed.

CHEMICAL CONTROL

Herbicides, if applied consistently each year, can control this weed after 3 to 5 years.

LEAFY SPURGE



LEAFY SPURGE (*Euphorbia esula*) Because of the ability to store nutrients in its root system for several years, leafy spurge is a difficult plant to control.

WHAT DOES IT LOOK LIKE? Leafy spurge is an aggressive perennial weed that can grow to 3 feet tall and up to 20 feet deep. It has bluish-green narrow leaves and showy yellowish green, heart-shaped leaves which surround a small flower. Stems and leaves ooze a milky latex sap when broken. **Caution:** Horses and cattle should not graze the plants; the toxic sap causes blisters or ulcerations.

WHERE DOES IT GROW? It can be found in any type of soil and is commonly found in rangeland, pastures, roadsides, waste areas and wetland sites. Although leafy spurge grows best in unmanaged sites, it will invade cultivated sites as well.

WHEN DOES IT BLOOM? Flowering begins in May and continues into the fall. It's seed capsules open explosively, shooting the seed up to 15 feet from the parent plant or can be carried further by water and wildlife. The seeds can live in the soil for up to 8 years before germination. The roots can grow sideways and spread several feet per year, developing buds which will produce many more plants.

HOW DO I CONTROL IT? Successful management of leafy spurge requires the use of a combination of methods. Constant control is necessary during the growing season.

Non-Chemical Control:

- Fertilization and pasture health are extremely important.
- Mow and pull to prevent seed production. The sap of leafy spurge is toxic; skin and eye protection are needed when handling this plant.
- DO NOT CULTIVATE; new plants can begin from the cut root segments.

Biological: Several insect biological control agents are available for this plant and may be present in North Idaho infestations. Sheep, goats, and hogs will graze leafy spurge. Constant grazing slows the weed's spread and starves out the root system.

September 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 ●	2	3
4	5 Labor Day	6	7	8	9 ●	10
11	12	13	14	15	16 ○	17
18	19	20	21	22	23 ●	24
25	26	27	28	29	30 ●	

October 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8 ●
9	10 Columbus Day	11	12	13	14	15 ○
16	17	18	19	20	21	22 ●
23	24	25	26	27	28	29
30 ●	31					

Information for this guide came from the
Inland Empire Cooperative Weed Management Area Weed Identification and Control Handbook 2014

November 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7 ●	8	9	10	11 Veterans' Day	12
13	14 ○	15	16	17	18	19
20	21 ●	22	23	24 Thanksgiving	25	26
27	28	29 ●	30			

December 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7 ●	8	9	10
11	12	13 ○	14	15	16	17
18	19	20 ●	21	22	23	24
25	26	27	28 ●	29	30	31
Christmas						

Design and Printing:

Ron Harbison and Tracey Kelly of Kootenai County Reprographics Center; Weed Specialists Shelby Talley & Merry Ruth Dingman and Weed Superintendent Bill Hargrave of Kootenai County Noxious Weed Control.

CAUTION WHEN USING HERBICIDES:

READ THE ENTIRE HERBICIDE LABEL CAREFULLY.

Any time herbicides are used, the applicator is legally required to follow the directions and precautions stated on the label. Note what safety equipment is needed; where, when and how the herbicide can be applied; the plants it can be used on; mixing rates and disposal and storage requirements. When using **any** chemical product, **READ THE LABEL!** Idaho follows the Environmental Protection Agency (EPA) approved label because **the label is the law!**

ADJUVANTS AND SURFACTANTS:

It is common to use adjuvant/surfactants mixed with herbicides. These products increase the success of the treatment. They do this by better penetration, increasing coverage, and extra absorption on the plants being sprayed.

CONVERSION TABLE

1 ml	=1 cc	1 oz	= 28.4 grams
1 teaspoon	=5 ml	16 oz	= 1 pound
3 teaspoons	= 1 tablespoon	1 pound	= 454 grams
1 table spoon	= 15 ml	1 kilogram	= 2.2 pounds
2 tablespoons	= 1 oz	2000 pounds	= 1 ton
16 tablespoons	= 1 cup		
1 cup	= 8 oz	Length & Area	
2 cups	= 1 pint	1 mile	= 5,280 feet
2 pints	= 1 quart	1 mile	= 1.6 kilometer
8 pints	= 1 gallon	½ acre	= 21,780 sq ft
1 gallon	= 128 oz	1 acre	= 43,560 sq ft

SMALL QUANTITY DILUTION TABLE

To spray small areas use the following dilution table.

IF Dosage on Label shows:

Use this Amount for each Gallon of Water:

2 pints (1 quart) per acre	¾ ounces
3 pints (1 ½ quart) per acre	1 ¼ ounces
4 pints (2 quarts) per acre	1 ½ ounces
6 pints (3 quarts) per acre	2 ¼ ounces

If there are any questions about the use of an herbicide product, **please call your local weed control agency for guidance.**

CHEMICAL SUGGESTIONS

This noxious weed calendar does not recommend any product or company. All brand names listed are for resource purposes only.

CHEMICAL	NON-CROP LANDS	HOME LANDSCAPES
2, 4-D	Hi-Dep [®] and other generic brands	Hi-Dep, [®] Hi-Yield [®]
2, 4-D + dicamba	Weedmaster [®] Range Star [®] Brash [®]	Weed-B-Gon Weed Killer [®] Bayer All In One Weed Killer [®]
2, 4-D + clopyralid	Curtail [®] Commando [®]	
Aminopyralid	Milestone	
Aminopyralid+ metsulfuron	Opensight [®]	
Aminopyralid+ triclopyr	Capstone [®]	
Picloram	Tordon RTU [®] ; Tordon 22K [®] (restricted use)	
Glyphosate	Roundup [®] and other generic brands	Roundup [®] ; and other generic brands
Clopyralid	Stinger [®] ; Transline [®]	
Dicamba	Banvel [®] ; Vanquish [®]	
Chlorsulfuron	Telar [®]	
Metsulfuron	Escort [®] and other generic brands	
Imazapyr	Arsenal [®] ; Habitat [®] and other generic brands	
Triclopyr	Garlon 3A [®] Garlon 4 [®] and others	Weed-B-Gon Chickweed, Clover & Oxalis [®] ; Ortho Max Poison Ivy/Brush Killer [®] ; Blackberry-Brush Killer [®]
Triclopyr + Clopyralid	Brazen [®] ; Prescott [®]	Confront [®]
Triclopyr + 2, 4-D	Crossbow [®]	