# Fall River County

Get the "INSIDER"

Information

**Custer County** 

## **Hot Springs**

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**Edgemont** 

**Oelrichs** 

Ogalioa Lakota County

Wyomling

# Welcome!!!

from the Fall River County Weed and Pest Board!

South Dakota is known for its friendly, hardworking people. Fall River County is an excellent example of both. All you need to do is spend some time in our communities and you will know what we mean.

Fall River County lies at South Dakota's SW corner. Its south borderline abuts the north borderline of the state of Nebraska, and its west borderline abuts the east borderline of the state of Wyoming. The Fall River County terrain contains a mountainous area in the north-central portion, with rolling hills in the rest of the county. The terrain slopes to the north and east. Discharging from the Angostura Reservoir, the Cheyenne River flows northeasterly through the upper part of the county, departing the county through its north boundary line into Custer County.

Fall River County has a total area of 1,749 square miles  $(4,530 \text{ km}^2)$ , of which 1,740 square miles  $(4,500 \text{ km}^2)$  is land and 9.2 square miles  $(24 \text{ km}^2)$  (0.5%) is water.

The County seat is Hot Springs. There are three school districts in the county, Edgemont, Oelrichs, and Hot Springs.

Read on and learn about the agencies that are here to assist landowners, identify invasive plants and how to manage them and grasses, trees and wildflowers that are common in this area.

# Government Support & Resources

Emergency Services Fire/Ambulance/Police	911
Highway Patrol	605-745-5137
Fall River County Sheriff	605-745-4444
Hot Springs Police Department	605-745-5200
Hot Springs Fire Department	605-745-4333
National Poison Control Center	1-800-222-1222
Fall River County Information	
Auditor	605-745-5130
Fall River County Health Nurse	605-745-5135
Director of Equalization	605-745-5136
Emergency Management	605-745-7562
Extension / 4-H Services	605-745-5133
GIS	605-745-7584
Highway Superintendent	
Register of Deeds	605-745-5139
States Attorney	605-745-3866
Treasurer	605-745-5145
Veterans Service Office	605- 745-5146
Weed & Pest Control	605-745-5047
City of Edgemont	
City Hall	605-662-7422
Mayor's Office	605-662-5207
Post Office	605-662-7571
Public Library	605-662-7712
City of Hot Springs	
Airport Manager	605-745-3555
Chamber of Commerce	605-745-4140
Golf Course	605-745-6400
City Hall /Mayor's Office	605-745-3135
Public Library	605-745-3151
Post Office	605-745-4117
City of Oelrichs	
Post Office	605-535-2464
Other	
Fall River Farm Services Agency (FSA)	605-745-5716
Fall River Conservation District	605-745-5716
Buffalo Gap National Grasslands Office	605-745-4107

### **Fall River Weed and Pest**

#### **Identification of Plants**

It is important to know what is growing on your property and in your community. There are many "Watch Weeds" that are getting close to our county or may be here. EDMaps is a great program to report a plant that you are not sure of. You may also bring a sample in to the office (placed in a plastic bag with as much of the plant as possible, root, stem, leaves, and flower) We will enlist the help of the SDSU Master Gardener program, SDSU Extension Center, and the SD Dept. of Ag. to get proper identification. New Black Hills Forest Service site has great colored pictures and fact sheets. This is the link <a href="https://www.inaturalist.org/guides/14927">https://www.inaturalist.org/guides/14927</a>

# Integrated Weed Management...

The most effective and economical weed control program will utilize all control options appropriate for the infestation. Weed control methods can be varied:

Prevention Intensive cultivation
Burning or flaming Grazing
Mowing or chopping Competitive crops
Herbicides Biological control

The Fall River Weed & Pest office can assist with developing a Management plan that will work for you and your property.

# Prairie Dog-Where Did It Come From?

If you believe you have prairie dogs on your private property that have come off of public lands.... you may qualify for assistance with control.

Call 605-773-5913, Wildlife Damage Program Administration, SD Game, Fish and Parks or log on to <a href="https://gfp.sd.gov/">https://gfp.sd.gov/</a> go to Forms & Permits > Resource management > Prairie Dog Control and enter your information.

Prairie dogs coming from another private landowner? Call the Weed and Pest Office for assistance with complaint forms. Office must have a signed complaint from an adjacent landowner to start the communication process.

# Looking for a Commercial Applicator ......

to help with spraying and /or prairie dog control assistance... Contact the Weed and Pest office for a list.

605-745-5047 709 Jensen HWY – in the South Annex Building.

#### Reimbursement Grants \$

#### Prairie Dog Chemical Control -

reimbursement on receipt purchases for prairie dog control. Receipts from November 1 to October 31, (following year) will be accepted.

#### Fall River Weed Control Assistance.

Will reimburse for herbicide costs. Receipts from the current year will be accepted till Sept. 30. Sponsored by Fall River County Weed and Pest Board.

( All reimbursement % amounts are subject to change for the current year)

# EMPTY PLASTIC PESTICIDE JUGS

**Stop**! It is not a good idea to burn or dump the plastic jugs, let us recycle them.

Prepare the containers by triple rinsing or pressure rinsing immediately after empting them. Remove the caps and labels.

Place in the Collection Area in the Fall River County Weed & Pest Shop Yard, Rathbun RD behind the County Highway Shop on Cascade RD. If you have over 5 jugs ready to go, the County Weed & Pest staff will come to your place, collect the containers, and deposit the jugs at the collection site.

#### CUSTER / FALL RIVER EXTENSION - 605-745-5133- 709 Jensen HWY.

Serves the communities and citizens of Custer / Fall River County providing education and information on a variety of subjects:

#### \*Equipment for landowner use:

- -Hay probe
- -Portable livestock scale

#### \*Resources /kits:

- Private new and existing well water tests
- Livestock water testing
- Soil

\*Master Gardeners provide horticulture support .

## \*RENEW or OBTAIN a Private or Commercial Applicator Liscence.

#### \*The Fall River County 4-H youth program

The South Dakota Extension Office and Rapid City Regional Center, can help us provide expertise in areas such as 4-H/youth development, horticulture, livestock, marketing/farm business management, agronomy (dry land & irrigation), and community innovation/ leadership.

#### FALL RIVER CONSERVATION DISTRICT - 605-745-5716 Ext. 121

The mission of the Fall River County Conservation District is to promote conservation of soil, water, and natural resources for residents and visitors now and in the future.

#### **Tree Sales**

Interested in buying trees for next year? The Fall River Conservation Districts has trees for sale. The Fall River order form can be found at https://www.sdconservation.org/ fallrivercd

#### **No-till Drills for Rent**

Are you looking for a no-till drill to rent? The Fall River Conservation District has a 10' Haybuster No Till drill available.

#### Absinth Wormwood (Wormwoodsage)











A perennial species that also is a prolific seed producer, so plants may re-establish a few years after control. Just 2,4-D can be effective, but two applications (spring and fall) may be required for control. Herbicides such as Milestone, Forefront, may be effective with one application and maybe effective in the spring up to the end of June, plant is less than 6 in. tall, but less effective after early June during abnormally dry springs, apply 2,4-D after tree leaves turn color and sage is still green. There is no bio agent. Manual management- Plant may be dug or pull.

#### Biennial Thustles (Musk, PLumeless, Bull and Scotch)











Scotch

These species generally emerge as rosettes I the fall and early spring and bolt during the second year of growth. Control is most consistent when herbicides are applied at the rosette stage. Milestone may provide some residual control for plants that germinate after the herbicide application. At the rosette state, 2,4-d by be every effective. After bolting occurs, consider using aminopyralid (Milestone or GrazonNext HL) or metsulfuron (Escort or Cimarron). There is bio agent Seed weevils and rosette weevil that can be found on plants but not highly successful. Manual management: Plants can be dug up by cutting at the top of the root crown.

#### **Black Henbane**











An annual or biennial weed that can invade disturber areas in pastures, roadsides, or forested areas. The leaves are coarsely-toothed to shallowly lobed and pubescent. Flower, blooming along the long racemes, are brownish-yellow with a purple center and purple; veins. The plant has a foul odor. Black Henbane is a native of Europe and has been cultivated as an ornamental. Henbane can be toxic to humans and livestock but livestock will generally avoid eating it if other forage is available. It is most common in the Black Hills area.

#### Burdock – common burdock











Biennial weeds with large, wavy-edged leaves are light-colored, woolly on underside; upper surface is darker and smoother. Miscellaneous: Common burdock is often found in fencelines and other areas devoid of permanent vegetation. Can develop a persistent seed bank so plants may appear again within a couple years after control. The burs of common burdock were the inspiration for Velcro. Milestone may provide some residual control for plants that germinate after the herbicide application. At the rosette state, 2,4-d by be every effective. After bolting occurs, consider using aminopyralid (Milestone or GrazonNext HL) or metsulfuron (Escort or Cimarron). Manual management: Plants can be dug up by cutting at the top of the root crown.

#### **Canada Thistle**





#### STATE NOXIOUS WEED







Creeping thistle, also called Canada thistle or Cirsium arvense, has small purple flower heads found in clusters, and the bracts beneath the flower heads do not have spines. This perennial can reach 5 feet tall. Creeping thistle spreads by seed and an extensive root system. Seeds may become viable within 10 days after flowering. Milestone, or ForeFront, Stinger or Transline may be used around some tree species, but follow the label precautions. These herbicides may e applied from mid-June (pre-bud state) to Sept. or early Oct. (fall regrowth while the leaves are mostly green).

#### Chicory











A perennial species that may be invasive in pastures and along roadsides. It has unlobed, pointed leaves clustered at the base of a tough, grooved, and more or less hairy stem and some leaves on the stem. The base leaves resemble those of the dandelion. The flowers are bright sky blue (rarely white or pink) and stay open only on sunny days. Chicory has a milky juice.

#### **Common Mullein**





#### **LOCALLY NOXIOUS WEED**







A biennial species that grows rosettes the first year and bolt during the second year of growth. Apply herbicides at the rosette stage during periods of active growth. For common mullein, use a recommended surfactant to help the herbicide penetrate the extremely heary Illieaf surface. Manual management: Plants can be dug up by cutting at the top of the root crown. Breaking of the spear may only cause two or more spears to regrow.

#### **Common Tansy**











A perennial species that seems to be particularly invasive in or near low areas or near waterways. It mainly spreads by seeds, but will also spread by creeping roots. Flowers are bright yellow daisy-like discs and blooms from July through October, resembles a yellow button. Metsulforuon products (e.g. Escort) are commonly used for control.

#### **Eurasian Common Reed (Phragmites)**











A perennial grass species that looks similar to the native common reed, which is not a local noxious weed species. The fluffy plume on European common reed may be denser than the native common reed. European Common red stems may be rigid, rough, dull, and slightly ribbed whereas native common reed stems are smooth and shiny. Both reed species may be found in sunny wetland habitats including marshes, streams or lake shores, ponds, wet meadows, and road ditches or in areas where cattails may be found. Aquatic glyphosate has been very effective in some locations.

#### Field Bindweed











Field bindweed is a perennial species that develops an extensive root system making it difficult to control. Management programs may require several years. Apply herbicides at the beginning of flowering or to regrowth in the fall.

#### Flowering Rush











Flowering rush can spread aggressively in shallow-water areas, inhabiting access, crowding out native vegetation, and changing aquatic habitats for fish and other organisms. Vehicles or wildlife can spread seed and root fragments Aquatic glyphosate has been effective in some locations.

#### **Giant Knotweed**







As the name suggests, giant knotweed is a large plant that can get 6 to 16 ft. tall with heart-shaped leaves 6-16 inches long. It has a unique bamboo-like hollow stem. It often grows near streams, so herbicide options may be limited. Aquatic glyphosate is the only herbicide registered for knotweed control. Studies in other states have indicated that foliar applications of imazapyr (e.g. Habitat) or triclopyr (e.g. Vastlan) may also be effective.

#### **Hoary Cress**





#### STATE NOXIOUS WEED







A perennial species that can develop an extensive root system. Hoary cress may be challenging to control because it flowers in early spring (late April-early May, which is the best time for herbicide applications. SDSU trails indicate metsulfuron products (e.g. Escort) are the most effective. Growth regulator herbicides such as Tordon or 2,4-D are ineffective. Hoary cress may be found in low areas, such as gullies, ditches, dry lakebeds, or near lakes or streams.

#### Houndstongue











Houndstongue is a biennial species that grows rosettes the first year and bolt during the second year of growth. Apply herbicides at the rosette stage during periods of active growth.

#### **Knapweed Species (Spotted and Diffuse)**









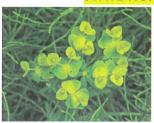


Spotted and diffuse knapweeds are biennial or short-lived perennial species and are generally easier to control. Apply herbicides to spotted or diffuse knapweed in the spring or fall while they are in the rosette to early-bolting growth stage. Several biocontrol agents have been released for the knapweed species. The knapweed flower or seed weevil has been successful, especially on spotted knapweed.

#### **Leafy Spurge**



#### STATE NOXIUS WEED







Leafy spurge is a perennial species that develops extensive root systems making it very difficult to control. Apply herbicides in the spring (early June) at flowering or to regrowth in the fall (September-October or while the white sap is still flowing). For large infestations, consider introducing biocontrol agents such as leafy spurge flea beetles.

#### Oxeye Daisy











Oxeye daisy may be found throughout South Dakota. A perennial, reproducing by seed and underground rootstocks. It mostly infests open meadows and other grassy areas. Grazing can increase oxeye daisy densities, but intensive grazing can result in some control due to trampling plants and some feeding Thick grass can greatly suppress oxeye daisy.

#### Perennial sowthistle





#### **STATE NOXIUS WEED**







Perennial sowthistle produces and underground creeping rootstock and numerous sticky hears on its flower head bracts and flower stalks. The midrib is smooth. It prefers moist soils and is a heavy nitrogen user.

#### **Poison Hemlock**









Poison hemlock is a biennial species that grows only foliage the first year and bolts and flowers the second year. It may be confused with wild carrot, but poison hemlock grows taller, has purple blotches on its stems, and will have no hears whereas wild carrot may be slightly hairy. Poison hemlock is toxic to livestock and humans. It may be found along roadsides, stream banks, waste areas, pasture edges, and occasionally in no-till fields. Control may require a multiple year effort. Escort may be the most effective herbicide option.

#### **Puncturevine**









Puncturevine is an annual weed species, but is problematic because it produces large spiny burs that can puncture vehicle tires. It may be found on roadsides or field roads where the soil is dry and compacted. It is very susceptible to 2,4-D, but new seedlings may emerge after application which can make this weed difficult to control.

#### **Purple Loosestrife**





#### **STATE NOXIOUS WEED**







Purple loosestrife is often found growing on the edge of lakes or streams, so be sure to use herbicide products hat are registered for use on or near water. The best time to apply herbicides is at the beginning of flowering (late June to early July). Alternative control options may include repeated tillage, burning, or biocontrol insects. The Galerucella leaf feeding beetles have been effective biocontrol insects.

#### Saltcedar (Tamarix)











Saltcedar is a very persistent tree species as it can reproduce by seed, roots, or stem fragments. It is a prolific seed producer and can spread rapidly. It produces pink, red, or purple flowers in mid-summer and the cedar-like leaves will turn yellow in the fall and fall off in the winter. It can be found along the water line on the edges of streams, lakes, ponds, or dugouts. Habitat may be applied to the foliage whereas triclopyr products, such as Vastlan, may be applied to the trunk or stems in winter.

#### St. Johnswort











St. Johnswort spreads by seed and creeping roots. Repeated tillage may suppress populations and repeated mowing may help reduce seed spread. Biocontrol insects have been effective for large infestations in western states.

#### **Sulfur Cinquefoil**











Sulfur cinquelfoil is a perennial weed that can become invasive in grasslands, particularly in western South Dakota. A number of follow-up applications may be needed 2-3 years after initial applications.

#### Toadflax (Yellow and Dalmatian)













Both spread by seeds and creeping roots. Dalmatian toadflax is generally more sensitive to herbicides than yellow toadflax. Yellow toadflax control requires high herbicide rates and several years of application which can become very costly. Biocontrol insects have been effective on large Dalmatian toadflax infestation, but are not effective on yellow toadflax.

#### White Horehound











Was introduced as an ornamental. It is hardy and spread by seed. It likes open and disturbed areas of range, pasture and lawns.

#### **Weeds - More Obnoxious Plants**

#### **Buffalo Burs**







A native – Annual dense, golden-yellow prickles cover the stems and each yellow, star-like flower on this leafy weed. The prickles on this highly toxic plant help to discourage grazing by livestock. Before burrs have formed treatment with Dicamba and 2,4-D or Highnoon.

#### Bur Buttercup







Bur buttercup is a winter annual. It emerges, flowers and sets seed early in the spring when temperatures reach around 45-50 degrees. It is highly toxic to cattle, sheep and horses and can affect humans by irritating skin and causing blisters.

#### **Myrtle Spurge**







Myrtle spurge is a succulent perennial with a penetrating root system. The plant sap is caustic and may cause rashes, swelling and blistering on skin. Manual removal is possible collecting as much of the plant as possible wearing gloves and long sleeves and mask. 2,4-D + Dicamba can be effective, but two applications may be required for control.

#### **Poison Ivy**







Poison ivy is a woody perennial, reproducing by see and underground rootstocks. All parts of the plant contain anoily, resinour substance that may cause dermatitis within a few hours of contact.

#### **Curly Cup Gumweed**







Curly cup gumweed is a native biennial or short-lived perennial . Is considered undesirable as forage and is unpalatable to livestock. Treat from May to early June, 2,4-D ester \$L and Metsulfuron — Escort may be more effective for after mid June but prior to flowering.

#### **Baby's Breath**







A perennial with widely branching stems to 3 ft. in height. Was an ornamental species that has now escaped cultivation to pastures. Flowering occurs from June to August. Manual removal is possible collecting before plant has flowers. 2,4-D + Escort can be effective, but new seedling may emerge after application

#### Common Mallow







Annual, winter annual or biennial with stems generally low spreading, non-native.

#### Common Purslane





Common purslane, oleracea, is a member of the Portulacaceae family with more than 120 different species found in that family. It is a weedy summer annual species that is abundant throughout the world, invading vegetable gardens, bare areas, low-maintenance lawns, ornamental plantings, and agricultural areas.

#### **Deathcamas**







Deathcamas is a perennial, reproducing by seed and bulbs found in pastures, where it is usualy the first plant to resume growth. All plant parts contain an alkaloid and are poisonous. Bulbs are often mistaken for wild onion bulbs.

#### **Prostrate Knotweed**





Prostrate knotweed, is a low-growing summer annual/occasional perennial weed. Found in all 50 states, prostrate knotweed is a very widespread and invasive weed that will overtake and destroy your turf and release toxins into your soil if not properly managed.

#### **GRASSES- Natives and Invasive**

#### **Buffalo Grass**

**Native** 





A fine-textured grayish-green grass. The leaves are rolled in the bud, there are no auricles, and the ligule is a fringe of hairs. The leaf blades are curled, or drooping, and pointed. Buffalograss is a low-growing grass and spreads by stolons.

#### Ventenata

Invasive







V. dubia stems are slim, upright to erect, and 4 to 18 inches tall, though they can grow up to 29.5 inches (75 cm) tall. Stems can be covered in small hairs or glabrous (smooth and hairless) while the nodes are glabrous. The nodes are exposed and in late spring are purple-black.

#### Bluestem - Little and Big





Bluestem grasses (Andropogon gerardi) are warm season grasses. They are very leafy at the base with some leaves on the stem. They are commonly known as "Turkey Foot Grass" because the seed heads branch out resembling the foot of a turkey. They thrive in warm temperatures and moderate amounts of rain.

#### Sandbur

**Invasive** 





The easiest way to identify sandbur is after flowering, by looking at its inflorescence which is a terminal spike 1 to 3 inches long containing 6 to 20 spiny hairy burs

#### **Western Wheatgrass**

The primary uses of Western Wheatgrass have been in erosion control, where it is used to seed waterways, terraces, and streambanks, and also range revegetation. Its vigorous, sod-forming habits, plus its silt tolerance make it valuable for these purposes.



#### **Foxtail Barley**

Invasive





It is one of the few weeds that are native to the region and can be found growing in all types of soil. It can go by other names including: wild barley, skunk-tail grass and tickle grass.

#### **Switchgrass**





Switchgrass can grow to more than 10 ft tall and well-managed stands may last for decades. Once switchgrass is established, its bunch-type growth habit makes it very competitive with weeds. However, it is not considered to be invasive.

**Bulbous Bluegrass** 

Invasive





This weedy, tufted, short-lived, cool-season perennial with bulbous-based stems. This grasslands invader is a threat as it is capable of spreading rapidly. It is worthless as forage, although its bublets are probably eaten by small birds and mammals

#### Prairie Cordgrass





Prairie cordgrass is a warm-season perennial grass. It is native to the tall grass prairies of most of the United States. It has an average height of 3 to 8. Some species are grown as garden ornamentals, cultivated as turf for lawns and recreational areas, or used as cover plants for erosion control. feet

#### Cheatgrass

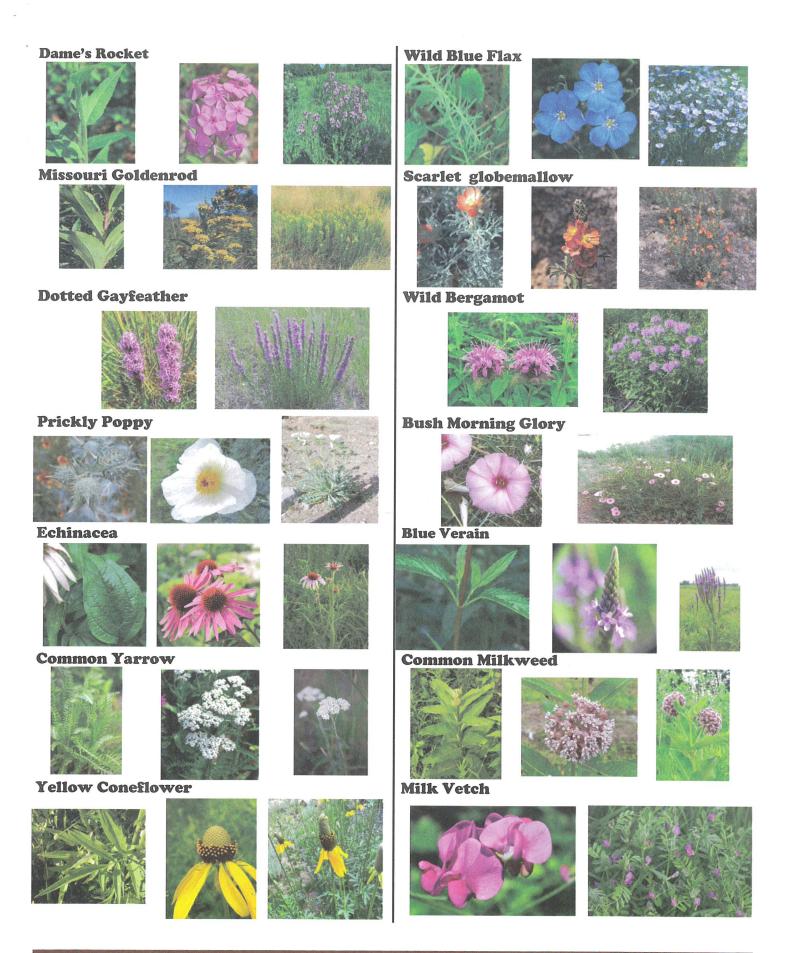
Invasive





Cheatgrass is a highly invasive species. It greens up and sets seed earlier than most native species, giving it an advantage over slower-growing native species. By using up soil moisture in the spring, it can prevent the germination of native plants.

#### **Wildflowers - Mostly Common Seen**



#### TREES - Natives and Survivors

#### Ponderosa Pine







Ponderosa Pines are easily recognized by their tall, straight, thick trunks, clad in scaled, rusty-orange bark that has split into big plates. One can easily identify some trees by smelling their bark. Ponderosa Pine bark smells like vanilla or butterscotch.

#### **Black Hills Spruce**







Black Hills spruce grows 50-70' tall in cultivation with a relatively narrow, cone-shaped crown. The blue-green needles (to 3/4") are on small woody pegs and have sharp tips. Needles are pungently aromatic when crushed. Needles have a glaucous (white waxy coating) bloom.

#### Cottonwood







Cottonwoods can be identified by their blocky, ashy-gray bark, which has extremely thick, flat-topped furrowed ridges on mature trees. The leaves of the eastern cottonwood are broad and slightly triangular. The base of each leaf is coarsely toothed.

#### Lilac







common lilac is distinctive in having smooth, hairless, dark heartshaped leaves which are arranged in opposite pairs. Fragrant flowers usually purple and sometimes white, Hardy and adaptable. Suckers to form colony.

#### Caragana







Siberian Peashrub is a shrub or small tree that was commonly planted as a windbreak, for wildlife, and as an ornamental in landscapes. Produces yellow flowers in spring and non-edile seedpods. Fine-leafed and drought tolerant, extremely hardy and long lived.

#### **Lodgepole Pine**





A handsome native pine with yellowish green to dark green needles, twisted in bundles of two. It has a long, slender, pole-like trunk with a short, narrow, cone shaped crown. The flaky, thin bark is orange brown to grey or black.

#### Boxelder







Box elder trees are usually asymmetrical and crooked. As a pioneer-species, they are fast-growing and not long-lived, and can drop branches in high-wind events when large. Box elder seed bearing flowers have no petals and are reduced to simple pistils.

#### Honey locust







The trees are very hardy and are often used in parking lot islands and along side walks. The open canopy and small leaves will not shade out turf grasses or other landscape plants. Wildlife Honey locust is used extensively by wildlife.

#### **Russian Olive**







Russian olive is a deciduous shrub in the oleander family that is native to Asia. It is a large thorny shrub or small tree, that has a rounded form but can get leggy with a loose and irregular form. It can grow up to 30 feet tall. Ornamental but quickly spread over a large area due to an aggressive root system, fast growth rate and spread of the seeds by birds.







Not only are crabapples trees beautiful, they're also an important early source of pollen for bees and a source of food for birds that overwinter here in Iowa. Crabapples are also an excellent option for cross-pollinating other apple trees in the area.

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#### South Dakota Aquatic Nuisance Species

Zebra & Quagga Mussels Common Carp Didymosphenia Geminata **New Zealand Mud Snail** Rusty Crayfish **Brittle Naiad** <u>փոթություրինանինն արևարկան կանական իրականին արև իրա և </u> **Bighead Carps Grass Carps Curly Pondweed** Silver Carps Black Carps Eurasian Water Milfoil CLEAN Drain DRY All plants, animals, and mud from All water by removing plugs, Interior compartments and bulge the boat, trailer, and gear. opening valves, and lowering area with a sponge or towel. motors.

Anytime you believe you have found a new AIS introduction, please notify GFP immediately. Every boat operator should inspect their boat for attached mud, vegetation or animals, drain all water from the boat and motor, and dry all compartments before and after each launch. When possible, operators should powerwash their boat and allow it to dry between trips

#### Fall River Weed and Pest

### **Calibration of Sprayers**

<b>Boom and Boom-Less</b>	spraver	Calibration	Directions:
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		KNO	V how much y	ou are USING!
Boon	n and Boom-Le	ess sprayer Calib	ration Direction	ns:
	rayer with <b>CLEAN</b> v			
1.	Run your spraye	r at your selected ope	rating pressure "wi	th your booms or handgun turned on"
2.	Make sure all no	zzles are spraying uni	formly <b>, MEASURE t</b>	he SWATH WIDTH in "FEET of SPRAYED AREA" and write
	it down:	feet width of spra	/ed area <b>.(SW)</b>	
3.	Collect the spray	volume from each No	ozzle(s) and measur	e the "EXACT AMOUNT COLLECTED IN 1(ONE) MINUTE".
	Record the amou	unt caught in gallons p	er minute <b>(GPM</b> ) a	nd write that down:
	gal	<u>lons</u> caught in 1 minu	te <b>(GPM)</b> (If you wro	ote the amount down in ounces caught then divide by 128
	to get gallons).			
4.	If you do not ha	ve a speedometer D	etermine the spray	er speed in miles per hour (MPH) over a 200 foot
	distance. Mainta	ain the desired speed	and measure in "se	conds" the time it takes the sprayer to travel the 200 ft.
	distance (do this	several times to get a	n average in your s	peed and to get used to a certain speed). Write this time
	down in seconds	to travelse	econds to travel 200	) ft.
5.	You determine y	our miles per hour by	taking 200FT x 0.6	82 =, then divide by the seconds to
	travel the 200 ft	into that number	miles	per hour traveling (MPH).
6.	You determine y	our gallons per acre	applying by doing t	he following:
	GPA (gallons per	acre) =		
	<b>GPM</b> (gallons pe	r minute) X 495(const	ant used)	
		er hour) X <b>SW</b> (swath v		
		x 495=		
	( MPH	x SW	) =	(b)
	(2)	divided by (b)	_	Gallons per Acre applying.

#### FIELD RECORDS - YOU NEED TO HAVE THEM!

There are many different types and designs for record application books or note taking. They are only a record and not a legal document. You need these 11 +points:

1.	Property Owner	Name:			Address:	
2.	Applicator's Name and Certification #	Name:			#:	
3.	Application Date:	Month:	Day:	Year:	Time: Start: End:	
4.	Weed(s) or Pest to be controlled:					
5.	Brand / Product Name /			EPA#	Rate of m per Acre	ix: /
	Brand / Product Name /			EPA#	Rate of M per Acre	ix /
6.	Field / pasture Location:					
7.	While making application- Temperature	Start:			End:	
8.	<ul> <li>Wind Speed</li> </ul>	Start:			End:	
9.	- Wind Direction	Start:			End:	
10.	Total Acre Treated :					
11.	Total amount of product applied:					

Notes:

#### **Fall River Weed and Pest**

### But I Only Want to mix a Little Bit... Make a BATCH MIX .....

**BATCH MIXING** for a 1 Gallon Hand Held Sprayers and Back Packs.

**Step 1**: Get a 1-gallon container with a lid that seals.

**Step 2**: Fill container ½ to ½ full of water.

Step 3: Measure your one acre worth of product (read the label for this amount) and put into the 1-gallon container.

**Step 4:** Repeat the one acre worth for any additional products (read the label for this amount) and add the surfactant (read the label for this amount). All being added into the 1-gallon container.

**Step 5**: Finish filling the 1-gallon container with water up to the 1 gallon mark.

Now you have 128 ounces of **Batch Mix** or <u>one acre of herbicide mix</u> in the <u>1-gallon container</u>. You will need <u>to add 2.5 ounces</u> of **Batch Mix** to each <u>1 gallon of water In your smaller sprayer</u>.

Example: If you have a 3 gallon backpack or handheld, take the 2.5 ounces of **Batch Mix** X 3. That equals 7.5 ounces of **Batch Mix** per full load in the three gallon sprayer.

**Label** your **Batch Mix** so you know exactly what is in this container for the next time you want to use just a little bit.

**Notes** 

Fall River Weed and Pest 709 Jensen Hwy, Suite C Hot Springs, SD 57747 PRESORTED STANDARD US PSTAGE

**PAID** 

RAPID CITY, SD PERMIT NO. 618

## NOTICE OF RESPONSIBILITY TO CONTROL NOXIOUS WEEDS AND DECLARED PESTS

NOTICE IS HEREBY GIVEN THIS pursuant to SDCL 38-22 as amended to all owners, occupants, agents and public officials in charge of lands in Fall River County, South Dakota, that they are responsible for the suppression, control, and eradication of noxious weeds and declared pest infestations that may exist on such lands.

Chemical, biological, and/or cultural control methods used for the suppression, control and eradication of noxious weed and declared pest infestations shall be those approved for such purposes by the Fall River County Weed and Pest Supervisor or the South Dakota State University Experiment Station.

Upon failure to observe this notice, the county weed and pest board is required to proceed pursuant to the law and have the noxious weeds or declared pests destroyed by such methods as they may find necessary, the expense of which shall constitute a lien and be entered as a tax against the land, and be collected as other real estate taxes are collected, or by other means as provided by law.

Plants and animals designated as being noxious weeds and declared pests in the state of South Dakota are Leafy spurge, Salt cedar, Perennial Sow thistle, Absinth wormwood, Hoary cress, Canada thistle, Purple loosestrife, Prairie dogs and Gypsy moth.

In addition, Dalmation toadflax, Scotch thistle, Houndstongue, Musk and Plumeless thistle, Bull thistle and Common mullein, have been approved by the South Dakota Weed and Pest Control Commission as locally noxious weeds and are subject to the same suppression, control, and eradication requirements as the before mentioned plants and animals.

NOTICE IS HEREBY GIVEN that upon establishing probable cause to believe a noxious weed or declared pest infestation exists upon any property in Fall River County, a representative of the Fall River County Weed and Pest Board will enter upon said property for the purpose of inspecting and confirming that such infestation actually exists.