



Ada County

Noxious Weed Guide

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Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.

Glossary of Terms

Alternate – leaves that are arranged singly up the stem, not opposite each other

Allelopathic – chemical compounds (toxins) released by a plant to suppress the growth of nearby, competing plants

Annual – plant that germinates flowers, seeds, and dies during one growing season

Auricle – lobelike structure at the collar of a grass leaf

Awn – slender bristle at the tip of grass seed structures

Axil – the angle formed between a leaf and a stem

Basal – at the base of a plant or plant part

Biennial – plant that germinates in one growing season, then flowers, seeds, and dies during the second

Bract – leaflike structure at the base of flowers or leaves

Calyx – the entire flower leaves together, normally green in color

Clasping leaves – leaves that appear to wrap the leaf base around the stem

Collar – in grasses, the point where the leaf leaves the stem, resembling a shirt collar

Compound leaves – leaves with two or more distinct leaflets

Crown – the structure formed where leaves, stems, and roots grow together

Disk flower – tiny tubular flowers in the central portion of the flower head of certain composite plants such as the daisy

Dissected – deeply and repeatedly divided into smaller parts

Elliptic – narrowly oval, broadest at the middle and narrower at the two ends

Entire – not toothed or otherwise cut

Glumes – the two bracts surrounding a grass spikelet

Head – a group of flowers borne tightly together

Inflorescence – a group or cluster of flowers arranged on the stem

Irregular flower – a flower with petals that are not uniform in shape, but usually are grouped to form upper and lower “lips”

Lanceolate – lance-shaped; much longer than wide

Leaflets – leaflike structures within a compound leaf

Lineria – long, narrow, and slender

Lobed – leaves having cuts into the leaf edge; deeper than toothed but not quite compound

Margin – the edge of a leaf

Midrib – the center and usually the most prominent vein on a leaf

Noding – a flower that is not pointed upward but bent downward or sideways to the stem

Opposite – leaves situated directly across the stem from each other

Ovate – egg-shaped in outline

Palmate – lobed or divided from a common point, like the fingers of a hand

Panicle – a much-branched inflorescence

Perennial – a plant that lives for more than two growing seasons

Petiole – a leaf stalk

Pinnate – with two rows of leaflets like a feather

Plume – a hairlike or featherlike structure, often on a seed

Ray flower – a straplike flower at the edge of a flower head of certain composite plants, such as the daisy; each ray flower resembles a single petal

Rhizome – a creeping, underground stem

Rosette – a circular, normally basal, clump of leaves

Sheath – the extension of leaf tissue surrounding a stem

Simple leaf – one with a blade all in one piece

Spike – a narrow, non-spreading inflorescence

Spikelet – floral structures in a grass

Spur – a hollow appendage on a flower

Taproot – a thick, central root with minimal branching

Whorled – three or more similar structures arranged as spokes on a wheel





Black Henbane



FLOWERING MONTHS: May through August

ABOUT

Black henbane, a native European or Mediterranean plant, was introduced to the United States as an ornamental plant. It grows as an annual or biennial, reaching up to three feet tall. The coarsely-toothed foliage has a strong unpleasant odor. Black henbane contains toxins and alkaloids which have caused livestock poisonings, and the plant is considered toxic to humans. Its flowers grow in a funnel-shape and are yellow or off-white with deep purple centers. Its seeds grow in rows of pineapple-shaped fruit, about an inch long, which appear in early fall. Within each capsule are hundreds of small dark-colored seeds. Black henbane grows along roadsides, in fields and in disturbed areas. It has spread throughout the United States and is a common weed of pastures or fencerows.

CONTROL METHODS

Manual Control: On small infestations, hand pulling or digging can be an effective manual control if the taproot is removed. Plants with mature fruit should be fully contained in a plastic bag to prevent further seed dispersal. Wear gloves and protective clothing when handling the plants to prevent skin irritation. Monitor the area for new seedlings at least four years after you pull the plant. Larger infestations of Black henbane require chemical control methods to fully eradicate the noxious weed.

Cultural Control: Maintain healthy competitive vegetation cover.

Chemical Control: A variety of products work to control Black henbane. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	May through the end of July
Picloram	September through October
Dicamba	April through May
Metsulfuron + Chlorsulfuron	March through May
Metsulfuron + dicamba + 2, 4-D	March through July

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Bohemian Knotweed



FLOWERING MONTHS: June through August

ABOUT

Bohemian knotweed is a hybrid between Giant and Japanese Knotweed, and shares characteristics of both parent species. Plants are typically 6 to 10 feet tall, with reddish-brown stems. Leaves are usually heart-shaped closer to the base of the plant, and become more spade-shaped near the branch ends. One key identifying feature is that there are short, broad-based hairs on the underside of the leaf along the midvein. Flowers are small and white, and grow in plume-like clusters near the end of the stems. Once established, Bohemian Knotweed spreads quickly. The plant grows in disturbed moist sites and in wetland or riparian areas.

CONTROL METHODS

Manual or Cultural Control: Neither manual control nor cultural control is effective against Bohemian Knotweed.

Chemical Control: A variety of products work to control Bohemian Knotweed. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr	March through mid-October
Imazapyr	July through September
Glyphosate	March through mid-October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Brazilian Elodea



FLOWERING MONTHS: Spring and Fall

ABOUT

Brazilian elodea is a submerged aquatic perennial that was first introduced from South America originally for aquarium use. It's a bushy plant with bright green leaves that are arranged in fours around the plant stem. It grows three-petaled white flowers that float on the water surface. It reproduces by fragmentation and can be dispersed by boats, animals or water currents. It grows in canals, rivers, ponds, lakes and reservoirs and grows dense subsurface mats, clogging waterways from sunlight and native harming aquatic life.

CONTROL METHODS

Manual Control: Manual controls to eradicate Brazilian elodea are not effective, and pose the risk of further contaminating waterways since this plant reproduces through plant fragmentation. With the risks of chemical application in aquatic areas, prevention is the best way to keep Brazilian elodea out of Ada County waters. Don't inadvertently spread Brazilian elodea.

Chemical Control: A variety of products work to control Brazilian elodea. See the timeline below for most effective herbicide use.

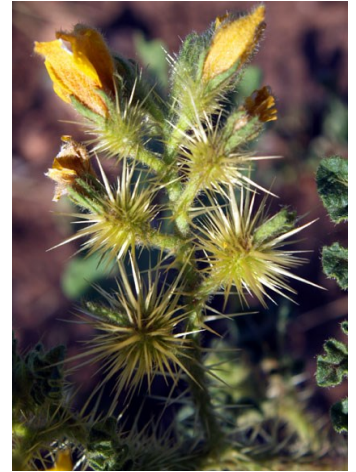
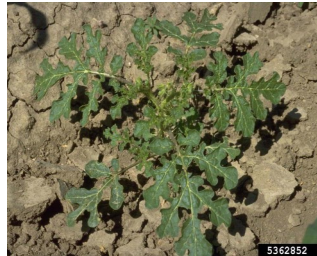
HERBICIDE TIMELINE:

Triclopyr A.S.	Mid-march through November
Endothall dipotassium salt	April through September
Natique	June through August
Diquat	April through October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Buffalobur



FLOWERING MONTHS: June through August

ABOUT

Buffalobur is a contaminant of birdseed, and spreads by seed dispersed either by the wind or by animals or equipment. It's an annual plant with yellow spines and star-shaped hairs. The plant grows up to 2 feet tall and has an extensive taproot. The flowers are bright yellow, typically 1-inch across with 5 petals. Buffalobur grows in pastures, dry rangeland, roadsides, disturbed areas and under bird feeders and around livestock corrals.

CONTROL METHODS

Manual Control: Small infestations or scattered plants can be killed effectively by hoeing or hand-pulling (wear gloves). You can dig up the plant, but make sure you get two inches below the crown. Cultivate before blossoms appear. You can also mow the plant to prevent seed production.

Cultural Control: Buffalobur is an annual plant, so do your best to prevent seed production until the seed reserve in the soil is exhausted. The weed's seeds can remain viable for several years. Buffalobur likes to take root in bare ground, so plant competitive vegetation in any bare areas.

Chemical Control: A variety of products work to control Buffalobur. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Dicamba	April through the end of June
Picloriam + 2, 4-D	April through the end of June
Metsulfuron + Dicamba + 2, 4-D	April through the end of August
2, 4-D	April through September

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Canada Thistle



FLOWERING MONTHS: July and August

ABOUT

Canada thistle grows in colonies from deep and extensive horizontal roots. Stems are from 1 to 4 feet tall. Leaves grow with serrated edges common to the thistle plant. Flowers are typically purple, but sometimes grow white, in heads from 1/2 to 3/4 an inch in diameter. Bracts (the bulbous growth beneath the flower) are spineless. Early spring growth appears as weedy rosettes with spiny tipped, wavy leaves.

CONTROL METHODS

Manual Control: Mowing is not effective enough a control measure. Combine with herbicide use.

Cultural Control: Grow competitive grasses to stifle out infestations, but it's not 100-percent effective. Combine with an aggressive herbicide treatment plan.

Chemical Control: A variety of products work to control Canada Thistle. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr + Clopyralid	March through the end of August
Clopyralid	March through the end of August
Aminopyralid	March through June and September through October
Picloram	March through October
Chlorsulfuron	June through October
Glyphosate	May through the end of July
Dicamba	March through October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Dalmatian Toadflax



FLOWERING MONTHS: July through September

ABOUT

Dalmatian toadflax is a perennial plant with bright yellow flowers that look like a snapdragon. The stems grow up to 4 feet tall with creeping roots. One plant can produce nearly 500,000 seeds that can live in soil for up to 10 years. Dalmatian toadflax grows in arid rangelands, pastures and roadsides.

CONTROL METHODS

Manual Control: Intensive cultivation efforts can effectively control Dalmatian Toadflax. It requires a two-year effort with approximately 10 cultivations in the first year and between four and five cultivations in the second year. Start in June, and repeat to ensure there is never more than ten days of green growth.

Cultural Control: Plant and manage desirable winter annuals and perennials to compete with young Dalmatian Toadflax infestations.

Chemical Control: A variety of products work to control Dalmatian Toadflax. See the timeline below for the most effective herbicide use.

TIMELINE:

Chlorsulfuron	June through mid-July
Picloram + Telar	June through mid-July
Picloram	September through the end of October
Dicamba	April through the end of July

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Diffuse Knapweed



FLOWERING MONTHS: July through September

ABOUT

Diffuse knapweed is an annual or short-lived perennial that grows one to two feet tall. The plant stems are rough to the touch, and numerous narrow leaves grow sporadically from the stems. Flowers bloom white, rose or purple. The bract (the bulbous growth beneath the flower) under the flower is divided like the teeth of a comb, tipped with a slender spine. Diffuse knapweed infests roadsides, waste areas and dry rangeland. The plant is highly competitive and excludes many desirable species from an area. A single plant can produce up to 18,000 seeds. Diffuse knapweed has allelopathic characteristics, meaning it produces a chemical that can kill nearby competing vegetation.



CONTROL METHODS

Manual Control: Both mowing and hand-pulling are effective control measures.

Cultural Control: Grow and fertilize competitive grasses to help stifle out infestations.

Chemical Control: A variety of products work to control Diffuse knapweed. See the timeline below for the most effective herbicide use.

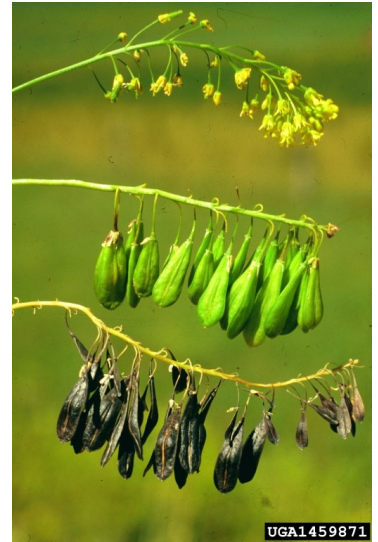
HERBICIDE TIMELINE:

Triclopyr + Clopyralid	Mid-March through August and September through November
Picloram	Mid-March through August and September through November
Clopyralid	March through July
Aminopyralid	Mid-March through August and September through November
Clopyralid + 2,4-D	March through July
Glyphosate	June through August
2,4-D	Mid-March through the end of June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Dyer's Woad



FLOWERING MONTHS: April to June

ABOUT

Dyer's woad was introduced from Europe as a source of blue dye. It's a biennial, winter annual or short lived perennial that grows up to 3.5 feet tall. The taproot can extend up to 3 feet deep. Its leaves are bluish-green with a pale midvein. They're elliptic to lance-shaped and clasp at the stem base. Flowers are flat-topped clusters of bright yellow, 4-pettalled flowers. Its seeds grow from pendulous, purplish-brown fruit, most noticed for its teardrop shape. Dyer's Woad grows in rangelands, forests, pastures, cultivated fields, along roadsides and in disturbed sites. It has allelopathic properties, meaning it produces chemicals which inhibit growth in nearby plants.

CONTROL METHODS

Manual Control: Cut the weed below the crown, two inches below the soil surface. Tilling is effective for short-term control. Hand-pulling can be effective.

Cultural Control: Grow competitive plants to stifle out infestations.

Chemical Control: A variety of products work to control Dyer's Woad. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	April through the end of June
Chlorsulfuron	April through the end of June and September through October
Metsulfuron + Dicamba + 2, 4-D	April through the end of June
Metsulfuron + Chlorsulfuron	April through the end of June
2, 4-D LV Ester	April through the end of May

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Eurasian Milfoil



FLOWERING MONTHS: July through August

ABOUT

Eurasian watermilfoil was first introduced from Eurasia as an aquarium plant. It's a submerged aquatic perennial, with stems growing up to 22 feet long. The plant forms dense subsurface or surface mats. Stems branch near the water surface into featherlike leaves. Erect flower spikes grow up to 6 inches long. The flowering stem is a pink spike up to 8 inches long held above the water surface. Eurasian Watermilfoil disperses by means of floating stem fragments (that can be cut by boat propellers), by its root structures or by waterfowl. Eurasian Watermilfoil grows in ponds, lakes, streams, canals and ditches.



CONTROL METHODS

Manual Control: Hand pulling can be effective, if divers pull plants in late spring to summer. You can also selectively remove plants by suction dredge in the late spring and summer.

Cultural Control: To stifle small plants, you can place benthic barrier frames over the young plants. Leave the barrier there for approximately 8 weeks.

Chemical Control: A variety of products work to control Eurasian Watermilfoil. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Fluridone	May through the end of August
Endothall dipotassium salt	May through the end of August
2, 4-D	May through the end of August
Triclopyr	May through the end of August

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Field Bindweed



FLOWERING MONTHS: June through September

ABOUT

Field bindweed is one of the most noxious weeds in agriculture. It's a perennial vine with deep creeping roots and twining stems up to 6 feet long. The plant forms dense mats and can climb over other plants. The lateral creeping roots grow up to 9 feet deep. Funnel-shaped flowers are white or pink and grow in leaf axils. Field Bindweed grows in cultivated fields, pastures lawns, along roadsides and in disturbed sites.



CONTROL METHODS

Manual Control: Mowing or cutting is effective on small infestations. Hand-pulling is also effective on smaller patches. Hoeing every 10 to 14 days during the growing season is effective to kill the root system.

Cultural Control: Keep your grass a little tall, or plant tall-growing crops. Field Bindweed needs warm soil to grow, and higher vegetation chokes out needed sunlight.

Chemical Control: A variety of products work to control Field Bindweed. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Dicamba	April through November
Picloram	September through November
Dicamba + 2, 4-D	April through November
Metsulfuron	June through September
Glyphosate	July through October
2,4-D	April through May

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Giant Knotweed



FLOWERING MONTHS: June through August

ABOUT

Giant knotweed is a clumping perennial introduced from Japan as a garden ornamental. It can grow up to 12 feet tall, and reproduces by seed, rhizomes and stem fragments. Its leaves are lance shaped and can grow up to a foot long. The small white flowers grow in shoots in the leaf axils. Giant knotweed grows in moist sites, wetlands and riparian areas.

CONTROL METHODS

Manual Control: Neither manual nor cultural control is effective against Giant knotweed infestations.

Chemical Control: A variety of products work to control Giant knotweed. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr	March through mid-October
Imazapyr	Mid-June through September
Glyphosate	March through mid-October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Hoary Alyssum



FLOWERING MONTHS: June through August

ABOUT

Hoary alyssum is an annual to short-lived perennial with multiple stems from the base. The plant grows up to 2 feet tall and is covered with grayish-green, star shaped hairs. Flowers have four white, deeply notched petals per flower. The plant grows along roadsides, in disturbed areas and from canyon grasslands to wet meadows. Hoary Alyssum is poisonous to horses - it causes leg swelling and fever.



CONTROL METHODS

Manual Control: Mowing or cutting is effective to prevent Hoary Alyssum from going to seed, but it is not 100-percent effective in controlling the plant.

Cultural Control: Small patches can be pulled or dug out, but replace infested areas with competitive plants.

Chemical Control: A variety of products work to control Hoary Alyssum. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	April through July
Telar	April through July

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





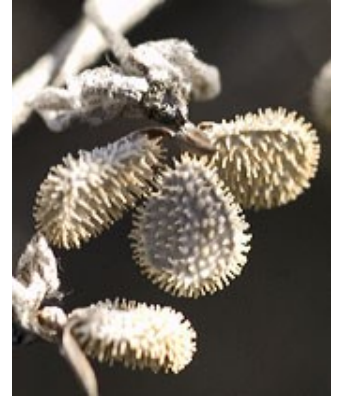
Houndstongue



FLOWERING MONTHS: May through July

ABOUT

Houndstongue is a biennial or short-lived perennial that can grow up to four feet tall. It reproduces by seeds, which have hooks that can cling to an animal's fur or a hiker's clothing. Houndstongue grows in two stages. The first year it grows as a rosette with leaves, which are four to eight inches long, hairy and rough. In the second year of the plant's life, it grows reddish-purple flowers. Houndstongue is toxic to livestock, causing liver damage. Sheep are more resistant to the toxins, but horses are sensitive, so pastures or grazing areas should be maintained to eliminate the introduction or spread of Houndstongue.



CONTROL METHODS

Manual Control: Hand-pulling Houndstongue to completely remove the root crown is effective only before seeds appear. You can till year-old rosettes in autumn or early spring to reduce the severity of an infestation. Mow more mature plants close to the ground to prevent seed production.

Cultural Control: A dense, stable canopy of perennial grasses is effective. Maintain a good ground cover.

Chemical Control: A variety of products work to control Houndstongue. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	April through August
Picloram	April through June
2, 4-D ester	April through mid-June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Hydrilla



ABOUT

Hydrilla, a non-native plant was introduced as an aquarium decoration. It's considered the most problematic aquatic plant in the United States; it can grow in almost any fresh water, like springs, rivers, canals, lakes, marshes and reservoirs. Hydrilla is a submerged perennial that can grow in dense stands; each slender stem can grow up to 25 feet. Hydrilla reproduces by re-growth of stem fragments, special buds that grow on the stem, and tubers attached to the root system. It grows small white flowers with three white petals attached to the base of a leaf. Inch-long leaves grow in groups of five to eight, each swirling around the stem. The leaf margins are saw-toothed and can have an abrasive feel.

CONTROL METHODS

Manual Control: Manual controls to eradicate Hydrilla are not effective, and pose the risk of further contaminating waterways since this plant primarily reproduces through fragmentation of plant parts. With the risks of chemical application in aquatic areas, prevention is the best way to keep Hydrilla out of Ada County waters.

Chemical Control: A variety of products work to control Hydrilla. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr A.S.	Mid-March through November
Endothall dipotassium salt	April through September

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Iberian Starthistle

ABOUT

Iberian Starthistle, is native to the Mediterranean region, southern Europe and northern Africa. Seedlings will sprout in the fall or early spring forming spiny rosettes in May and June. Blooming continues from midsummer through fall as the plant grows one to six feet tall.

Closely resembling Purple starthistle, both invasive species have the ability to adapt to a variety of climate conditions. They are very competitive along roadsides and low-rainfall rangeland, as well as in higher rainfall pastures, where they displace valuable forage.

Sharp spines deter grazing animals or wildlife movement and their access to forage. The potential negative impact on agriculture, wildlife and recreation is significant.



CONTROL METHODS

Cultural Control: Grubbing or digging can control small infestations. Plants should be cut at least two inches below the soil surface early in the growing season. They are easiest to see after they have begun to bolt, but they should be cut before they begin to flower in order to prevent the release of viable seed. If plants are cut after they have begun to flower, they should be removed from the site and destroyed. Follow-up treatments will be necessary as field tests indicated that 10-15 percent of plants cut below the root crown resprouted.

Mowing is not an effective method of control. The rosettes are too low to be cut and plants that have already bolted often respond to mowing by producing multiple rosettes. Mowing plants that have begun to flower will spread the cut flowerheads, which may still be capable of dropping mature seed.

Chemical Control: Herbicides are most effective when applied in the spring. This is when the plants are in the sensitive seedling or rosette stage, are actively growing, and when soil moisture is high.

Glyphosate, 2,4-D, dicamba, and picloram are effective, but are sometimes only a temporary control. A single application of any of these herbicides will probably not eradicate the weed, particularly in widespread infestations, therefore repeated applications are recommended. A full application of clopyralid may also be effective. Eradicating Purple starthistle and Iberian starthistle will not be achieved through any single management method. A combination of several management techniques is recommended based upon the infestation level and environmental conditions.

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Japanese Knotweed



FLOWERING MONTHS: Late June through August

ABOUT

Japanese knotweed is a clumping perennial that grows up to 9 feet tall. It has long, creeping roots that grow up to 18 feet long. The plant reproduces by the roots and also by stem fragments that root at the nodes. The leaves are heart-shaped with a pointed tip. Plant twigs zigzag and have purple-spotted stems. Flowers grow in drooping tendrils of small white flowers. The plant grows along disturbed moist sites, in wetlands and along riparian areas.



CONTROL METHODS

Manual or Cultural Control: Neither manual control nor cultural control is effective against Japanese knotweed.

Chemical Control: A variety of products work to control Japanese knotweed. However, use caution - the noxious weed has an extensive root system that must be properly killed. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

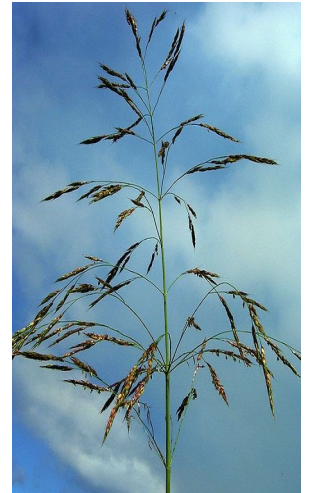
Triclopyr	March through mid-October
Imazapyr	Mid-June through September
Glyphosate	March through mid-October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Johnsongrass



FLOWERING MONTHS: June through August

ABOUT

Johnsongrass is the tenth most noxious weed in the world. It spreads by means of creeping rhizomes and plant parts spread by harvesting equipment. Its erect stems can grow up to eight feet tall. The bright green leaves are flat with a prominent midvein. Where the leaf adheres to the stalk can be found a hairy fringe. The spikelets grow red to purple. The plant can produce toxic levels of hydrocyanic acid so it is potentially poisonous to horses and livestock. Johnsongrass grows in cultivated fields, pastures, ditches and along canal banks and roadsides.

CONTROL METHODS

Manual Control: It's important to control Johnsongrass before it can grow seeds. However, keep in mind that Johnsongrass can also regrow from rhizomes, so ensure you get the entire root systems. Follow any manual or cultural control regiment with proper chemical controls to completely eradicate the Johnsongrass infestation.

Cultural Control: Maintain healthy competitive vegetation cover.

Chemical Control: A variety of products work to control Johnsongrass. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Glyphosate	June through August
Sethoxydim	April through June
Fluazipof	April through June
MSMA	April through June
Fenoxaprop	April through June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Jointed Goatgrass



FLOWERING MONTHS: May through July

ABOUT

Jointed goatgrass is a winter annual grass with "spikelets" that resemble winter wheat. The plant grows up to 4 feet tall with flat blade leaves from which hairs extend outward. Flowers are cylindrical spikes that compose a series of joints. The top spike is tipped by a straight awn. The plant reproduces by seeds, which can remain viable for about 5 years. Jointed goatgrass grows in wheat fields, pastures and rangelands and along roadsides and fencerows. Jointed goatgrass looks like winter wheat, but Jointed goatgrass spikes break apart between the nodes.

CONTROL METHODS

Manual Control: Hand-pull small infestations, especially before they sprout seeds. Mowing is effective.

Cultural Control: Plant competitive plant species

Chemical Control: A variety of products work to control Jointed goatgrass. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Glyphosate	May through the end of August
Sulfometuron	February through May and again from September through November

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Leafy Spurge



FLOWERING MONTHS: June through August

ABOUT

Leafy spurge is a caustic noxious weed - its milky sap can be an irritant to humans and livestock. It's an erect perennial that grows up to 2.5 feet tall, and its roots extend 20 feet in depth. The plant reproduces by these roots and also by seeds, which can live up to 8 years. The leaves grow in whorls, up to 4 inches long. A pair of showy, yellowish-green heart-shaped bracts enclose small flower clusters. Leafy spurge grows in rangelands and pastures and along roadsides and riparian areas.



CONTROL METHODS

Manual Control: Leafy spurge's milky sap is caustic, so hand-pulling is NOT recommended. The plant's root system stores food and nutrients, so mowing and other manual control options are not effective.

Cultural Control: Grow competitive grasses to stifle out infestations, but it's not 100 percent effective. Combine with an aggressive herbicide treatment plan.

Chemical Control: A variety of products work to control Leafy spurge. See the timeline below for the most effective herbicide use.

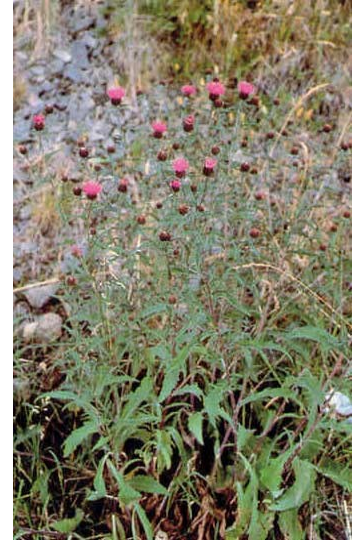
HERBICIDE TIMELINE:

Impazapic	July through September
Picloram + 2, 4-D	June through November
Picloram	June through November
Glyphosate	June through September
Dicamba	April through July
2, 4-D Ester	March through June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Meadow Knapweed



FLOWERING MONTHS: June through September

ABOUT

Meadow knapweed is a perennial that grows up to four feet tall. The plant is multi-branched. Leaves found lower on the branches grow up to four inches long. As the branch grows, the leaves narrow into lance-shaped leaves that are covered by short, stiff hairs. The flowers grow alone atop the stem as pink to reddish-purple disk flowers. Tan to dark brown bracts with deeply fringed margins are found under the flower. Meadow knapweed can be found along roadsides, in waste areas, fields and pastures. Meadow knapweed has allelopathic effects, which kills surrounding desirable vegetation.

CONTROL METHODS

Manual Control: Young plants can be hand-pulled or dug out, but remove as much as the root system as possible. Also wear gloves to avoid skin irritation. Manually control Meadow knapweed before flowering occurs. Combine manual or cultural control methods with a comprehensive chemical control plan.

Cultural Control: Maintain healthy competitive vegetation cover.

Chemical Control: A variety of products work to control Meadow knapweed. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr + Clopyralid	April through July
Clopyralid	April through August
Aminopyralid	April through July and September through November
Picloram	May through July and September through November
Clopyralid + 2,4-D	April through June
2, 4-D	April through June
Glyphosate	April through August

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Mediterranean Sage



FLOWERING MONTHS: June through August

ABOUT

Mediterranean sage was introduced from Europe likely as a contaminant of alfalfa seed. In its first year, Mediterranean sage begins as a rosette with woolly blue-green leaves that smell like sage when crushed. The following year, it produces multi-branched stems adorned with yellowish-white clusters of winged flowers. Mediterranean sage can grow up to three feet tall. In its lifetime, one plant may produce thousands of seeds which are widely dispersed since the mature plant develops into a sort of tumbleweed easily moved by the wind. Mediterranean sage is quickly invading pastures, meadows, rangeland and public lands across the west.

CONTROL METHODS

Manual Control: Small infestations of plants can be dug out before they set seed. You can cut the plant root three inches below the crown to prevent regrowth. You can also mow before seeds form, but the plants must be mown regularly.

Cultural Control: Promote healthy desirable vegetative growth and take caution not to spread the seeds by recreating in or near an infestation. Seeds can attach themselves to footwear, vehicles and recreational equipment.

Chemical Control: A variety of products work to control Mediterranean sage. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Chlorsulfuron	April through the end of June
Metsulfuron	April through the end of June
Triclopyr + Clopyralid	April through the end of June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Musk Thistle



FLOWERING MONTHS: July through August

ABOUT

Musk thistle is a biennial or winter annual that grows up to five feet tall. It reproduces by seeds that can disperse in wind as far as 50 yards. This is especially dangerous since seeds remain viable for up to 10 years. Purple or pink flowers grow to up to three inches in diameter. They grow solitary at stem tips, and often have spine-tipped bracts below the flower head. Seeds are yellowish-brown and have a hairlike plume attached which helps the seeds fly in the wind.



CONTROL METHODS

Manual Control: With a shovel blade, cut the weed stem **a few inches below the soil surface**.

Cultural Control: A dense, stable canopy of perennial grasses is effective. Maintain a good ground cover.

Chemical Control: A variety of products work to control Musk thistle. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Chlorsulfuron	April through the end of June
Metsulfuron	April through the end of June
Triclopyr + Clopyralid	April through the end of June
Clopyralid	April through the end of July
Aminopyralid	April through the end of July and September through November
Picloram	September through November
Clopyralid + 2,4-D	April through the end of June
Dicamba	April through the end of June and September through November
2,4-D	April through the end of June and September through November
Glyphosate + 2,4-D	April through May and September through November

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Oxeye Daisy



FLOWERING MONTHS: June through August

ABOUT

Oxeye daisy is a perfect example of an attractive noxious weed commonly used as garden ornamentals. In fact, Oxeye Daisy is spread as a contaminant of grass and legume seed, but most importantly, it is found in commercial wildflower packets. It spreads by seeds, and while most seeds die after 6 years, some can survive up to 39 years. Oxeye daisy is a perennial with numerous stems rising from the base. Stems can grow up to 3 feet tall. Each stem will have a solitary daisy-like flower with white ray petals and yellow disks. It grows in grasslands, meadows, pastures and along roadsides.

CONTROL METHODS

Manual Control: Cultivate or hand-pull infestations. Mow as the first flowers open to eliminate seed production.

Cultural Control: Minimize bare soil by planting competitive, desirable vegetation. Also, do not plant Oxeye daisy as a garden ornamental. This is a noxious weed, not a wildflower!

Chemical Control: A variety of products work to control Oxeye daisy. See the timeline below for the most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	Late March through the end of June
Aminopyralid	Late March through the end of June
Picloram	March through the end of June and from September through October
Clopyralid	Late March through the end of June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Parrotfeather Milfoil



ABOUT

Parrotfeather milfoil is non-native invasive aquatic weed that was introduced as an aquarium plant or ornamental pond vegetation. It's a submerged perennial weed that can grow up to 15 long, forming dense mats that can cover the surface of the water in shallow areas. Parrotfeather milfoil reproduces by plant fragmentation, meaning boaters, waterfowl, swimmers and recreationalists can inadvertently spread Parrotfeather milfoil to previously uninfested areas. Parrotfeather can be identified by its green featherlike leaves. It can be found in ponds, lakes, rivers, canals and ditches, and, when present, can become prime mosquito habitat in still waters.

CONTROL METHODS

Manual Control: Manual controls to eradicate Parrotfeather milfoil are not effective, and pose the risk of further contaminating waterways since this plant primarily reproduces through fragmentation of plant parts. With the risks of chemical application in aquatic areas, prevention is the best way to keep Parrotfeather milfoil out of Ada County waters.

Chemical Control: A variety of products work to control Parrotfeather Milfoil. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

2, 4-D	April through August
Imazapyr	Mid-April through August

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Perennial Pepperweed



FLOWERING MONTHS: June through August

ABOUT

Perennial pepperweed - like the name suggests - is a perennial that grows up to 6 feet tall, with long creeping roots that can grow up to 9 feet deep. Its basal leaves (leaves at the base of the plant) can grow up to 1 foot. Leaves are waxy and green to grey-green with a prominent whiteish midvein. Flowers grow in dense clusters at the branchy tips. The flowers are small, white and have 4 petals. Perennial pepperweed reproduces by seeds and creeping roots. It grows in riparian areas, meadows, flood plains, croplands and along irrigation ditches and roadsides.



CONTROL METHODS

Manual Control: Hand-pulling is suitable for small infestations. Ensure you remove as much of the root as possible. Disking is effective, especially when followed by mowing. This keeps the plant uniform in size and helps herbicide applications become more effective. Following mowing, apply a herbicide containing the active ingredient Telar.

Cultural Control: Cultural control isn't 100 percent effective.

Chemical Control: A variety of products work to control Perennial pepperweed. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Chlorsulfuron	April through the end of June
Metsulfuron	April through the end of June
Glyphosate	March through the end of September
2, 4-D amine	April through the end of June
2, 4-D ester	March through June
Impayapyr	March through June
Metsulfuron + Dicamba + 2, 4-D	April through the end of June
Metsulfuron + Chlorsulfuron	April through the end of June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Poison Hemlock



FLOWERING MONTHS: June through August

ABOUT

Poison hemlock is highly toxic to humans and animals. It grows as an erect biennial weed up to 9 feet tall. In the first year of life, it germinates and forms a low growing fern-like rosette with shiny green, triangular leaves. In the second year, Poison Hemlock grows a tall central hollow stalk with mottled purple spots that flowers and forms seeds. It has a thick, white taproot (often mistaken for a wild carrot). It flowers in a small white umbrella-shaped cluster about 3 inches across. Poison hemlock grows along roadsides, ditches and riparian areas and in pastures, fields and disturbed, often moist, sites.



CONTROL METHODS

Manual Control: If pulling Poison hemlock, wear gloves and use a shovel to get the entire root system.

Cultural Control: Cultural control isn't 100 percent effective.

Chemical Control: A variety of products work to control Poison hemlock. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	April through the end of June
2,4-D	March through August
MCPA	March through the end of May
Glyphosate	April through mid-July
Metsulfuron + Dicamba + 2, 4-D	March through August
Metsulfuron + Chlorsulfuron	March through August

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Puncturevine



FLOWERING MONTHS: July through October

ABOUT

Puncturevine - the bane of bare feet, bicycle tires and animal paws - is a plant commonly called "goat heads." This summer annual plant forms dense mats, and the yellow flowers mature to form stout, spiny burrs. Puncturevine is potentially toxic to livestock.



CONTROL METHODS

Manual Control: Hand pull when soils are moist, and vines are long enough to effectively grab. Mowing is not effective. Hoeing can be effective if done prior to flowering and seed production. Cultivation should be repeated to prevent future bur formation. Manual control is actually more effective than using herbicides on small infestations.

Cultural Control: Cultural control isn't 100 percent effective, so make sure you promote healthy competitive vegetation when using chemical control.

Chemical Control: A variety of products work to control Puncturevine. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Chlorsulfuron	March through mid-April unless irrigation is provided to meet rainfall requirements.
Bromacil + Diuron	March through June and September through November
2, 4-D	June through the end of September

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Purple Loosestrife



FLOWERING MONTHS: June through August

ABOUT

Purple loosestrife is a semi-aquatic perennial with showy pinkish-purple flower spikes. The plant grows up to 8 feet tall. Its leaves are lance-shaped with smooth margins. It disperses by seeds, up to 10 feet from the infestation. It grows in wetlands and along stream banks, canals, ditches and pond edges.

CONTROL METHODS

Manual Control: Remove all roots and underground stems of small infestations. Small segments of the weed's stems can become rooted and reestablish the infestation. Also remove flowering spikes to reduce future seed production.

Cultural Control: Purple loosestrife does not like shade, or bare ground so encourage healthy, competitive vegetation.

Chemical Control: A variety of products work to control Purple loosestrife. See the timeline below for most effective herbicide use. Bare ground increases infestations. Call our offices at 577-4646 for a consultation.

HERBICIDE TIMELINE:

Triclopyr	May through the end of August
Glyphosate + 2,4-D	June through mid-August
Glyphosate	June through the end of August
Metsulfuron	May through the end of August
Metsulfuron + Chlorsulfuron	May through the end of August
Aquatic 2, 4-D	June through mid-August

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Purple Starthistle

ABOUT

Purple Starthistle, is an annual to perennial thistle with a mounding growth habit and heads of purple flowers surrounded by long, sharp-pointed spines. Mature plants are one to four feet high, densely and rigidly branched, and have numerous flowerheads.



Purple starthistle has stiff, sharp spines and its bitter taste discourages feeding by cattle, deer, and rodents. It replaces palatable species in some grazed areas, and dense stands of mature plants can make areas inaccessible to livestock and humans. Its spines are thicker and stronger than those of yellow starthistle and do not fall from the plants in autumn as do those of yellow starthistle. Because of this, forage that may grow in infested areas during fall and winter may be inaccessible to grazers.

CONTROL METHODS

Cultural Control: Grubbing or digging can control small infestations. Plants should be cut at least two inches below the soil surface early in the growing season. They are easiest to see after they have begun to bolt, but they should be cut before they begin to flower in order to prevent the release of viable seed. If plants are cut after they have begun to flower, they should be removed from the site and destroyed. Follow-up treatments will be necessary as field tests indicated that 10-15 percent of plants cut below the root crown resprouted.

Mowing is not an effective method of control. The rosettes are too low to be cut and plants that have already bolted often respond to mowing by producing multiple rosettes. Mowing plants that have begun to flower will spread the cut flowerheads, which may still be capable of dropping mature seed.

Chemical Control: Herbicides are most effective when applied in the spring. This is when the plants are in the sensitive seedling or rosette stage, are actively growing, and when soil moisture is high.

Glyphosate, 2,4-D, dicamba, and picloram are effective, but are sometimes only a temporary control. A single application of any of these herbicides will probably not eradicate the weed, particularly in widespread infestations, therefore repeated applications are recommended. A full application of clopyralid may also be effective. Eradicating Purple starthistle and Iberian starthistle will not be achieved through any single management method. A combination of several management techniques is recommended based upon the infestation level and environmental conditions.

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Rush Skeletonweed



FLOWERING MONTHS: July through October

ABOUT

Rush skeletonweed is a perennial or biennial plant that grows up to 3 feet tall with wiry branched flower stems. Its lower stems have dense, bristly, downward-pointing hairs. The plant oozes an innocuous milky sap. The plant starts as a thistle-like rosette with lance-shaped, shallow-lobed leaves. As the plant grows, the leaves become bract-like. The small flowers are bright yellow, star-shaped blooms that grow at the end of branches. It disperses by seed up to 5 miles. Seeds survive fewer than 5 years. Rush skeletonweed grows along roadsides and in rangelands, pastures and grain fields.



CONTROL METHODS

Manual Control: Mechanical control like mowing or hand-pulling are only effective on small infestation. Research shows this can actually stimulate growth in larger infestations.

Cultural Control: Cultural control isn't 100 percent effective. Use in combination with chemical control. Plant competitive species after herbicide application

Chemical Control: A variety of products work to control Rush skeletonweed. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Clopyralid	May through July and September through November
Aminopyralid	May through July and September through November
Picloram	May through July and September through November
2,4-D	May through July
MCPA	May through July

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Russian Knapweed



FLOWERING MONTHS: June through September

ABOUT

Russian knapweed is a branched perennial that grows up to 3 feet tall. It is toxic to horses, causing chewing disease. The oblong leaves at the base and lower stems of the plant are bluish-green and can grow up to 6 inches long. Toward the top of the plant, the leaves become narrow and lance-shaped. Russian Knapweed flowers are white, pink, or lavender-blue disk-like blooms. The flower head is urn shaped, and the bract has a pointed tip. It spreads by seeds or from shoots arising from creeping roots. Russian Knapweed grows in cultivated fields, pastures and disturbed areas or along irrigation ditches and roadsides, and it is toxic to horses.



CONTROL METHODS

Manual Control: Manual control is not 100-percent effective, chemical control is the only option for complete eradication of Russian Knapweed

Cultural Control: Re-seeding an area after the weed is eradicated might prove helpful to keeping the plant out.

Chemical Control: A variety of products work to control Russian knapweed. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr + Clopyralid	May through the mid-July
Picloram	May through the mid-July and September through November
Clopyralid + 2,4-D	May through the end of June
Clopyralid	May through the mid-July
Aminopyralid	July through the end of August and October through November
Glyphosate	May through the mid-July
2,4-D	Only in June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Saltcedar



FLOWERING MONTHS: March through May

ABOUT

Saltcedar is a plant commonly found in ornamental home gardens, but don't be fooled - this is a dangerous noxious weed. It sucks up surrounding water, and exudes salt from its foliage. Saltcedar grows as a shrub or small tree, sometimes reaching 24 feet tall. It has a long taproot with lateral roots. The leaves are small, scalelike gray-green growths that overlap at the stem. It grows pale or dark pink flowers with 5 distinct petals. The seed capsule grows with a tuft of long hair which enables it to disperse 100 yards in a light wind. Saltcedar grows along stream banks, in lake margins and wetlands or moist rangelands and in saline environments. It can drink up to 200 gallons of water a day, which is why early detection and quick control are so important for this plant.

CONTROL METHODS

Manual Control: The best way to manually control Saltcedar is by cutting down the shrub/tree, but you must also paint herbicide over the stump for effective control

Cultural Control: Do not plant Saltcedar in your home garden - it is NOT an ornamental plant!

Chemical Control: A variety of products work to control Saltcedar. See the timeline below for most effective herbicide use. Follow label instructions. Some require you to first cut the shrub stump.

HERBICIDE TIMELINE:

Triclopyr	May through the end of September
Imazapyr	June through the end of September
Glyphosate	May through the end of September

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





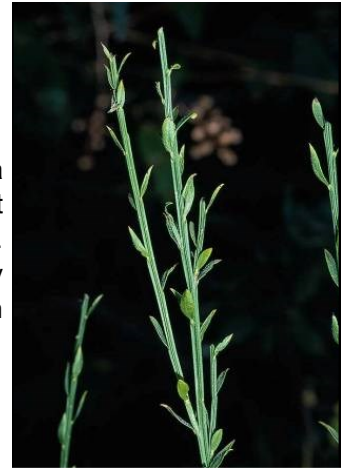
Scotch Broom



FLOWERING MONTHS: July through September

ABOUT

Scotch broom, a European perennial shrub, was first introduced to North America as an ornamental plant. It's an aggressive woody shrub that can grow up to 10 feet tall. The tall, angled stems grow tiny leaves and yellow to maroon inch long flowers. Seeds grow in flat, dark pods with hairy margins. The seeds can be dispersed by the wind and remain viable for more than three years. Scotch broom grows in pastures, forests, roadsides and disturbed sites. It is toxic to humans and livestock.



CONTROL METHODS

Manual Control: You can dig out small infestations of Scotch broom, but make sure to get as much of the root structure as possible. For larger infestations, mow or hand scythe the weed close to the ground and immediately apply a herbicide to ensure complete control. You may need to repeat these steps several times, and make sure you get the plant before seed production. If only one cutting/mowing can be made, do the work when the plant begins to flower – this is the time when the weed's nutrients are traveling up the stems and not in the root systems.

Cultural Control: Once mature plants have been removed, utilize cultural control by removing new shoots and densely replanting the area with desired vegetation.

Chemical Control: A variety of products work to control Scotch broom. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Glyphosate	April through October
Triclopyr	April through October
Triclopyr + 2, 4-D	April through October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Scotch Thistle



FLOWERING MONTHS: July and August

ABOUT

Scotch thistle is a biennial plant that grows up to 8 feet tall with spiny leaves and stems. It has winged stems and is covered with woolly gray hairs. The spiny rosette leaves can grow up to 2 feet long and 1 foot wide. The flowers, usually purple but sometimes white, are globe shaped and can grow to 2 inches in diameter. Beneath the flower are spine-tipped bracts covered with short cobwebby hairs. It disperses by seeds that can survive at least 39 years. Scotch thistle grows in rangelands, dry pastures, in disturbed areas and along roadsides, railroads and riparian areas.

CONTROL METHODS

Manual Control: With a shovel blade, cut the weed stem **a few inches below the soil surface** to prevent the weed from re-growing. Mowing before flowering will reduce seed production.

Cultural Control: A dense, stable canopy of perennial grasses is effective. Maintain a good ground cover.

Chemical Control: A variety of products work to control Scotch thistle. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Chlorsulfuron	April through the end of July and September through November
Metsulfuron	April through the end of July and September through November
Triclopyr + Clopyralid	April through the end of July and September through November
Clopyralid + 2,4-D	April through the end of July and September through November
Clopyralid	April through the end of July and September through November
Picloram	September through November
Dicamba	April through the end of July and September through November
2,4-D	April through the end of July and September through November
Glyphosate + 2,4-D	April through the end of July and September through November

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



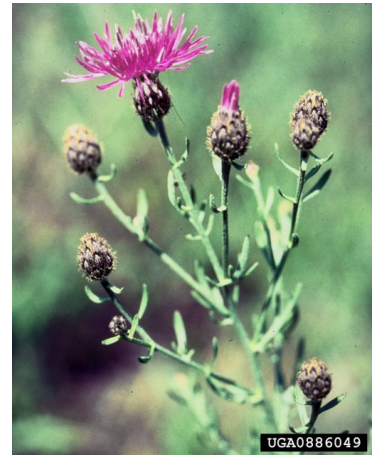
Spotted Knapweed



FLOWERING MONTHS: June through October

ABOUT

Spotted knapweed is a highly competitive biennial or short-lived perennial plant. It grows up to three feet tall with a sturdy taproot and white or pink-purple flowers that grow solitary on branch tips. The bract below the flower has a comb-like fringed margin with a black tip. It reproduces by seeds, and one plant can produce up to 25,000 seeds. Spotted knapweed is particularly aggressive since it is allelopathic - it produces a natural toxin that kills any plants that grow around the weed. Spotted knapweed grows on rangelands, dry meadows, pastures and along roadsides or in sandy or gravelly floodplains.



CONTROL METHODS

Manual Control: Hand pulling can be effective on small infestations. Wear gloves to prevent skin irritation. Ensure you remove the entire crown and taproot to prevent any re-growth.

Cultural Control: Cultural controls are not typically effective unless combined with other methods of control.

Chemical Control: A variety of products work to control Spotted knapweed. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Triclopyr + Clopyralid	Mid-March through June
Picloram	Mid-March through the end of July and late August through October
Clopyralid + 2,4-D	April through early June
Clopyralid	Mid-March through the end of May
2,4-D	Mid-March through the end of May
Glyphosate	April through May
Aminopyralid	Mid-March through the end of May and late August through October

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Sticky Nightshade



ABOUT

Sticky Nightshade, (The Fire and Ice Plant) *Solanum sisymbriifolium* is an annual to short-lived perennial plant. It has strongly dissected leaves on stems armed with long spines and showy large white flowers fading to pale mauve. Flowers are followed by up to 2cm large bright red fruits. Nightshade seedlings begin to appear in late April and continue to emerge throughout June. Nightshades contain a group of toxic chemicals called steroidal alkaloids. Toxicity is not determined by the concentration, but rather by the amount of nightshade that an animal consumes relative to its body weight.

Nightshades cause serious problems at harvest. Nightshades do not dry rapidly and are not killed by light frosts in the fall. The rotors, screens, and augers of combines become clogged by a sticky mass of stems, leaves, berries and soil. Crops may be coated with berry juice and dirty or stained produce may be difficult to sell. Because of toxic alkaloid danger, green peas are rejected if any nightshade berries are found in a harvested lot.

CONTROL METHODS

Successful nightshade control requires allowing no seed production. Avoid planting crops contaminated with nightshade seed. Plan a crop rotation where nightshade can be controlled. Annual nightshades can be effectively controlled by cultivation or the proper selection and use of herbicides. Cultivation can effectively eliminate plants which escape herbicide treatments and thus prevent seed production.

Manual Control: Crop rotation is an important aspect of nightshade control. Eliminate nightshade seed production. Avoid planting crop seed contaminated with nightshade seed. Plant crops (corn, small grains, soybean) that allow use of effective herbicides. Plant broadleaf crops in rows instead of drilled, so cultivation can be used with herbicides to control flushes or plants that survive herbicide treatment.

Chemical Control: Herbicides effective on small nightshade in small grains include 2,4-D, Banvel, and Curtail. Herbicides that control small and slightly larger nightshade are Buctril, Bronate, and Tordon. Preemergence treatments with metolachlor, dimethenamid, and imazethapyr provide excellent control. Imazethapyr is also effective when applied postemergence and as a preplant no-till treatment. Emerged annual nightshades may be controlled by bentazon and acifluorfen; however, no residual activity is provided by these herbicides and later emerging seedlings will not be controlled.

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Vipers Bugloss



FLOWERING MONTHS: June through September

ABOUT

Vipers bugloss is a winter annual or biennial plant that grows up to 3 feet tall. It has a long taproot with lateral roots extending horizontally. The leaves grow in rosettes and are covered with bristly hairs. Flowers are purplish-blue and funnel shaped. They grow at the end of a coiled flower stem and have threadlike filaments that extend from the flower. The plant's seeds can live up to 3 years. Toxic alkaloids in the plants cause liver damage to humans and the plant is especially toxic to horses and pigs. The plant grows in disturbed sites, along roadsides, in pastures and in grasslands.



CONTROL METHODS

Manual Control: Destroy plants before they become invasive. An easy remedy is to cut, bag and destroy flower heads when they appear. Digging or mowing the plants can be effective.

Cultural Control: Fertilize! Noxious weeds don't like fertile soil, but grasses do. Competitive healthy vegetation can help control noxious weeds.

Chemical Control: A variety of products work to control Viper's bugloss. See the timeline below for most effective herbicide use.

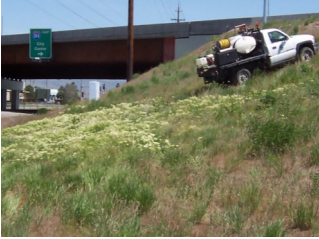
HERBICIDE TIMELINE:

2,4-D Ester	Mid-March through May
Glyphosate	Mid-February through the end of October
Picloram	Mid-March through the end of July
Metsulfuron	March through mid-June and again mid-August through November

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.



Whitetop



FLOWERING MONTHS: May through July

ABOUT

Whitetop (AKA: Hoary Cress) is a perennial plant growing up to 2 feet tall. It disperses short distances by creeping roots, although the seeds can disperse long distances in flowing water. Its vertical roots can reach up to 6 feet deep. Whitetop has alternate, gray-green, lance-shaped leaves. It has numerous, white 4-petaled flowers that are 1/4-inch in diameter. Flowers grow in dense, nearly flat-topped clusters at the top of each stem. Whitetop grows in cultivated fields, rangelands, pastures and disturbed sites and along roadsides.

CONTROL METHODS

Manual Control: Manual control is not recommended; it is minimally effective since you must remove the entire root system. Mow whitetop to the ground before it can reseed for a somewhat effective form of manual control.

Cultural Control: Grow competitive grasses to stifle out infestations, but it's not 100-percent effective. Combine with an aggressive herbicide treatment plan.

Chemical Control: A variety of products work to control Whitetop. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Metsulfuron	April through late June and September through November
Chlorsulfuron	April through late June and September through November
Metsulfuron + Chlorsulfuron	April through late June and September through November
2,4-D	April through June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Yellow Starthistle



FLOWERING MONTHS: July through September

ABOUT

Yellow starthistle is a winter annual with winged stems that can grow several feet tall. The plant's most distinguishing feature is sharp long spines that grow in bracts underneath the bright yellow disk flowers. Leaves are grayish to bluish-green with fine, cobwebby and short, stiff hairs. Yellow starthistle is toxic to horses, causing chewing disease. It grows in canyon grasslands, in rangelands, pastures, cultivated fields and in disturbed sites or along roadsides.



CONTROL METHODS

Manual Control: Hand-pulling is effective, but avoid the sharp spines beneath the flower. Since the plant can establish a long taproot, it's best to cultivate seedlings. Mowing is not completely effective.

Cultural Control: It's best to set seed for desirable vegetation before mowing existing patches of Yellow starthistle. In the absence of competitive vegetation, Yellow Starthistle will regrow.

Chemical Control: A variety of products work to control Yellow starthistle. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Clopyralid	Mid-May through Mid-July
Aminopyralid	June through early August
Triclopyr + Clopyralid	June through early August
Picloram	May through July and September through November
Clopyralid + 2,4-D	May through July
Chlorsulfuron	April through May
2,4-D	May through Mid-June

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.





Yellow Toadflax



FLOWERING MONTHS: June through September

ABOUT

Yellow toadflax—This non-native perennial is an escaped ornamental plant originally from Europe. It has showy yellow snapdragon-like flower clusters that turn orange near the stem. Stems grow up to three feet tall with linear, two-inch-long tapered leaves. Yellow toadflax reproduces by underground root stocks and brown, circular seeds. Seeds don't travel very far, at most nine feet from the plant. Yellow toadflax grows in rangeland, pastures, cultivated fields, gardens and along roadsides. When found in grazing areas, take extreme caution – Yellow toadflax contains toxins that are harmful to livestock.

CONTROL METHODS

Manual Control: Because of its extensive underground root system, Yellow toadflax is difficult to hand-pull. Any mechanical control should focus on eliminating or reducing seed production and eliminating further root spread. Any manual control will take years to gain effective results.

Cultural Control: Plant competitive and desired vegetation to culturally control Yellow toadflax.

Chemical Control: A variety of products work to control Yellow toadflax. See the timeline below for most effective herbicide use.

HERBICIDE TIMELINE:

Chlorsulfuron	May through July
Picloram + Chlorsulfuron	May through Mid-July
Picloram + Metsulfuron	May through Mid-July
Picloram	July through mid-October
Dicamba	March through mid-May

Ada County Weed Control encourages you find a specific herbicide with the recommended active ingredients. Follow the label instructions when using all herbicides.

