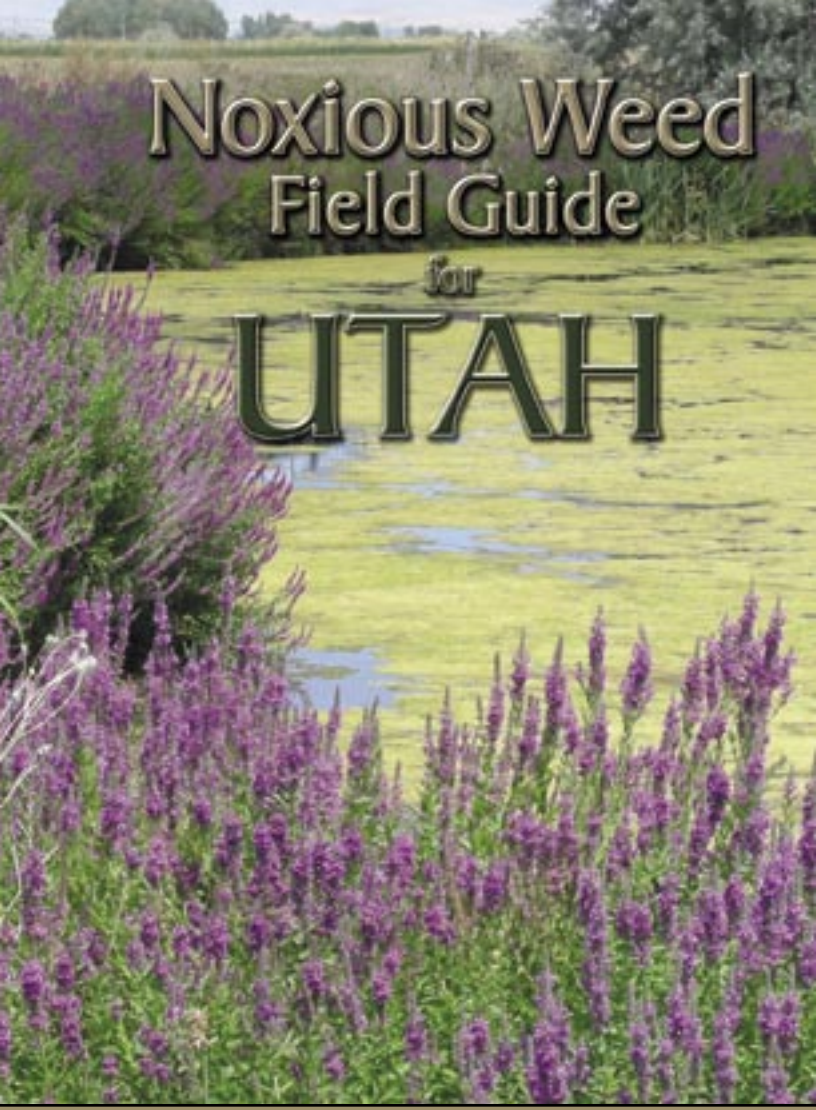
Noxious Weed Field Guide for UTAH



By Nathan Belliston
Ralph Whitesides
Steven Dewey
Joel Merritt
Stephen Burningham

Utah State University
COOPERATIVE EXTENSION

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Uintah County Weed Department

Authors:
Nathan Belliston, Uintah County assistant weed control supervisor
Ralph Whitesides, Utah State University Extension weed specialist
Steven Dewey, Utah State University Extension weed specialist
Joel Merritt, Cache County weed control supervisor
Stephen Burningham, Utah State Department of Agriculture and Food - program manager

Edited by:
Ralph Whitesides, Utah State University Extension weed specialist and Donna Falkenborg, Utah State University Extension communications editor

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Class A Weeds
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Noxious weeds, such as this musk thistle, can have tremendous negative impacts in every aspect of our lives.

Foreword

Noxious Weeds a Biological Wildfire

Invasive noxious weeds have been described as a raging biological wildfire – out of control, spreading rapidly, and causing enormous economic losses. Millions of acres in North America have been invaded or are at risk of being invaded by weeds, including cropland, pastures, rangelands, forests, wilderness areas, national parks, recreation sites, wildlife management areas, transportation corridors, waterways, wetlands, parks, golf courses, even yards and gardens. Noxious weeds are currently spreading at a rate of more than 4,600 acres per day on federal lands in the United States.

Devastation caused by noxious weeds is enormous. Economic losses from weeds exceed $20 billion annually in the United States, and the cost continues to grow. Weeds often reduce crop yields, and can damage watersheds, increase soil erosion, negatively impact wildland plant and animal communities, and adversely affect outdoor recreation. Ecological damage from uncontrolled noxious weed infestations can be permanent, leaving lands unable to return naturally to their pre-invasion condition.

Prevention, preserving and protecting lands not presently infested, is the first line of defense against aggressive noxious weeds. Prevention requires awareness and action by land managers as well as the general public, to recognize, report, and control new infestations before they have a chance to expand and spread.

Noxious weeds, such as this dyer's woad, spread much like a wildfire, out of control.

This publication is designed to help you identify some of the common noxious and invasive weed species that are currently threatening Utah and have been identified on Utah's state weed list. If you are an outdoor enthusiast or other concerned citizen, this booklet will help you recognize these invasive weeds so you can report them to proper authorities before significant spread and damage can occur. If you are an agriculturalist or public land manager, this booklet will help you more accurately identify the invasive weeds in the area of your stewardship - a critical step in choosing the most effective control strategy.

Steven A. Dewey

Using This Handbook

This noxious weed field guide deals exclusively with Utah's state noxious weeds.

Effective July 2, 2008, the Utah Noxious Weed Act was amended to allow for categorization of weeds and 27 weeds were declared noxious.

This book is divided into three color-coded sections that reflect the categories and weed rankings from a statewide perspective. Individual counties may add county-declared noxious weeds to the list and rank the state-listed weeds in different categories, but cannot delete state-listed weeds.

Noxious Weed Classifications and Attributes:

Class A Weeds: Early Detection Rapid Response (EDRR) — Declared noxious weeds not native to the state that pose a serious threat to the state and should be considered as a very high priority.

Class B Weeds: Control — Declared noxious weeds not native to the state that pose a threat to the state and should be considered a high priority for control.

Class C Weeds: Containment — Declared noxious weeds not native to the state that are widely spread, but pose a threat to the agricultural industry and to agricultural products with a focus on stopping invasion.

Common Name: The most widely accepted name used by the Weed Science Society of America and found in the book *Weeds of the West*.

Scientific Name: The officially accepted scientific name used by the Weed Science Society of America and found in the book *Weeds of the West*.

Other Common Names: Local or historical names.

Background: Description of origin, habitat preferences, and methods of reproduction.

Description: Life cycles and some distinguishing characteristics of the weed.

Distribution Maps: Known county distribution in Utah.

Control Methods: General effective control methods.

Utah's State Noxious Weeds

Class A Weeds (EDRR)

Black Henbane

Hyoscyamus niger

BACKGROUND: Black henbane is a native plant of Europe commonly found in waste areas, pastures, along rights-of-way and fence lines. It is poisonous to both animals and humans; however, it has medical use in controlled circumstances.

OTHER COMMON NAMES: Hog's bean

DESCRIPTION: As either an annual or biennial, black henbane grows 1 to 3 feet tall. Leaves have pointed lobes and prominent veins. Off-white flowers with purple centers and veins are 1 to 2 inches wide bearing pineapple shaped fruit in leaf axils. Each fruit has 5 lobes and contains hundreds of tiny black seeds. Bloom occurs in late spring.

CONTROL: Biocontrol is not available. Herbicides can be very effective when applied during rosette to bloom stages. Digging can offer some control. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Class A Weeds (EDRR)

Diffuse Knapweed

Centaurea diffusa

BACKGROUND: Native to Eurasia, diffuse knapweed inhabits dry rangeland, roadsides, field edges and waste areas. Knapweeds release chemical substances into the soil that inhibit the growth of competing vegetation.

DESCRIPTION: It is an annual or a short-lived perennial averaging 1 to 2 feet tall. Leaves have finely divided lobes. Flowers are white to rose in color. Diffuse knapweed differs from squarrose knapweed in that toothed flower bracts are straight rather than arched outward. It blooms throughout summer.

CONTROL: Several biocontrol agents are available and provide fair to good control. Select herbicides can offer good to excellent control when applied from rosette to pre-bud stages. Tillage offers good control. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Class A Weeds (EDRR)

Johnsongrass

Sorghum halepense

BACKGROUND: Johnsongrass was introduced from the Mediterranean to the United States as a forage grass. However, when under frost or moisture stress, it becomes toxic to livestock. It reproduces by seed and creeping lateral root systems. It thrives in rich soils and along waterways.

DESCRIPTION: Johnsongrass is a hardy perennial grass. It displays erect stems 2 to 8 feet tall. Spreading roots send large, fleshy rhizomes to the sides for wide distribution. Leaf blades are flat, up to 1 inch wide, with a prominent light midvein. Stems are stout with prominent nodes. Seedheads are reddish to purple.

CONTROL: Biocontrol is not available. Herbicides can offer good control. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Leafy Spurge

Euphorbia esula

BACKGROUND: A native plant of Eurasia, leafy spurge is an aggressive invader of pastures, rangeland, stream banks and waste areas. It reproduces by seed and rootstock. It is toxic to cattle and may result in their death.

DESCRIPTION: This perennial plant grows up to 3 feet tall. The leaves are narrow, 1 to 4 inches long. In late spring, yellow-green flower bracts appear. Seeds are contained in a 3-celled capsule, 1 seed per cell. When dry, capsules can shoot seeds up to 15 feet from parent plant. Stems exude a milky fluid when damaged. An extensive root system, up to 20 feet long and more than 14 feet deep, with multiple shoot-producing buds, makes this plant very difficult to control.

CONTROL: Biocontrol is extensive and control is fair to excellent. Herbicides can offer fair to good control especially when combined with biocontrol. Apply herbicides from spring to the killing frost. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Medusahead

Taeniatherum caput-medusae

BACKGROUND: Medusahead was brought to the United States from Eurasia. It is extremely competitive, completely displacing other desirable grass species. It spreads by seed, commonly carried by wind, animals, clothing and vehicles.

OTHER COMMON NAMES: Medusahead rye

DESCRIPTION: Medusahead is an annual growing from 6 inches to 2 feet high. Leaf blades are about 1/8 inch wide. Awns of the seedhead are long and become twisted as the seed matures. It is sometimes confused with foxtail barley or squirreltail, but is different in that the seedhead doesn't break apart completely as the seeds mature. Flowering and seed production take place in late spring and early summer.

CONTROL: Biocontrol is not available. A combination of burning, herbicide and reseeding offers the best control. For the best results, this should be done in fall through early winter. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Class A Weeds (EDRR)

Oxeye Daisy

Chrysanthemum leucanthemum L.

BACKGROUND: This native of Europe survives in a wide range of environments. It is prevalent on poor soils, tolerates cold conditions and survives drought well. Often found in meadows, roadsides, waste areas, grasslands, or overgrazed pastures.

OTHER COMMON NAMES: Marguerite, moon-daisy

DESCRIPTION: This perennial, rhizomatous herb grows 1 to 3 feet tall. Leaves are lance-shaped with coarse teeth. Flowers range in diameter from 1 to 2.2 inches and blossoms usually appear from June to August. The plant has a disagreeable odor if crushed. Although not toxic, it can give milk an off-flavor if consumed by dairy cattle. It grows in patches and can spread vegetatively and by seed. Oxeye daisy is often confused with members of the Aster genus; however, the coarse teeth on the leaf margins differentiate it from asters.

CONTROL: Biocontrol is not available. Cultivation is effective. Maintaining a dense crop canopy is effective in stopping establishment. Several herbicides are effective in controlling oxeye daisy. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Class A Weeds (EDRR)

Purple Loosestrife

Lythrum salicaria

BACKGROUND: Purple loosestrife is a European plant probably introduced to the United States as an ornamental. It reproduces by both seed and creeping rootstocks. Infestations can impede water flow and replace beneficial plants and thus, displace wildlife. It can be found in shallow marshy wetland areas and ditches.

OTHER COMMON NAMES: Purple lythrum.

DESCRIPTION: Purple loosestrife is a semi-aquatic perennial growing 6 to 8 feet tall. There are 5 to 7 petals on rose-purple flowers that appear in columns along the upper end of stems. Leaves are lance shaped with smooth margins up to 5 inches long. Bloom is in midsummer.

CONTROL: Biocontrol is limited in availability but control can be good to excellent. Herbicides with an aquatic label can offer fair to good control. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Class A Weeds (EDRR)

St. Johnswort

Hypericum perforatum

BACKGROUND: St. Johnswort was introduced from Europe. It invades areas with sandy or gravelly soils. Reproduction is by seeds and short runners. It contains a substance that is toxic (but rarely fatal) to white-haired animals causing them to develop skin irritations and often lose weight when exposed to sunlight. It is also a key ingredient of some popular dietary supplements.

OTHER COMMON NAMES: Klamath weed

DESCRIPTION: This perennial grows 1 to 3 feet tall. Stems are rust colored and woody at the base. Leaves are characterized by prominent veins and transparent dots, visible when held up to light. The flowers are bright yellow with 5 petals.

CONTROL: Several biocontrol agents are available and can offer good to excellent control. Herbicides can offer good control when applied to actively growing plants between rosette and pre-bloom stages. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Spotted Knapweed

Centaurea maculosa

BACKGROUND: Originally found in Eurasia, spotted knapweed infests rangeland, pastures, roadsides, or any disturbed soils. Knapweeds release chemical substances into the soil that inhibit the growth of competing vegetation.

DESCRIPTION: Spotted knapweed is a short-lived perennial 1 to 3 feet tall. The rosette leaves are deeply lobed and may be 6 inches in length. The stems are moderately leaved. Flowers are typically pink with spots on the flower bracts. Bloom is in early summer.

CONTROL: Several biocontrol agents are available and offer fair to good control. Select herbicides can offer good to excellent control when applied between rosette and pre-bud stages. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Sulfur Cinquefoil

Potentilla recta L.

BACKGROUND: Sulfur cinquefoil is native to Eurasia. It invades pastures, shrub dominated areas, rights-of way and waste areas. It often out-competes desirable vegetation dominating areas that are unmanaged. Due to a high tannin content it is not palatable to livestock or wildlife.

OTHER COMMON NAMES: Erect cinquefoil

DESCRIPTION: This perennial grows from 1 to 3 feet tall and may have some branching near the top. Single or multiple stems sprout from a woody crown. Long stiff hairs on the stems and the leaves stick straight out. Plants may reproduce and spread vegetatively and by seed. It sprouts in early spring and flowers from May to July. Leaves have distinctly toothed edges and there are usually 5-7 leaflets per leaf. Flowers are pale yellow and they contain 5 heart-shaped petals.

CONTROL: Cultivation associated with annual cropping controls this weed. Hand pulling or digging is effective if the entire root crown is removed. Mowing is not effective. Several herbicides are effective. There are no known successful biological control agents. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Yellow Starthistle

Centaurea solstitialis

BACKGROUND: Yellow starthistle was introduced from Europe. It grows well on dry sites in rangeland, roadsides and waste areas. It can cause "Chewing disease" in horses that consume it.

DESCRIPTION: Yellow starthistle is a 2 to 3 foot tall winter annual with blue-green coloration. Rosette leaves are deeply lobed and could be confused with dandelion. Stems are sparsely leaved and heavily ridged. Flowers are yellow. Cream-colored thorns, 1/4 to 3/4 inch long, protrude from the flowering heads. Bloom is in early summer.

CONTROL: Several biocontrol agents have been tested but availability is limited. Select herbicides offer fair to good control when applied between rosette and bloom stages. Tillage is effective. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Yellow Toadflax

Linaria vulgaris

BACKGROUND: Yellow toadflax came from Eurasia. It is an aggressive invader of rangeland, roadsides, field edges and waste areas. An extensive root system makes this weed difficult to control. It reproduces by seeds and roots.

OTHER COMMON NAMES: Butter and eggs, toadflax

DESCRIPTION: This perennial weed grows to 2 feet tall. Leaves are 2 and 1/2 inches in length, narrow and pointed. Flowers are about 1 inch long, yellow with an orange throat and have long tails. They look similar to snap dragon flowers. Bloom is in late spring into summer. Fruits are small, 1/4 inch, 2-celled, berry-like capsules containing many seeds.

CONTROL: A few biocontrol agents are available and offer fair control. Herbicides can offer good control. Contact your state or county weed specialist for specific, updated information.

Class A Weeds (EDRR)

Class B Weeds (Control)

Bermudagrass*

Cynodon dactylon

BACKGROUND: Bermudagrass probably came from Africa. It prefers warmer regions, but it is becoming established in cooler regions as well. It is posing a serious threat to crop production and turf management. It reproduces by seed, rhizomes and lateral stolons, taking root at any node.

DESCRIPTION: It is a low-growing and sod-forming perennial grass with stolon's creeping along the ground and upright stems about 12 inches tall. Seedheads have 3 to 7 terminal spikes, each about 2 inches in length.

CONTROL: Biocontrol is not available. Herbicides can offer fair to good control. Tillage should not be used as a control. Contact your state or county weed specialist for specific, updated information.

**Bermudagrass is exempt from noxious weed classification in Washington County.*

Class B Weeds (Control)

Class B Weeds (Control)

Dalmatian Toadflax

Linaria genistifolia

BACKGROUND: Dalmatian toadflax was brought to the United States from Europe, probably for ornamental purposes. It prefers rangeland and roadside habitat with sandy soils. It is very aggressive and hard to control due to deep roots and a thick, waxy leaf cuticle. It reproduces by seed and rootstock.

DESCRIPTION: This perennial weed grows from 2 to nearly 4 feet tall. Multiple stems may come from the base. Blue-green leaves line the stem in alternate fashion. Leaves are wedge shaped, have a thick waxy cuticle and partially clasp the stem. Flowers are yellow and may have white highlights and have long tails appearing similar to snap dragon flowers. Bloom is in late spring into summer. Fruits are 2 celled berry-like capsules containing many seeds.

CONTROL: Biocontrol is available and offers fair control. Select herbicides can offer good control when applied from spring through fall. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Dyer's Woad

Isatis tinctoria

BACKGROUND: Dyer's woad was introduced from Europe for production of textile dyes. It thrives in waste areas, gravel pits, road sides, pastures, field edges and disturbed soils.

OTHER COMMON NAMES: Woad

DESCRIPTION: Dyer's woad may be a winter annual, biennial, or a short-lived perennial. Heights of 1 to 4 feet are common. A thick tap root may penetrate to 5 feet deep. Leaves are blue-green with a whitish midrib. The bright yellow flowers bloom and are highly visible in late spring. Club-shaped seed pods each produce a single seed. As the fruits mature, they turn from green to dark brown or nearly black.

CONTROL: Biocontrol rust fungus is naturally wide spread and other agents are currently undergoing research. Rust infected plants will have yellowish, puckered leaves with dark spots on the underside. Herbicides can offer good to excellent control when applied to rosettes in spring and fall and during pre-bloom. Digging offers good control. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Class B Weeds (Control)

Hoary Cress

Cardaria draba

BACKGROUND: This plant originated in Europe. It reproduces by root segments and seed. It is commonly found on disturbed sites along road ways, field edges and excavations. It is also a widespread weed of grain fields, cultivated fields and meadows. It grows particularly well on somewhat salinic soils.

OTHER COMMON NAMES: Small whitetop, whitetop

DESCRIPTION: Hoary cress is a perennial plant, commonly 1 to 2 feet tall, with creeping rootstocks. Leaves are finely toothed. Upper leaves clasp the stem. Bloom is in late spring with clusters of white flowers, each flower containing 4 petals. Seed pods are heart shaped and contain 2 brownish seeds.

CONTROL: Biocontrol research is in the early stages. Select herbicides can offer fair to good control when applied from rosette to early bloom stages. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Musk Thistle

Carduus nutans

BACKGROUND: Native to southern Europe and western Asia, musk thistle thrives in pastures and range lands, in waste areas, stream banks and road sides.

OTHER COMMON NAMES: Nodding thistle

DESCRIPTION: Musk thistle is a biennial or winter annual. 4 to 6 foot tall plants are common. Deeply lobed leaves are distinguished by a dark green blade with a prominent light green midrib. Flowers may be violet, purple, or rose colored. Flowers are typically "nodding" or bent over. Ends of stems supporting flowers are often nearly leafless. Bloom is in June and July.

CONTROL: Several biocontrol agents are available and offer good control. Herbicides can offer good to excellent control when applied between rosette and pre-bud stages. Mechanical means can be used for control by chopping the plant off at the ground. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Perennial Pepperweed

Lepidium latifolium

BACKGROUND: Native to southern Europe and western Asia, perennial pepperweed is commonly found in wet drainage areas of waste areas, ditches, roadsides and crop lands.

OTHER COMMON NAMES: Tall whitetop, broad-leaved peppergrass

DESCRIPTION: Perennial pepperweed grows from 1 to 6 feet high. It has spreading lateral rootstocks. Leaves have smooth to lightly toothed margins. Stems and leaves are waxy. White flowers form dense clusters at the end of branches. Flowering takes place from summer into early fall.

CONTROL: Biocontrol research is in early stages. Select herbicides can offer fair to good control when applied to actively growing plants up to pre-bloom. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Class B Weeds (Control)

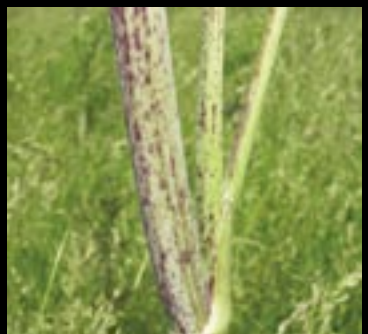
Poison Hemlock

Conium maculatum

BACKGROUND: Poison hemlock is a European native, growing 6 to 10 feet tall. It is commonly found along waterways, roadsides and field edges and tolerates poorly drained soils. It has been mistaken for parsley and wild carrot. All parts of the plant are toxic.

DESCRIPTION: This biennial has a large taproot. The stems have purple spots, especially at the bases. Leaves are finely divided, having a fern-like appearance. Leaf stems clasp the main stem. The tiny flowers are in umbrella-shaped clusters on the ends of individual stalks. Bloom is late spring into early summer.

CONTROL: Biocontrol is available and offers fair to good control. Herbicides can offer excellent control when applied to actively growing plants between rosette and bloom stages. Contact your state or county weed specialist for specific, updated information.



Class B Weeds (Control)

Class B Weeds (Control)

Russian Knapweed

Centaurea repens

BACKGROUND: Russian knapweed is native to Eurasia. It infests rangelands, field edges, pasture, roadsides and other disturbed soils. Knapweeds release chemical substances into the soil that inhibit the growth of competing vegetation. It can cause "Chewing disease" in horses that consume it.

DESCRIPTION: A perennial, Russian knapweed grows 2 to 3 feet tall. Roots may go 8 feet deep or more. Basal leaves are lobed and are 2 to 4 inches in length. It has pinkish flowers. Flower bracts have membranous cream-colored tips. Bloom is early summer through late summer.

CONTROL: Biocontrol is available, but limited. Select herbicides can offer good to excellent control when applied between pre-bloom to the killing frost. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Scotch Thistle

Onopordum acanthium

BACKGROUND: Scotch thistle is native to Europe and eastern Asia. It grows well in waste areas, pastures, range land and along canal and stream banks.

OTHER COMMON NAMES: Cotton thistle

DESCRIPTION: This biennial plant commonly grows 3 to 8 feet tall, but it may grow as high as 12 feet. Rosettes may be 4 feet wide. Large spiny leaves up to 2 feet long and 1 foot wide are covered with dense hair, giving a grayish, blue-green coloration. The flowers are violet to reddish with spine tipped bracts, blooming in mid-summer.

CONTROL: Biocontrol research is currently being conducted. Herbicides can offer good to excellent control when applied between rosette and pre-bud stages. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Squarrose Knapweed

Centaurea virgata

BACKGROUND: Squarrose knapweed is a native plant of the eastern Mediterranean area. It is very competitive on rangelands. Knapweed releases a chemical substance reducing competing vegetation.

DESCRIPTION: This long-lived perennial grows 12 to 18 inches tall. The rosette and stems have deeply-lobed leaves. Flowers are rose to pink. It is often confused with diffuse knapweed, but differs in that the toothed flower bracts are curved outward and are not laterally toothed. Bloom occurs in early to mid-summer.

CONTROL: Several biocontrol agents are available. Herbicides offer good to excellent control. Contact your state or county weed specialist for specific, updated information.

Class B Weeds (Control)

Class C Weeds (Containment)

Canada Thistle

Cirsium arvense

BACKGROUND: A native to southeastern Eurasia, Canada thistle reproduces by seeds and rootstock. It is adaptable to a diverse range of habitats.

OTHER COMMON NAMES: California thistle, field thistle

DESCRIPTION: Canada thistle is a perennial plant usually from 1 to 4 feet tall, in sparse to extremely dense colonies. Leaves have spiny tipped lobes. Flowerheads are softly spined, light pink to purple and are typically 3/4 inch in diameter. Bloom occurs in July and August.

CONTROL: Several biocontrol agents are available offering fair control. Herbicides can offer good control when applied to actively growing plants from spring to fall. As with most creeping perennials, digging or tillage is generally not effective. Contact your state or county weed specialist for specific, updated information.

Class C Weeds (Containment)

Field Bindweed

Convolvulus arvensis

BACKGROUND: This European native reproduces from both seed and rootstock. Seeds may remain viable in the soil for up to 50 years. It grows in fields, pastures, gardens, road sides and many other areas. It may be found in areas up to 10,000 feet in elevation.

OTHER COMMON NAMES: Morningglory, bindweed, wild morning-glory

DESCRIPTION: Field bindweed is a perennial with stems up to 6 feet long growing prostrate, or it may climb nearby vegetation. The root system may grow to a depth of 10 feet or more. Arrow-shaped leaves are up to 2 inches long. Flowers are funnel shaped, white to pink and 1 inch wide. Bloom is from June through September.

CONTROL: Biocontrol is not available. Several herbicides offer good control when applied from late spring to the killing frost. Contact your state or county weed specialist for specific, updated information.

Class C Weeds (Containment)

Houndstongue

Cynoglossum officinale

BACKGROUND: Houndstongue is a native of Europe. It thrives in disturbed soils along roadsides, trails, in pastures and rangelands. Because of the bur-like seed, it spreads widely along travel corridors as a passenger on clothing or animal fur. It is toxic to livestock.

DESCRIPTION: Houndstongue is a 1 to 4 foot tall biennial. Basal leaves are about 3 inches wide with a hairy surface. Upper leaves are narrower, about 1 inch wide and have a curled appearance and partially clasp the stem. Small reddish purple flowers form in the upper portions of the plant along stems borne in leaf axils. Each flower produces 4 green, bur-like fruits that turn brown as they mature. Bloom is in early summer.

CONTROL: Biocontrol is not available. Herbicides can offer good to excellent control when applied between the rosette and bloom stages. Digging before seed development can offer good control. Contact your state or county weed specialist for specific, updated information.

Class C Weeds (Containment)

Quackgrass

Elytrigia repens

BACKGROUND: Originally found in the Mediterranean area, quackgrass infests crops, rangeland, pasture and lawns. It adapts well to moist soils in cool, temperate climates. It reproduces by seed and rhizomes. These rhizomes can penetrate hardened soils and even roots of other plants.

DESCRIPTION: This perennial grass usually grows 1 to 3 feet tall. Rhizomes are creamy colored and pointed. Leaf blades are up to a half inch wide. Near the tip of the leaves a band-like constriction may be present. Seedheads are 3 to 4 inches long and narrow.

CONTROL: Biocontrol is not available. Herbicides can offer good control when applied from early spring to winter. Contact your state or county weed specialist for specific, updated information.

Class C Weeds (Containment)

Saltcedar

Tamarix ramosissima

BACKGROUND: Saltcedar was introduced from Eurasia and is found throughout the United States. It is widely used as an ornamental. It commonly infests lake and stream banks as well as pastures and rangeland. Large plants can transpire 200 gallons of water per plant per day, drying up ponds and streams.

OTHER COMMON NAMES: Tamarisk, tamarik, tamarix

DESCRIPTION: This perennial plant grows 5 to 20 feet tall. Stems are reddish-brown. Leaves are small and scale-like. Branches are long and slender. White to pink flowers have 5 petals and are borne in finger-like clusters. The root system is extensive. Saltcedar may exhibit either deciduous or evergreen traits.

CONTROL: Biocontrol is available but is still undergoing testing. Select herbicides can offer excellent control when applied in late summer through early fall. Contact your state or county weed specialist for specific, updated information.

Class C Weeds (Containment)

County Weed Control Offices

Beaver
105 E. Center
Beaver, UT 84713
(435) 438-6461

Box Elder
5730 W. 8800 N.
Tremonton, UT
84337
(435) 279-5258

Cache
527 N. 1000 W.
Logan, UT 84321
(435) 755-1562

Carbon
120 E... Main St.
Price, UT 84501
(435) 636-3270

Daggett
95 N. 100 W.
P.O. Box 219
Manila, UT 84046
(435) 784-3218

Davis
1500 E.. 650 N.
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References

Albee, B. J., L. M. Shultz, and S. Goodrich, 1988.
Atlas of the Vascular Plants of Utah. Utah Museum of Natural History Occasional Publication No. 7, 670 pp.

Callihan, R. H., and T. W. Miller, 1994.
Idaho's Noxious Weeds. Agricultural Communications Center, University of Idaho. 74 pp.

Holmgren, A. H. and B.A. Andersen, 1970.
Weeds of Utah. Utah Agricultural Experiment Station - Special Report 21. 115 pp.

State of Utah, county weed control yearend reports. 1996, 1998, 1999, 2001, 2002, 2003.

Whitson, T. D., R. Stougaard, S. A. Dewey, et al., 1999.
Montana - Utah - Wyoming Cooperative Extension Services 1999 - 2000 Weed Management Handbook. Cooperative Extension Service. iv, v, 291 pp.

Whitson, T. D. et al., 2000.
Weeds of the West. 9th Edition. The Western Society of Weed Science. 630 pp.

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