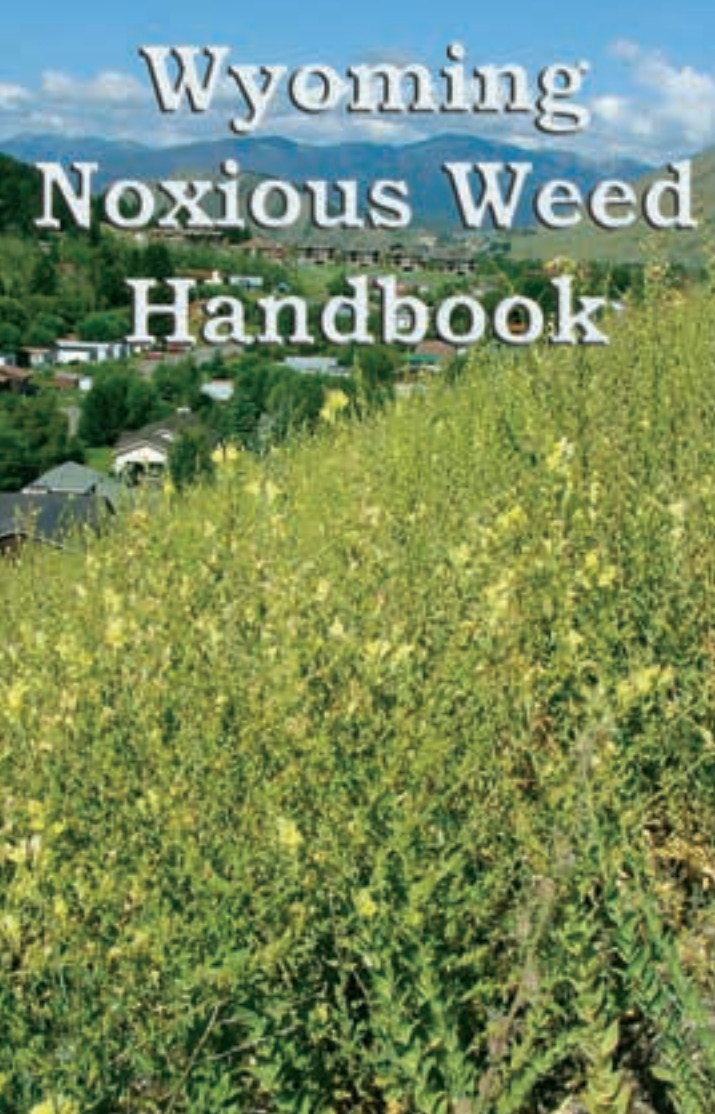




Wyoming Noxious Weed Handbook



Oxeye daisy infestation.

The rich varieties of habitats found throughout the State of Wyoming are treasured by residents and visitors alike. All of us depend on healthy livestock, soils and wildlife which require healthy native plant communities. These native communities are threatened by invasive noxious weeds and pests, which if left unchecked could transform an entire ecosystem and everything that depends on it. Future generations are counting on us to protect and preserve our natural resources. Learn more and help us keep Wyoming naturally beautiful!

The Wyoming Weed and Pest Council has been working to control invasive species since 1973. This publication and other resources are available through the Wyoming Weed and Pest Council, www.wyoweed.org, (307) 733-8419.

Cover photo: Teton County Weed & Pest - Dalmatian toadflax.
This book contains many photos from ***Weeds of the West*** and www.weedimages.org

HELP US KEEP WYOMING NATURALLY BEAUTIFUL

Play Clean Go

Help Prevent The Spread Of Invasive Plants And Animals

- REMOVE plants, animals & mud from boots, gear, pets & vehicles.
- CLEAN your gear before entering & leaving the recreation site.
- STAY on designated roads & trails.
- USE CERTIFIED hay & local firewood.

The PlayCleanGo campaign is a preventative outreach message that is meant to help elevate the issue of invasive species on a nation-wide scale. The intent is to provide outdoor enthusiasts with a clear call to action to become attentive and accountable for helping stop the spread of invasive plants, animals, insects, and pathogens.



Table of Contents

Common Name	Latin Name	Page
-------------	------------	------

White flowered weeds

Baby's breath	<i>Gypsophila paniculata</i> L.....	1
Black henbane	<i>Hyoscyamus niger</i> L.	3
Diffuse knapweed	<i>Centaurea diffusa</i> Lam.....	5
Field bindweed	<i>Convolvulus arvensis</i> L.	7
Field dodder	<i>Cuscuta pentagona</i> Engelm.var. pentagona	9
Hoary cress (Whitetop)	<i>Lepidium draba</i> L.	11
Oxeye daisy	<i>Leucanthemum vulgare</i> Lam.	13
Perennial pepperweed	<i>Lepidium latifolium</i> L.	15
Poison hemlock	<i>Conium maculatum</i> L.....	17
Scentless chamomile	<i>Tripleurospermum perforata</i> (Merat) M. Lainz.....	19

Yellow flowered weeds

Absinth wormwood	<i>Artemisia absinthium</i> L.....	21
Austrian fieldcress	<i>Rorippa austriaca</i>	23
Buffalobur	<i>Solanum rostratum</i> Dun.....	25
Common St. Johnswort	<i>Hypericum perforatum</i> L.	27
Common mullein	<i>Verbascum thapsus</i> L.	29
Common tansy	<i>Tanacetum vulgare</i> L.	31
Dalmatian toadflax	<i>Linaria dalmatica</i> (L.) Mill.....	33
Dyer's woad	<i>Isatis tinctoria</i> L.	35
Leafy spurge	<i>Euphorbia esula</i> L.	37
Meadow hawkweed	<i>Hieracium caespitosum</i> Dumort..	39
Moth mullein	<i>Verbascum blattaria</i> L.	41
Perennial sowthistle	<i>Sonchus arvensis</i>	43
Puncturevine	<i>Tribulus terrestris</i> L.....	45
Rush skeletonweed	<i>Chondrilla juncea</i> L.	47
Russian olive	<i>Elaeagnus angustifolia</i> L.	49
Skeletonleaf bursage	<i>Ambrosia tomentosa</i> Nutt.	51
Sulfur cinquefoil	<i>Potentilla recta</i> L.	53
Tall buttercup	<i>Ranunculus acris</i> L.	55
Tansy ragwort	<i>Senecio jacobaea</i> L.....	57
Yellow toadflax	<i>Linaria vulgaris</i> L.	59
Yellow starthistle	<i>Centaurea solstitialis</i> L.....	61

Table of Contents

Common Name	Latin Name	Page
-------------	------------	------

Orange flowered weeds

Orange hawkweed	<i>Hieracium aurantiacum</i> L.	63
-----------------	---	----

Purple flowered weeds

Bull thistle	<i>Cirsium vulgare</i> (Savi) Tenore	65
Canada thistle	<i>Cirsium arvense</i> L.Scop.	67
Common burdock	<i>Arctium minus</i> (Hill) Bernh.	69
Common crupina	<i>Crupina vulgaris</i> Cass.	71
Common teasel	<i>Dipsacus fullonum</i> L.	73
Dames rocket	<i>Hesperis matronalis</i> L.	75
Field scabious	<i>Knautia arvense</i>	77
Houndstongue	<i>Cynoglossum officinale</i> L.	79
Meadow knapweed	<i>Centaurea pratensis</i>	81
Musk thistle	<i>Carduus nutans</i> L.	83
Plumeless thistle	<i>Carduus acanthoides</i> L.	85
Purple loosestrife	<i>Lythrum salicaria</i> L.	87
Russian knapweed	<i>Acroptilon repens</i> (L.) DC.	89
Saltcedar (Tamarix)	<i>Tamarix</i> spp.	91
Scotch thistle	<i>Onopordum acanthium</i> L.	93
Spotted knapweed	<i>Centaurea stoebe</i> spp <i>micranthos</i>	95
Squarrose knapweed	<i>Centaurea virgata</i> L.	97

Green Weeds & Grasses

Cheatgrass	<i>Bromus tectorum</i> L.	99
Common cocklebur	<i>Xanthium strumarium</i>	101
Halogeton	<i>Halogeton glomeratus</i> (Stephen ex Bieb) C.A. Mey	103
Jointed goatgrass	<i>Aegilops cylindrica</i> Host.	105
Medusahead	<i>Taeniatherum caput-medusa</i> (L.) Nevski	107
Quackgrass	<i>Elymus repens</i> (L.) Gould.	109

Aquatic Weeds

Curly leaf pondweed	<i>Potamogeton crispus</i> L.	111
Eurasian watermilfoil	<i>Myriophyllum spicatum</i> L.	113
Flowering rush	<i>Butomus umbellatus</i>	115
Yellow flag iris	<i>Iris pseudacorus</i> L.	117



BABY'S BREATH **(*Gypsophila paniculata* L.)**

GROWTH HABIT: deep-rooted perennial **growing 3-4 feet tall.**

LEAVES: narrowly lanceolate, **growing opposite up the slender stem.**

STEMS: slender, erect, swollen at nodes.

FLOWER: **panicle-like, numerous white flowers, 6-8mm wide.**

ROOTS: deep-rooted to 13 feet.

SEEDS: black seeds that are **1.5 to 2 mm long.**

OTHER: introduced as an ornamental.

Photos by Steve Dewey, Teton County Weed & Pest





BLACK HENBANE **(*Hyoscyamus niger* L.)**

GROWTH HABIT: Erect, bushy, annual or biennial.

Reproduces by seed only.

LEAVES: Alternate, coarsely toothed, shallowly lobed, **very hairy. Foliage has a foul odor.**

STEMS: Erect, branched, 1-3 feet tall.

FLOWER: Large, 1-2 inches in diameter, **brownish-yellow with a purple center and purple veins.** Flowers from upper leaf axils.

ROOTS: Medium taproot.

SEEDS: Tiny, black; hundreds in 1 inch long **pineapple-shaped or vase-shaped seed capsules.**

OTHER: All parts of this plant are toxic.

Photos by Teton County Weed & Pest





DIFFUSE KNAPWEED **(*Centaurea diffusa* Lam.)**

GROWTH HABIT: Annual or biennial, bushy, up to 2 ft. tall. **Rosette formed first year, flowering stalk elongates second year.**

LEAVES: **Greyish-green**, alternate, basal leaves whorled, **upper leaves much reduced. Covered with fine hair.**

STEM: **Hairy**, erect, **single main stem** from a rootstock, branched near or above the base.

FLOWER: Solitary, usually white, sometimes pink, rose or lavender; **seedhead bracts end as sharp, rigid spines.**

ROOTS: Elongated taproot.

SEEDS: Oblong, dark brown or grey with **longitudinal lines.**

OTHER: May seriously reduce productive potential of infested rangelands.

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





FIELD BINDWEED **(*Convolvulus arvensis* L.)**

GROWTH HABIT: Perennial **vine**, reproducing from seeds and roots.

LEAVES: Alternate, simple, **arrowhead-shaped, rounded or blunt tipped.**

STEM: **Prostrate, twining mat-forming**, up to 10 ft. long.

FLOWER: **Funnel-shaped**, pale pink to white, up to 1 in. wide; **two small scale-like bracts** attached below flower on flower stem.

ROOTS: **Creeping rhizomes**, extensive.

SEEDS: Four per capsule, dark grey to reddish brown, three sided.

OTHER: Seeds viable over 60 years. **Often confused with wild buckwheat which has heart-shaped sharp pointed leaves and tiny inconspicuous flowers.**

Photos by Tom Whitson, Sublette County Weed & Pest





FIELD DODDER
**(*Cuscuta pentagona* Engelm. var.
pentagona)**

GROWTH HABIT: Native parasitic annual.

STEMS: Extensively branched, pale brown, Yellow or Orange in color due to lack of chlorophyll.

Thread like, counter clockwise twining with alternate leaves and 6.5 feet in length.

FLOWER: 4 or 5 lobes and somewhat globular, spherical, loose with a flat flower.

ROOTS: Penetrate soil until attaching to a green host plant.

OTHER: Parasitizes forage legumes and is toxic to bees.

PHOTOS BY ALAN POMEROY





HOARY CRESS (WHITETOP) (*Lepidium draba* L.)

GROWTH HABIT: Perennial herb, bolting to approximately 24" tall, forming a basal rosette, erect.

LEAVES: Alternate, lance-shaped and slightly irregular, **greyish-green, base of upper leaves clasping stem.**

STEMS: Stout, branched toward top.

FLOWERS: Small, white, 4 petals; numerous flower branches and dense flowers give plant a **dense, white, flat-topped appearance.**

ROOTS: **Extensive** horizontally, and vertically, **frequent shoots arising from root stocks.**

SEEDS: Reddish-brown, granular, egg-shaped, contained in heart-shaped pods.

OTHER: **Flowers early** (April and May), **reproduces by seeds, rootstocks and creeping roots.**

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





OXEYE DAISY **(*Leucanthemum vulgare* Lam.)**

GROWTH HABIT: Perennial, erect to 2 feet tall.

LEAVES: **Lower leaves** — lance-shaped, 2 to 5 inches long including short stalk, margins lobed or deeply parted. **Upper leaves** — lance-shaped, attached directly to stem, margins toothed.

STEMS: Numerous from root crown, terminating in flowers.

FLOWER: **Solitary, 1½ inches wide, numerous white petals and a yellow center.** Flowers June to August.

ROOTS: Fibrous.

SEEDS: Straw colored, 1/8 inch long.

OTHER: Eurasian introduction, escaped from cultivation.

Photos by Sublette and Teton County Weed & Pests





PERENNIAL PEPPERWEED (*Lepidium latifolium* L.)

GROWTH HABIT: Erect perennial, numerous stems, spreading by **seed and deep-seated rootstocks.**

LEAVES: Alternate, lance shaped, bright green to gray-green, waxy, smooth to toothed margins, basal leaves larger than upper leaves.

STEMS: Branched, smooth, waxy, 2-5 feet tall.

FLOWER: Raceme of **small white flowers in dense clusters near branch ends.**

ROOTS: Deep-seated and spreading.

SEEDS: Small, rounded, flattened, slightly hairy, $\frac{1}{16}$ inch long, reddish brown.

OTHER: Deep roots make it difficult to control.

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





POISON HEMLOCK **(*Conium maculatum* L.)**

GROWTH HABIT: Biennial, erect to 10 feet tall.

LEAVES: Shiny green, **fern-like**, finely divided 3 and 4 times. Lower leaves have long stalks clasping the stem. Upper leaves on short stalks. Musty odor.

STEMS: Stout, branched, **purple-spotted** with distinct ridges.

FLOWER: Numerous umbrella shaped **clusters of tiny white flowers** without sepals. Clusters supported by stalks whorled at branch terminals.

ROOTS: **Large white taproot.**

SEEDS: Paired, $\frac{1}{8}$ inch long, ribbed, concave, light brown.

OTHER: All parts are poisonous.

Photos by Roy Reichenbach, Steven Dewey





SCENTLESS CHAMOMILE (*Tripleurospermum perforata* (Merat) M. Lainz)

GROWTH HABIT: Annual, biennial, or perennial, **erect to 2 feet tall.**

LEAVES: Alternate, finely divided several times into **narrow segments.**

STEMS: Multi branched or branched toward the top.

FLOWER: **Daisy-like**, solitary, 1 to 1½ inches in diameter, **white petals** (ray flowers) with **yellow center** (disk flowers).

ROOTS: Taproot with many fibers but not creeping.

SEEDS: Achene, dark brown, slightly grooved.

OTHER: **Lacks odor** (not aromatic).

Photos by Sublette and Teton County Weed & Pests





ABSINTH WORMWOOD **(*Artemisia absinthium* L.)**

GROWTH HABIT: Erect, perennial, to 4 feet tall.

LEAVES: 1 to 3 inches long, **deeply dissected, covered with fine hair, a gray or silver color.**

STEMS: Erect, **covered with fine hairs.**

FLOWER: Small, yellow, in panicles toward top of plant.

ROOTS: Large, woody taproot.

SEEDS: Formed in late summer and fall.

OTHER: **Strong medicinal odor,** European origin.

Photos by Rod Lym & Roy Reichenbach





AUSTRIAN FIELDCRESS (*Rorippa austriaca*)

GROWTH HABIT: Perennial in the mustard family which **grows from 2-4 feet tall.**

LEAVES: Alternately, lower leaves with petioles and large lobed margins, middle to upper stem leaves have toothed to smooth margins.

STEMS: Upright stems are branched near the tips and usually hairless.

FLOWER: **Four yellow petals on a raceme.**

ROOTS: Taproots are deep, thick, and fleshy.

SEEDS: Globular seed pods that contain small, **reddish brown to black, rough seeds.**

OTHER: Reproduces by seed, creeping roots and from rootstalks.

Photos by Sublette and Teton County Weed & Pests





BUFFALOBUR **(*Solanum rostratum* Dun.)**

GROWTH HABIT: Annual, erect to 2 feet tall.

LEAVES: 2 to 5 inches long, **deeply lobed, covered with spines on the under side.**

STEMS: Covered with sharp spines.

FLOWER: **Yellow, 1 inch wide, 5 lobed,** bloom throughout the summer.

ROOTS: Taproot.

SEEDS: Numerous, small, black, wrinkled, flattened, **seeds in a spine covered capsule.**

OTHER: Native to U.S. on disturbed prairie and wastelands.

Photos by Roy Reichenbach, Sublette County Weed & Pest





COMMON ST. JOHNSWORT (*Hypericum perforatum* L.)

GROWTH HABIT: Perennial, erect, numerous branches.

LEAVES: **Opposite, attached directly to stem, 1 inch long, oblong, covered with transparent glands when held up to the light.**

STEMS: Woody at the base, 1 to 3 ft. tall, **rust colored**, with 2 ridges.

FLOWER: **Yellow, $\frac{3}{4}$ inch diameter, numerous in flat-topped clusters, 5 petals with numerous stamens.**

ROOTS: Branched and deep, some shallow and capable of sending up shoots.

SEEDS: Small, shiny black, with rough texture in a round, pointed, three-part seedpod.

OTHER: Contains a toxic substance which causes light-haired animals to become sensitive to sunlight.

Photos by Sublette and Teton County Weed & Pests





COMMON MULLIEN (*Verbascum thapsus* L.)

GROWTH HABIT: up to **7 feet tall biennial**, exists as basal rosette until producing a single tall flowering stem.

LEAVES: Oblong basal rosettes, extremely woolly.

STEMS: Large terminal flower spike.

FLOWER: **Sulfur yellow with five petals** and grow on large terminal spikes.

ROOTS: Deep taproot.

SEEDS: **One plant can produce over 100,000 seeds** and persist up to 100 years.

OTHER: Unpalatable to livestock due to woolly leaves.

Photos by Teton County Weed & Pest





COMMON TANSY (*Tanacetum vulgare* L.)

GROWTH HABIT: Perennial, erect, **bushy**, up to 6 feet tall.

LEAVES: **Dark green**, alternate, deeply divided into numerous narrow, toothed leaflets (**fern-like**).

STEMS: **Often purplish-red in color.**

FLOWER: **Yellow, button-like, without petals, 1/2 inch across in flat topped dense clusters.**

ROOTS: Reproduces from roots.

SEEDS: Yellowish brown with short 5 toothed crown.

OTHER: Escaped European aromatic ornamental and medicinal plant.

Photos by Steven Dewey, Sublette and Teton County Weed & Pests





DALMATIAN TOADFLAX (*Linaria dalmatica* (L.) Mill.)

GROWTH HABIT: Perennial, often over 3 ft. tall, erect.

LEAVES: Light green, alternate, **broad, heart-shaped**, clasping the stem.

STEM: Branching, light green, smooth and **leafy**.

FLOWERS: Snapdragon type, **bright yellow**, tinged with orange, $\frac{3}{4}$ to $1\frac{1}{2}$ " **long spur**, born in upper leaf axils.

ROOTS: Vigorous, deep and extensive, **creeping roots**.

SEEDS: Numerous, irregularly angled.

OTHER: Spread by seed and creeping roots.

Photos by Teton County Weed & Pest





DYER'S WOAD (*Isatis tinctoria* L.)

GROWTH HABIT: Biennial or perennial up to 3 ft. tall. Spreads by seed. **Rosette formed 1st year, flowering stem elongates 2nd year.**

LEAVES: Basal rosette leaves are long with soft fine hairs. Stem leaves alternate, **have short basal lobes clasping the stem** and without hair.

STEMS: Woody, upper portion is branched.

FLOWERS: **Small, yellow**, 4 petals $\frac{1}{8}$ -inch across.

SEEDS: Plant has many, slightly pear-shaped, winged, **black seed pods $\frac{1}{2}$ " long** that hang like ornaments. Each pod contains one seed.

OTHER: Formerly cultivated in Europe as a source of blue dye.

Photos by Roy Reichenbach, Sublette and Teton County Weed & Pests





LEAFY SPURGE (*Euphorbia esula* L.)

GROWTH HABIT: Perennial, erect, up to 3' tall, spreading by seed or **creeping roots**.

LEAVES: Alternate, **long, narrow**, 1/4" wide and 2" long, usually drooping.

STEMS: Branched near top, hairless, **entire plant contains milky sap**.

FLOWERS: Inconspicuous, surrounded by **large heart shaped floral leaves** which turn **yellow-green** near maturity.

ROOTS: **Brown, numerous pink buds**, deep, spreading, very persistent.

OTHER: Grows in nearly all soil types and habitats. Seed is thrown to 20' by exploding seed capsule. Milky sap is a known irritant.

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





MEADOW HAWKWEED (*Hieracium caespitosum* Dumort)

GROWTH HABIT: Perennial, erect to 12 inches tall.

LEAVES: **Lance-shaped, hairy, leaves are basal, occasionally 1 to 2 small leaves on stem.**

STEMS: Erect, bristly, terminate in an umbel of flower.

FLOWER: 5 to 30 per plant, yellow petals.

ROOTS: Fibrous.

SEEDS: Each flower can produce 12 to 50 tiny black seeds, dispersed by wind.

OTHER: Entire plant contains a milky sap.

Photos by University of Idaho





MOTH MULLEIN (*Verbascum blattaria* L.)

GROWTH HABIT: 4 ft tall biennial, exists as basal rosette 16 inches in diameter.

LEAVES: **Irregularly toothed**, oblanceolate basal rosettes.

STEMS: Large terminal flower spike.

FLOWERS: **White to pale yellow flowers with five petals** and grow on large terminal spikes.

ROOTS: Deep taproot.

SEEDS: One plant can produce over 100,000 seeds and persist for 100 years.

OTHER: Unpalatable to livestock due to woolly leaves.

Photos by Theodore Webster, Lesley Ingram, Joseph DiTomaso





PERENNIAL SOWTHISTLE (*Sonchus arvensis* L.)

GROWTH HABIT: **Creeping-root perennial**, up to 5 ft. tall.

LEAVES: Alternate, lance-shaped and 2.5 – 12 inches long, with winged stalks and prickles on the margins.

STEMS: Branched only at the top.

FLOWER: **The flower is bright yellow** and resembles Dandelion flowers.

ROOTS: Extensive horizontal root system that grows up to 10 feet deep.

SEEDS: **Dark brown and prominently ridged.**

OTHER: Has a milky sap, evident when broken.

Photos by Michael Shephard, Sublette County Weed & Pest





PUNCTUREVINE **(*Tribulus terrestris* L.)**

GROWTH HABIT: Annual, **mat forming**, trailing stems to 5 feet long.

LEAVES: **Opposite, hairy, divided into 4 to 8 pairs of leaflets.** Oval leaflets $\frac{1}{4}$ to $\frac{1}{2}$ inch long.

STEMS: **Prostrate**, trailing, hairy, many branched from root crown.

FLOWER: **5 petals, yellow, in leaf axils, to $\frac{1}{2}$ inch wide.**

ROOTS: Fibrous.

SEEDS: Fruit break into 5 sections with 2 to 4 seeds per capsule. Capsules tack like structures with 2 sharp spines, **resembling the head of a goat.**

OTHER: Seeds have been known to puncture tires and cause injury to horses and livestock.

Photos by Steven Dewey, Roy Reichenbach





RUSH SKELETONWEED (*Chondrilla juncea* L.)

GROWTH HABIT: Perennial, erect to 4 ft. tall.

LEAVES: Basal rosette leaves - sharply toothed, lance-shaped (**dandelion like**). **Upper leaves** – inconspicuous, narrow, smooth margins.

STEMS: **Bottom 4 to 6 inches has numerous, red, downward bent coarse hairs.** Stems smooth above, many branched.

FLOWER: **Yellow, 3/4 inch wide**, scattered on branches. 7 to 15 strap-shaped petals are flat across the end terminating with distinct lobes or teeth.

ROOTS: Extensive and deep.

SEEDS: Pale brown to black, 1/8 inch long, several ribbed, smooth below with tiny scale projections above, terminated by a long beak with numerous soft white bristles.

OTHER: Introduced from Eurasia.

Photos by Tom Whitson, Teton County Weed & Pest





RUSSIAN OLIVE **(*Elaeagnus angustifolia* L.)**

GROWTH HABIT: Introduced deciduous perennial shrub or small tree.

LEAVES: Silvery, linear, 2-4 inches long, covered with scale-like stellate pubescence.

STEM: Reddish brown with woody thorns. Twigs are flexible, with gray coated scaly pubescence.

FLOWER: Yellow, arranged in clusters.

SEEDS: Shaped like small olives. Young fruit are silvery turning tan or brown at maturity having 3-year viability.

OTHER: Tap-root with a well developed lateral root system. Aromatic plant.

Photos by Gary Stone





SKELETONLEAF BURSAGE **(*Ambrosia tomentosa* Nutt.)**

GROWTH HABIT: Perennial, bushy, **reproducing by seed and creeping rootstocks.**

LEAVES: Alternate, **under surface covered with minute white hairs. Upper surface smooth, green, oval to lance shaped, deeply segmented and coarsely toothed.**

STEMS: Branched, bushy, 4-18 inches tall.

FLOWER: Male flower clusters yellow, on solitary, elongated, terminal branches. Female flowers green, inconspicuous, formed in pairs in leaf axils below male flowers.

ROOTS: Extensive creeping rootstocks.

SEEDS: One or more achenes in a light brown bur with conical spines.

OTHER: Native plant of the plains region.

Photos by Tom Whitson, Roy Reichenbach





SULFUR CINQUEFOIL (*Potentilla recta* L.)

GROWTH HABIT: Erect, long-lived **perennial**, reproducing by seed, plant may form a ring of plants as the older center dies out and new stems grow on the outside edges.

LEAVES: Palmate compound, 7 leaflets, **coarse stiff hair on upper and lower surfaces**, yellowish green.

STEMS: One of several, 12 to 28 inches tall, branched near top, **covered with hairs**. **Numerous leaves along stem**, few from base.

FLOWER: $\frac{1}{2}$ to 1 inch in diameter, **pale yellow**, large yellowish green buds. Blooms late May and throughout summer.

ROOTS: Woody (No rhizomes).

SEEDS: Very tiny $\frac{1}{20}$ inch in diameter, rough.

OTHER: Forms dense monocultures, reduces grass production.

Photos by Celstine Duncan, Sublette County Weed & Pest





TALL BUTTERCUP **(*Ranunculus acris* L.)**

GROWTH HABIT: Perennial with fibrous roots **growing to 5 feet tall.**

LEAVES: One to three inches long, divided into three palmate lobes that are each divided into two or three segments.

STEMS: Hairy, hollow and leafy below.

FLOWER: **5 to 7 glossy yellow petals**, radial symmetry.

ROOTS: Cluster of fibrous roots.

SEEDS: **Seeds have a short-hooked beak at the tip** capable of being stuck in clothes or animal fur.

OTHER: Fresh buttercup plants are toxic to grazing animals, who can suffer from blisters, inflammation and diarrhea.

Photos by Teton County Weed & Pest





TANSY RAGWORT **(*Senecio jacobaea* L.)**

GROWTH HABIT: Biennial or short-lived perennial, erect, branched near top. **Reproduces by seed only.**

LEAVES: Alternate, **deeply lobed with irregular margins, terminal lobe larger than lateral ones**, cobwebby hairs in early growth stages.

STEMS: Simple, usually single, to 6 ft. tall.

FLOWER: **Flower heads yellow, numerous, in clusters, about 1 inch in diameter.**

ROOTS: Small to medium taproot.

SEEDS: Small, striped, with a protrusion at one end.

OTHER: **Toxic to cattle and horses producing irreversible liver damage.**

Photos by Tom Whitson, Roy Reichenbach





YELLOW TOADFLAX (*Linaria vulgaris* L.)

GROWTH HABIT: Perennial, often over 3 ft. tall.

LEAVES: **Long and narrow**, numerous, pale green, **smooth and pointed**, attached directly to the stem.

STEM: Smooth, erect and sometimes branched.

FLOWER: Snapdragon type, **1 to 1½ inches long with spur, bright yellow** with deep orange center.

ROOTS: Woody, vigorous, well branched with many laterals.

SEEDS: Round 1/2 inch in diameter, dark brown to black with a papery circular wing.

OTHER: **Spreads by seeds and creeping roots.**
Also called “Butter-and-eggs.”

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





YELLOW STARTHISTLE **(*Centaurea solstitialis* L.)**

GROWTH HABIT: **Annual**, erect, rigid branching stems.

LEAVES: **Basal leaves deeply lobed, upper leaves not lobed, small, sharply pointed.**

STEMS: Rigid, **covered with a cottony fiber**, to 30 inches tall, winged structures.

FLOWER: **Yellow, terminal, flower bracts are tipped with straw-colored, $\frac{3}{4}$ inch thorn.**

ROOTS: Taproot.

SEEDS: Smooth, light-colored, often darker mottled, $\frac{1}{8}$ inch long, notched just above the base.

OTHER: **Causes “chewing disease” in horses.**

Photos by Tom Whitson, Roy Reichenbach





ORANGE HAWKWEED (*Hieracium aurantiacum* L.)

GROWTH HABIT: Perennial, erect to 12 inches tall.

LEAVES: **Lance-shaped, hairy, leaves are basal, occasionally 1 to 2 small leaves on stem.**

STEMS: Erect, bristly, terminate, in an umbel of flower heads.

FLOWERS: 5 to 30 per plant, red-orange, petals with notched tips.

ROOTS: Fibrous.

SEEDS: Each flower can produce 12 to 50 tiny black seeds, dispersed by wind

OTHER: Entire plant contains a milky sap.

Photos by University of Idaho





BULL THISTLE **(*Cirsium vulgare* (Savi) Tenore)**

GROWTH HABIT: Biennial, erect, many spreading branches. **Rosette formed first year, flowering stem elongates second year.**

LEAVES: **Green, sparsely hairy, with short appressed prickles on the surface, cottony below.** Sharp spines on the margins.

STEMS: Stout, 2 ft. to 5 ft. tall with spiny wings from leaves.

FLOWERS: Terminal, more or less clustered, 1½ to 2 inches wide, flowers dark purple, bracts spine tipped.

ROOTS: Short fleshy taproot.

SEEDS: Straw colored, striped lengthwise with brown or black, a protrusion at one end.

OTHER: **Reproduce by seed only.**

Photos by Tom Whitson, Roy Reichenbach





CANADA THISTLE (*Cirsium arvense* (L.) Scop.)

GROWTH HABIT: Perennial, erect, up to 4 ft. tall.

LEAVES: Varies from **light to dark green, oblong or lance shaped**, deeply cut, spiny toothed margins (some may be smooth); slightly hairy below. Tremendous leaf variability.

STEMS: Smooth to **slightly hairy**, branched at top.

FLOWER: **Small bristly clusters**, $\frac{3}{8}$ to $\frac{5}{8}$ inch in **diameter**, light lavender to deep rose purple. Plants are male or female.

ROOTS: Extensive, fleshy, **creeping rootstocks**.

SEEDS: Smooth, light to dark brown, tipped by a cupped conical point, approx. $\frac{1}{8}$ " long.

OTHER: Reproduces by seed and creeping rootstocks.

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





COMMON BURDOCK (*Arctium minus* (Hill) Bernh.)

GROWTH HABIT: Biennial, reproducing by seed only. **Rosette formed 1st year, flowering stalk elongates 2nd year.**

LEAVES: Hairy, alternate; **BASAL** — large, heart-shaped, **rhubarb-like**; **UPPER** — more oval shaped. **Dull green above, greyish underneath.**

STEMS: Rough, hairy, **somewhat grooved**, often grows over 5 ft. tall.

FLOWERS: Numerous, to 1" broad, clustered, **purple**, seedheads covered with **hooked spines**, **forming a bur at maturity.**

ROOTS: Large fleshy **taproot.**

SEEDS: Rough, mottled brown, somewhat flattened, slightly ridged.

OTHER: Common burdock thrives in shade and most fertile soils.

Photos by Tom Whitson, Roy Reichenbach





COMMON CRUPINA (*Crupina vulgaris* Cass.)

GROWTH HABIT: Winter annual, erect to 3 feet tall.

LEAVES: Rosette leaf margins smooth to slightly toothed, cotyledons have a red to purple midrib. Mature plant leaves alternate, attached directly to stems, **deeply lobed or dissected with margins containing short stiff spines.**

STEMS: Stiff, terminating in one to several flowering branches.

FLOWER: 1 to 5 heads per branch, **narrow, cylindrical, pink, lavender or purple.** Flower in June and July.

ROOTS: Taproot.

SEEDS: Oblong with a ring of dark stiff bristles encircling the broad end of the seed.

OTHER: Found in rangeland and disturbed non-crop areas.

Photos by Larry Burrill, Cindy Roché





COMMON TEASEL (*Dipsacus fullonum* L.)

GROWTH HABIT: A tap-rooted biennial that **commonly grows 6 feet tall.**

LEAVES: Long leaves with spines on midrib.

STEMS: Sharp spines on its stems.

FLOWER: **Light purple and occurs in dense,** protected clusters, egg-shaped 2 inches or longer.

ROOTS: Deep taproot.

SEEDS: One plant can produce over 2,000 seeds.

OTHER: Prolific seed producer.

Photos by Teton County Weed & Pest, John Randell





DAMES ROCKET **(*Hesperis matronalis* L.)**

GROWTH HABIT: Short-lived perennial, growing to 4 feet tall.

LEAVES: Alternate, lance shaped with toothed margins.

STEMS: Erect

FLOWER: Purple to white 2cm across, with four petals.

ROOTS: Aggressive root system.

SEEDS: Prolific seed producer.

OTHER: Quickly forms dense stands.

Photos by Teton County Weed & Pest





FIELD SCABIOUS (*Knautia arvensis*)

GROWTH HABIT: Tap-rooted perennial that **reproduces entirely by seed and grows 2-5 feet tall.**

LEAVES: One to three inches long, divided into three palmate lobes that are each divided into two or three segments.

STEMS: Erect covered in stiff hairs.

FLOWER: **Clover-like flowers are light purple** and occur terminally, each stem producing a single flower.

ROOTS: Woody, branched taproot.

SEEDS: Prolific seed producer.

OTHER: Prefers loose, loam soils that are nutrient rich.

Photos by Sublette and Teton County Weed & Pests





HOUNDSTONGUE **(*Cynoglossum officinale* L.)**

GROWTH HABIT: Biennial, spread by seed. **Rosette is formed on ground 1st year, flowering stalk elongates 2nd year.**

LEAVES: **Velvety** to touch. **Basal** – broad, lance-shaped. **Upper** – narrower, pointed, clasping stem.

STEMS: Heavy, erect, **usually branched above**, to 3' tall.

FLOWERS: **Dark red**, rarely white, $\frac{1}{4}$ " **diameter in terminal clusters.**

ROOTS: Taproot.

SEEDS: Fruit consists of 4 flattened bur-like nutlets, **each $\frac{1}{4}$ " long with short barbed appendages.**

OTHER: Burs attach to hair and fur of animals and are easily transported.

Photos by Roy Reichenbach, Sublette and Teton County Weed & Pests





MEADOW KNAPWEED (*Centaurea pratensis*)

GROWTH HABIT: Perennial, erect to 3½ ft. tall.

LEAVES: **Lower leaves** - long stalked, smooth margins, coarsely lobed or toothed. **Middle leaves** - without stalks, smooth or toothed margins. **Upper leaves** - much reduced and smooth margins.

STEMS: Stiff, many branched, **covered with fine hair.**

FLOWER: Large pink to purplish-red heads at the ends of branches. Bracts deeply fringed, light to dark brown.

ROOTS: Taproot.

SEEDS: 1/8 inch long tipped with a tuft of bristles.

OTHER: Roadsides, waste areas, fields, and pastures.

Photos by Cindy Roché





MUSK THISTLE **(*Carduus nutans* L.)**

GROWTH HABIT: Biennial, or winter annual, erect up to 7' tall. Freely branching. **Rosette formed 1st year, flowering stem elongates 2nd year.**

LEAVES: Dark green with light midrib, hairless on both sides, long sharp spines.

STEMS: Hairless.

FLOWER: Solitary, terminal, **nodding heads, 1½" to 3" in diameter, deep rose to violet to purple.**

ROOTS: Fleshy **taproot**, hollow near ground surface.

SEEDS: Can be in excess of 20,000 per plant with 90% viable. 90% may germinate in first two years. Seeds may germinate after 10 years in soil.

OTHER: **Reproduce by seed only.**

Photos by Sublette and Teton County Weed & Pests





PLUMELESS THISTLE **(*Carduus acanthoides* L.)**

GROWTH HABIT: Biennial, sometimes annual, erect, up to 8 ft. tall. **Rosette formed first year, flowering stem elongates second year.**

LEAVES: Dark green with a light midrib, hair only on the underside, leaf margin with sharp spines.

STEMS: To 4 ft. tall, erect, winged to flowering heads.

FLOWERS: Solitary, terminal or clusters of 2 to 5. Narrow seedhead bracts spine tipped. **Reddish-purple blooms 1/2 to 1 inch diameter.**

ROOTS: Stout, fleshy taproot.

SEEDS: Striped lengthwise, slightly curved, with a protrusion at one end.

OTHER: Reproduce by seed only.

Photos by Tom Whitson, Sublette County Weed & Pest





PURPLE LOOSESTRIFE (*Lythrum salicaria* L.)

GROWTH HABIT: Perennial, erect to 8 feet tall, associated with moist or marshy areas.

LEAVES: **Simple, lance-shaped, smooth margins, opposite or whorled.**

STEMS: Branched, terminating in flowering stalks.

FLOWER: **Rose-purple flowers** having 5 to 7 petals and numerous stamens, in **long, vertical racemes.**

ROOTS: Large, fleshy, adapted to aquatic sites.

SEEDS: Two-valved capsule, tiny as grains of sand.

OTHER: Dense infestations can impede water flow in canals and ditches.

Photos by Roy Reichenbach, Steven Dewey





RUSSIAN KNAPWEED **(*Acroptilon repens* (L.) DC.)**

GROWTH HABIT: Perennial herb, up to 3 ft. tall, erect, may be in dense clumps. Greyish color.

LEAVES: Alternate, simple, of **several types:**
Upper leaves – small, narrow, unbroken edge;
Stem leaves – intermediate in size, slight toothed margins; **Basal leaves** – deeply notched.

STEMS: Numerous branches, each ending with a single flower.

FLOWER: Single, **terminal, lavender, thistle like, scaly seed head.**

ROOTS: **Dark brown to black and heavily scaled.**

SEEDS: Flattened, ivory colored, **retained in cup-shaped seed heads.**

OTHER: Leaves and stems covered with short stiff hairs giving **plant an appearance of knap.** Spreads by seeds and creeping rootstocks.

Photos by Tom Whitson, Sublette County Weed & Pest





SALTCEDAR (TAMARIX) **(*Tamarix spp.*)**

GROWTH HABIT: Evergreen Shrub or small tree, up to thirty feet tall, spread by seed.

LEAVES: **Small scale like, resemble cedars,** salty residue that collects on foliage.

STEM: Numerous, slender, upright and highly branched, **smooth reddish brown bark,** become furrowed and ridged with age.

FLOWER: **Pink to white, five petaled.**

ROOTS: **Extensive,** crown to about 18 inches deep.

SEEDS: 500,000 seeds, small, **easily dispersed by wind.**

OTHER: Dependent on ground water, areas become dryer with long term occupation.

Photos by Margaret Reichenbach, Sublette County Weed & Pest





SCOTCH THISTLE (*Onopordum acanthium* L.)

GROWTH HABIT: Biennial, sometimes annual, erect, up to 8 ft. tall. **Rosette formed first year, flowering stem elongates second year.**

LEAVES: Large, coarsely lobed, **hairy on both sides, velvety gray appearance.** Margins lined with sharp conspicuous spines. Basal leaves up to 2 ft. long and 1 ft. wide.

STEMS: Erect, branching, **spiny leaf wings extend down onto stem,** covered with dense fine hairs.

FLOWER: Solitary, terminal, 1 to 2 inches in diameter, violet to reddish colored. Bracts spine tipped.

ROOTS: **Large fleshy taproot.**

SEEDS: Deep brown to black, distinctly wrinkled, $\frac{3}{16}$ " long.

OTHER: **Reproduce by seed only.** Dense stands may be impenetrable to recreationists, livestock or wildlife.

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





SPOTTED KNAPWEED (*Centaurea stoebe* spp. *micranthos*)

GROWTH HABIT: Biennial or short lived perennial, up to 3 ft. tall. **Rosette formed first year, flowering stalk elongates second year.**

LEAVES: Long and divided below, **short and narrow above. Covered with fine hair.**

STEM: Erect with slender wiry branches. **Covered with fine hair.**

FLOWER: Seed heads mostly on branch tips, solitary, to 1" diameter. **Pink to purple, rarely white. Seed head bracts are black tipped,** with 5 to 7 pairs of short feathery appendages.

ROOTS: Taproot not well developed.

SEEDS: Brownish, 1/8" long, notched on one side of base, short tuft of bristles at tip end.

OTHER: Very aggressive, can infest large areas quickly, offers very little wildlife or livestock forage value.

Photos by Tom Whitson, Roy Reichenbach, Teton County Weed & Pest





SQUARROSE KNAPWEED (*Centaurea virgata* L.)

GROWTH HABIT: Perennial, erect to 18 inches.

LEAVES: Covered with **dense fine hair**. **Lower leaves** – deeply dissected. **Upper leaves** – bract like.

STEMS: Many branched, covered with dense fine hair.

FLOWER: Terminal, small, rose to pink colored. **Bract tip spines are sharp, spreading, recurved,** and longer than the lateral spines on each bract.

ROOTS: Taproot.

SEEDS: 3 to 4 per head, $\frac{1}{8}$ inch long, heads fall readily from plant stems.

OTHER: Introduced from eastern Mediterranean.

Photos by Cindy Roché





CHEATGRASS **(*Bromus tectorum* L.)**

GROWTH HABIT: **Winter annual**, reproducing by seed.

STEMS: Slender, erect to 24 inches

INFLORESCENCE: Dense, slender, **1-sided, branched and drooping.**

SPIKELETS: Nodding, 5 to 8 flowered with soft downy hairs, **usually purplish at maturity.**

ROOTS: Fibrous

OTHER: Mediterranean origin, **commonly called cheatgrass.** Found throughout the United States.

Photos by Mike Hoddock, Teton County Weed & Pest





COMMON COCKLEBUR (*Xanthium strumarium* L.)

GROWTH HABIT: Highly branched, taprooted, broadleaved annual. **Produces a conspicuous prickly 'cocklebur'.**

LEAVES: **Alternate, coarsely toothed** and have 3-5 lobes.

STEMS: Stems are thick, and may branch many times, and have purple or black spots.

FLOWER: **Greenish in color, inconspicuous.**

ROOTS: Taproot.

SEEDS: **Elliptical shaped** two chambered prickly bur

OTHER: The flower heads of common cocklebur are unisexual. Small male and female flowers form separate clusters.

Photos by Robert Videki, Jan Samanek, Bruce Ackley





HALOGETON

(*Halogeton glomeratus* (Stephen ex Bieb.) C.A. Mey)

GROWTH HABIT: Annual, erect, many stems. Blueish green in spring, turning yellow or red in fall.

Reproduces by seed only.

LEAVES: Alternate, in **bunches along the stem, fleshy, tube-like, ending abruptly and tipped with delicate needle-like spine.** Tufts of cottony hairs at leaf attachment.

STEMS: Many branched from base, spreading then becoming erect, to 18 inches tall. **Usually red in color.**

FLOWER: Green, inconspicuous, born in leaf axil.

ROOTS: Fibrous.

SEEDS: Two types: Black, which germinate during first growing season after produced and brown, which are dormant but viable for several years.

OTHER: Toxic to livestock, especially sheep, from high oxalate content.

Photos by Tom Whitson, Roy Reichenbach





JOINTED GOATGRASS (*Aegilops cylindrica* Host.)

GROWTH HABIT: **Winter annual**, spread by seed only. Erect.

LEAVES: Alternate, simple, auricles present at base of blade. Can be **smooth or hairy** and **may have occasional hairs extending from margins of leaf blade**.

STEMS: Up to 30" tall, branched at base to give tufted appearance.

INFLORESCENCES: The **spike (seed head) is cylindrical**, more than 10 times as long as it is wide. 2 to 12 spikelets (joints) per spike, **1/2" long**. Spikelets awned with **uppermost spikelets having especially long awns**. At maturity spikelets separate and look like wheat stems.

ROOTS: Shallow, fibrous.

SEEDS: 1 to 3 per spikelet.

OTHER: Reduces grain yields and can be a contaminant in winter wheat, reducing prices.

Photos by Tom Whitson, Roy Reichenbach





MEDUSAHEAD

(*Taeniatherum caput-medusa* (L.) Nevski)

GROWTH HABIT: Winter annual grass, erect to 24 inches.

LEAVES: **Leaf blades to 1/8 inch wide**, rolled more or less, slightly hairy.

STEMS: Jointed, slightly hairy.

INFLORESCENCES: **A long awned-spike**, nearly as wide as long, flowers in May and June. **Bristly head persistent through winter** after individual florets fall.

SPIKELET: Stiff, minutely barbed, **twisted awns to 4 inches** at maturity.

ROOTS: Fibrous.

SEEDS: Awned, grass-like.

OTHER: Not as hairy as downy brome.

Photos by Steven Dewey





QUACKGRASS (*Elymus repens* (L.) Gould)

GROWTH HABIT: Erect perennial grass, reproducing from **seed and creeping rhizomes**.

LEAVES: Auricles present: blade soft, flat, may be covered with soft hair. Ligule 0.5mm long. Small leaf constriction often present near the point of the leaf.

STEMS: Culms 1 to 3 feet tall, erect, smooth.

ROOTS: Rhizomes **yellowish-white, sharp-pointed, rooting at nodes only**.

INFLORESCENCES: A spike up to 10 inches long, composed of two rows of spikelets born flat-wise to the stem.

SEEDS: Contained in spikelets, **awnless or with short straight awns**.

OTHER: Roots can penetrate hard soils, tubers, and roots of other plants.

Photos by Tom Whitson, Roy Reichenbach





CURLY LEAF PONDWEED **(*Potamogeton crispus* L.)**

GROWTH HABIT: Hardy invasive aquatic plant grows in early spring in shallow water.

LEAVES: **Three inches wide** and are wavy with toothed ridges.

STEMS: White flexible stem.

FLOWER: **Erect spike above water surface, greenish.**

ROOTS: Submerged rhizomes.

SEEDS: Nutlet-like.

OTHER: Reproduces by leaf fragments.

Photos by Chris Evans, Lesley Mehrhoff





EURASIAN WATERMILFOIL (*Myriophyllum spicatum* L.)

GROWTH HABIT: Mat forming invasive aquatic plant grows in still water.

LEAVES: **Finely dissected whorled submersed leaves, 12 plus leaflet pairs.**

STEMS: 12-20 feet long, becoming emergent when flowering.

FLOWER: **2 to 4 inches long, pink and whorled.**

ROOTS: Submerged rhizomes.

SEEDS: **Four one-seeded nutlets.**

OTHER: Reproduces by stem fragments and rhizomes.

Photos by Allison Fox, Graves Lovell





FLOWERING RUSH **(*Butomus umbellatus*)**

GROWTH HABIT: Perennial aquatic herbaceous plant. It grows 1-4' high on an erect stem along shores in shallow water.

LEAVES: Sword-shaped, triangular in cross section.

FLOWER: Pink flowers are arranged in umbels

ROOTS: Fleshy and rhizomatous

OTHER: It can reproduce by seed, vegetative bulbils on the rhizomes, vegetative bulbils on the flowers, and by fragmentation of the rhizomes.

Photos by Lesley Mehrhoff, Teton County Weed & Pest





YELLOW FLAG IRIS **(*Iris pseudacorus* L.)**

GROWTH HABIT: Perennial aquatic herbaceous plant. It grows 3' high on an erect stem along shorelines.

LEAVES: Sword-shaped, triangular in cross section.

FLOWER: Yellow iris flowers.

ROOTS: Fleshy and rhizomatous.

SEEDS: 3 inch long capsules take 3 years to produce.

OTHER: Toxic to humans and animals when ingested.

Photos by Nancy Loewenstein, Joseph DiTomaso



Wyoming Weed and Pest Districts

State Weed & Pest Coordinator.....	(307) 777-6585
Albany County.....	(307) 742-4469
Big Horn County.....	(307) 765-2855
Campbell County.....	(307) 682-4369
Carbon County.....	(307) 324-6584
Converse County.....	(307) 358-2775
Crook County.....	(307) 283-2375
Fremont County.....	(307) 332-1052
Goshen County.....	(307) 532-3713
Hot Springs County.....	(307) 864-2278
Johnson County.....	(307) 684-5715
Laramie County.....	(307) 245-3213
Lincoln County.....	(307) 885-9333
Natrona County.....	(307) 472-5559
Niobrara County.....	(307) 334-3373
Park County.....	(307) 754-4521
Platte County.....	(307) 322-3210
Sheridan County.....	(307) 672-3740
Sublette County.....	(307) 367-4728
Sweetwater County.....	(307) 273-9683
Teton County.....	(307) 733-8419
Uinta County.....	(307) 789-9289
Washakie County.....	(307) 347-8582
Weston County.....	(307) 746-4555

www.wyoweed.org

Wyoming Designated Noxious Weed List

Black henbane
Canada thistle
Common burdock
Common St. Johnswort
Common tansy
Dalmatian toadflax
Diffuse knapweed
Dyers woad
Field bindweed
Hoary cress (whitetop)
Houndstongue
Leafy spurge
Musk thistle
Oxeye daisy
Perennial pepperweed
Perennial sowthistle
Plumeless thistle
Purple loosestrife
Quackgrass
Russian knapweed
Russian olive
Saltcedar
Scotch thistle
Skeletonleaf bursage
Spotted knapweed
Yellow toadflax

Notes



Uniting with
Wyoming Weed and Pest Control Districts
Wyoming Department of Agriculture
University of Wyoming

- REMOVE plants, animals & mud from boots, gear, pets & vehicle.
- CLEAN your gear before entering & leaving the recreation site.
- STAY on designated roads & trails.
- USE CERTIFIED hay & local firewood.

Thank you for stopping invasive species in your tracks!

www.wyoweed.org

PlayCleanGo.org
STOP INVASIVE SPECIES IN YOUR TRACKS.

