## **Parrotfeather Milfoil**







Photos: Idaho State Department of Agriculture

#### Myriophyllum aquaticum

#### **Parrotfeather Milfoil**

Other common names: Brazilian watermilfoil, thread of life

Haloragaceae, the milfoil family

Category: Control

#### **Diagnostic Characteristics**

- Plant is bright green in color, has emergent leaves, and stems
- ◆ Leaves are arranged in whorls of 4 to 6 around the stem with 12 to 36 leaflet **pairs**
- Leaves are feather-like in appearance
- Forms dense mat of rhizomes under water and in sediment

#### Background

- Native to South America, an escaped aquarium and ornamental plant
- Grows on the margins of canals, ponds, and rivers
- Reproduces through fragments and rhizomes
- Plant interferes with water movement and contributes to flooding problems
- Provides ideal mosquito larvae habitat

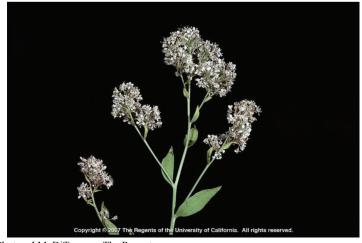




# **Perennial Pepperweed**







Photos: J.M. DiTomaso, The Regents of the University of California

#### Lepidium latifolium

### **Perennial Pepperweed**

Other common names: broad-leaved peppergrass, tall whitetop

Brassicaceae, the mustard family

Category: Containment

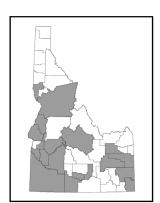
#### **Diagnostic Characteristics**

- Perennial, erect, grows up to 6 feet tall
- Basal leaves are lance-shaped with long petioles, serrate margin, basal leaves longer and wider than stem leaves
- Stem leaves alternate, green to gray-green, lance-shaped to elliptic or oblong, margins entire to weakley serrated
- Flowers are white, four petaled, borne in dense rounded clusters at the branch tips

#### **Background**

- Native to southern Europe and western Asia
- Inhabits ditch banks, riparian areas, rights-of-way, meadows, flood plains, and cropland
- Reproduces vegetatively from creeping roots, root fragments, and by seed; cultivation may increase infestations by spreading root fragments
- Often forms dense stands





## **Perennial Sowthistle**





Photos: Steve Dewey, Utah State University, Bugwood.org

#### Sonchus arvensis

#### **Perennial Sowthistle**

Other common names: field milk-thistle Asteraceae, the sunflower family

Category: Control

#### **Diagnostic Characteristics**

- Perennial, erect, branching in the upper portion of the plant, growing 2-4 feet tall
- Leaves deeply toothed to nearly entire, have a clasping base and prickly margins
- Upper leaves are fewer and much smaller than the basal ones
- Flowers are dandelion-like, bright yellow to orange-yellow
- Flower stalks and bracts are covered with gland-tipped hairs
- Plant contains milky juices

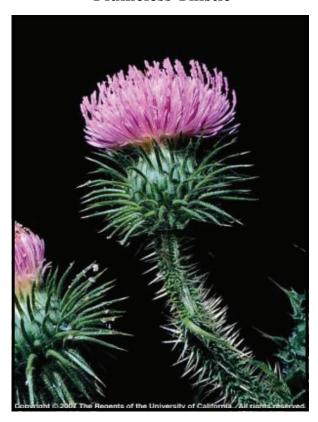
#### Background

- Native to Europe
- ♦ Inhabits non-crop areas, rights-of-way, gardens, cultivated fields, pastures, lakeshores, and lawns
- Reproduces vegetatively by creeping roots that produce new shoots, root fragments, and wind-borne seeds
- Very similar to marsh sowthistle (Sonchus arvensis ssp. uliginosus)





## **Plumeless Thistle**





Photos: J.M. DiTomaso, The Regents of the University of California

#### Carduus acanthoides

#### **Plumeless Thistle**

Other common names: bristly thistle, giant thistle

Asteraceae, the sunflower family

Category: Control

#### **Diagnostic Characteristics**

- ♦ Winter annual to biennial, grows 3-5 feet tall
- Rosette has wavy leaves with yellow spines along the leaf margin
- ♦ Stem leaves alternate
- ♦ Stems strongly winged, spiny, non-hairy to lightly woolly, 1/4-3/4 inches wide, extending up to the flower heads
- ♦ Spherical purple flower heads (solitary or clustered), 1 inch wide, smaller than musk thistle
- Bracts on flower head are thin spines

#### Background

- ♦ Native to Eurasia
- ♦ Inhabits pastures, fields, non-crop areas, rights-of-way, and disturbed sites
- Reproduces by seed
- Can hybridize with musk thistle





## **Poison Hemlock**







Photos: J.M. DiTomaso, The Regents of the University of California

#### Conium maculatum

#### Poison Hemlock

Other common names: deadly hemlock, carrot fern, poison parsley Apiaceae, the parsley family Category: Containment

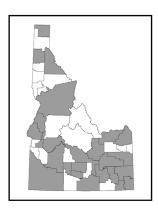
#### **Diagnostic Characteristics**

- Erect biennial plant that grows 6-9 feet tall
- Plants exist as a basal rosette in its first year
- Leaves are alternate, with bases sheathing the stems
- Leaves fern-like and are finely pinnately divided
- Stems are purple-spotted or purple-streaked, smooth and hollow
- Flowers are small, white, and are in umbrella-shaped clusters

#### **Background**

- Introduced from Europe as an ornamental
- ♦ Inhabits ditches, streams, rights-of-way, disturbed areas, and pastures, prefers poorly drained soils
- Reproduces by seed
- Contains highly toxic alkaloids that are poisonous to livestock and humans if ingested
- Handling plants can cause dermatitis in some individuals





### Policeman's Helmet







Photos: Richard Old, XID Services

#### Impatiens glandulifera

#### Policeman's Helmet

Balsaminaceae, the impatiens family Category: EDRR

#### **Diagnostic Characteristics**

- ♦ Annual, herbaceous, grows 6-10 feet tall
- Stems are purple or reddish tinged and hollow
- ◆ Leaves can be opposite or whorled, oblong, elliptic, or egg-shaped, with serrated leaf margins
- Flower colors range from white to purple or pink, resembling an old-fashioned English policeman's helmet

#### Background

- Native to India, introduced as an ornamental
- Inhabits moist areas and riparian zones
- Reproduces by seed, which are explosively ejected, up to a distance of 20 feet, when the mature pods are touched
- ♦ Considered extremely invasive in Britain

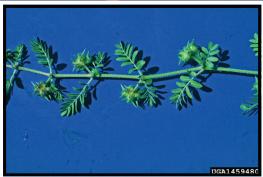
### <u>Infested Counties</u>





## **Puncturevine**







Photos: Steve Dewey, Utah State University, Bugwood.org

#### Tribulus terrestris

#### **Puncturevine**

Other common names: goathead, Mexican sandbur, tackweed, and caltrop

Zygophyllaceae, the caltrop family

Category: Containment

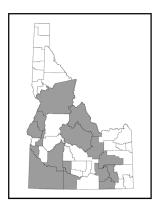
#### **Diagnostic Characteristics**

- Prostrate summer annual that forms dense mats up to 8 feet wide
- ◆ Leaves opposite, even-pinnate compound, hairy, with 4-8 leaflet pairs per leaf
- Flowers are bright yellow with 5 petals, borne solitary in the leaf axils
- Fruits roughly circular, with 10 spines, these mature burs can injure people, animals, and puncture bicycle tires

#### Background

- Native to the Mediterranean
- Inhabits sandy, dry, or gravelly sites
- Reproduces by seed





# **Purple Loosestrife**







Photos: Steve Dewey, Utah State University, Bugwood.org

#### Lythrum salicaria

### **Purple Loosestrife**

Other common names: purple lythrum, spiked willow-herb, long-purples

Lythraceae, the loosestrife family

Category: Containment

#### **Diagnostic Characteristics**

- Perennial plant that is semi-aquatic, can grow up to 8 feet tall
- New shoots grow from a broad, woody crown in the spring
- Stems are simple or branched, square or 5-angled
- ◆ Leaves are lance shaped, smooth margins, sessile, alternate, opposite, or whorled around the stem
- Flowers are bright pinkish purple, having 5-7 petals that are arranged in long vertical racemes

#### Background

- Native to Eurasia, introduced to the U.S. as an ornamental
- Escapes cultivation
- Inhabits seasonal and perennial wetlands, pond and marsh edges, streambanks, and ditches
- Reproduces by seed and spreading rhizomes that form dense monocultures





## **Rush Skeletonweed**









Photos: J.M. DiTomaso, The Regents of the University of California

#### Chondrilla juncea

#### Rush Skeletonweed

Other common names: Skeletonweed, devil's grass

Asteraceae, the sunflower family

Category: Containment

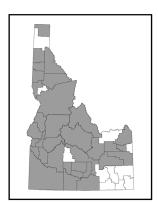
#### **Diagnostic Characteristics**

- Perennial, with rigid, wiry stems, up to 4 feet tall
- Rosettes look very similar to dandelion and chicory
- Rosette produces 1 or more flowering stems, rosette withers as the flower stem matures
- ◆ Lower portion of stems (bottom 4-6 inches) typically have reddish, bristly, down-turned hairs
- Upper stems are typically non-hairy
- Leaves of the stem are not noticeable
- Stems and leaves both exude a milky latex when cut
- Flowers are bright yellow, strap-shaped and are scattered on the branches

#### Background

- ♦ Introduced from Eurasia
- ♦ Inhabits rangelands, semi-arid pastures, non-crop areas, and rights-of-way
- Reproduces primarily by seed (airborne like dandelion seeds), however, cultivation can spread root fragments
- Soil disturbance and fire aids establishment





# Russian Knapweed







Photos: Steve Dewey, Utah State University, Bugwood.org Acroptilon repens

Synonym: Centaurea repens

### Russian Knapweed

Other common names: Russian starthistle, Turkestan thistle

Asteraceae, the sunflower family

Category: Control

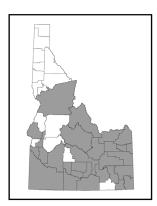
#### **Diagnostic Characteristics**

- Perennial with stems that are considerably branched up to 3 feet tall
- Leaves are blue-green, toothed, and covered with fine hair
- Upper leaves strap-like with entire margin
- Flower heads are cone-shaped with pink to violet flowers
- Rounded bracts are tipped with a pointed, papery transparent edge

#### Background

- ♦ Native to Eurasia
- Inhabits pastures, cultivated fields, non-crop areas, and rightsof-way
- Reproduces by seed and creeping roots
- Plants emit toxins under its canopy that inhibits the growth of desirable species
- Toxic to horses, causes chewing disease





## Saltcedar







Photos: J.M. DiTomaso, The Regents of the University of California

#### Tamarix ssp.

#### Saltcedar

Other common names: tamarisk, tamarik Tamaricaceae, the tamarisk family Category: Containment

#### **Diagnostic Characteristics**

- Deciduous trees and/or shrubs with juniper-like leaves
- Smooth woody stems are dark brown to reddish-brown
- Flowers are tiny, pink, 5-petaled, and borne in finger like clusters

#### **Background**

- ♦ Native to Eurasia
- Inhabits streams, canals, reservoirs, and rivers
- Reproduces by seed and vegetatively from root sprouts, and stem fragments
- Introduced as ornamentals, for wind erosion control, and stream bank stabilization
- Stands can form monocultures which decreases biodiversity
- Roots pull salt deep from the soil, leaves exude the salt through special glands and the salt is released into the ground when the leaves decompose, inhibiting desirable native vegetation establishment





## **Scotch Broom**



Photo: Jim McHenry, The Regents of the University of California



Photo: J.M. DiTomaso, The Regents of the University of California



Photo: J.M. DiTomaso, The Regents of the University of California

#### Cytisus scoparius

#### **Scotch Broom**

Other common names: English broom

Fabaceae, the pea family

Category: Control

#### **Diagnostic Characteristics**

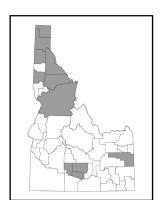
- Evergreen shrub that grows up to 10 feet tall
- Green stems are photosynthetic, ridged, and have 5 distinct angles or ridges
- Leaves typically compound with 3 leaflets, oblong to obovate shaped leaflets
- Flowers are pea-like, showy, bright yellow, occasional red markings in the center
- Mature seed pods are dark brown to black, flattened, smooth, except for hair along the margins, and have beanlike seeds which can eject a short distance

#### Background

- Native to Europe and introduced as an ornamental
- ♦ Inhabits disturbed sites, rights-of-way, non-crop areas, pastures, and forests
- Reproduces by seed



Photo: J.M. DiTomaso, The Regents of the University of California



## **Scotch Thistle**







Photos: Steve Dewey, Utah State University, Bugwood.org

#### Onopordum acanthium

#### **Scotch Thistle**

Other common names: cotton thistle Asteraceae, the sunflower family Category: Containment

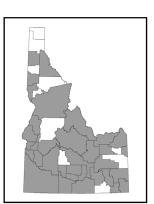
#### **Diagnostic Characteristics**

- ♦ Biennial that grows 6-12 feet tall
- A large spiny rosette develops during its first year
- ♦ Stems erect, branched, with conspicuous spiny wings that are continuous along the length of the stems
- ♦ Leaves are lobed with spiny margins that extend down the stems as spiny wings
- Entire plant appears grayish-green because of a covering of fine white hairs
- ◆ Flower heads are purple, globe-shaped, up to 2 inches wide with stiff spiny bracts

#### **Background**

- Native to Europe, introduced as an ornamental
- Inhabits rangelands, dry pastures, rights-of-way, waste areas, as well as rivers, streams, and canals
- Reproduces by seed and generally inhabits moist sites or drainages in dry locations
- Can form tall, dense, impenetrable stands





# Silverleaf Nightshade









Photos: J.M. DiTomaso, The Regents of the University of California

#### Solanum elaeagnifolium

### Silverleaf Nightshade

Other common names: desert nightshade, silverleaf nettle, white horsenettle

Solanaceae, the nightshade family

Category: Control

#### **Diagnostic Characteristics**

- Erect perennial that can grow up to 3 feet tall
- ◆ Leaves are lance shaped to oblong, somewhat wavy along the edges, an inch or less in width, and 5 inches long
- ◆ Leaf surface is covered with star-shaped hairs giving it a gray or silvery appearance
- Flowers are 1 inch wide with five bluish to violet petals with yellow anthers in the center
- Fruits are yellow or orange and are filled with seeds

#### Background

- Native to the central U.S.
- Reproduces by seed and a deep creeping root system
- Inhabits disturbed sites, pastures, and agricultural fields
- Berries and foliage are toxic to livestock if ingested, however, many species of birds are un-affected





# **Skeletonleaf Bursage**







Photos: Idaho Weed Awareness Campaign Ambrosia tomentosa

Synonym: Franseria discolor **Skeletonleaf Bursage** 

Other common names: bur ragweed, silverleaf, povertyweed

Asteraceae, the sunflower family

Category: Control

#### **Diagnostic Characteristics**

- Perennial that grows 4-18 inches tall with extensive creeping roots
- ♦ Leaves 2-5 inches long, alternate, and very deeply lobed with coarsely toothed margins
- ♦ Lower leaf surface is covered with minute white hairs, upper leaf surface is smooth and green
- Flowers are inconspicuous and yellow
- Fruits are light brown burs with conical spines

#### **Background**

- Native to the Great Plains region of the U.S.
- Inhabits non-crop areas, cultivated fields, and pastures
- Reproduces vegetatively by creeping roots and seeds



# **Small Bugloss**









Photos: Richard Old, XID Services

#### Anchusa arvensis

### **Small Bugloss**

Boraginaceae, the borage family Category: Control

#### **Diagnostic Characteristics**

- ♦ Annual that grows 6-24 inches tall
- Leaves alternate, lance shaped, are wavy with bristly hairs that arise from warty bumps
- Stems are also covered with bristly hairs
- Flowers are blue, funnel shaped, and are borne in clusters at the tip of the plant
- ◆ The floral tube (when removed) has a distinct elbow curve at mid-length
- Fruits are nutlets, 4 per flower

#### **Background**

- ♦ Native to Europe
- ♦ Inhabits disturbed areas, some cultivated fields, rights-of-way, and pastures
- Reproduces by seed



# **Spotted Knapweed**







Photos: J.M. DiTomaso, The Regents of the University of California

Centaurea maculosa

Synonym: Centaurea biebersteinii and Centaurea stoebe ssp. Micranthos

#### **Spotted Knapweed**

Asteraceae, the sunflower family

Category: Containment

#### **Diagnostic Characteristics**

- Biennial to short-lived perennial with branched stems, grows up to 3 feet
- Rosette produced in the first year, leaves are deeply lobed
- Principal stem leaves alternate, are not stalked, and are pinnately divided
- Flowers are pink to purple
- Flower heads are solitary at the end of branches, urn-shaped, bracts under the flowers has a comb-like fringe with a black triangular tip

#### Background

- ♦ Native to Europe
- Inhabits pastures, open forests, meadows, and disturbed areas
- Reproduces primarily by seed
- Plant produces toxins (allelopathic) that inhibits growth of nearby plants





# **Squarrose Knapweed**







Photos: J.M. DiTomaso, The Regents of the University of California

Centaurea virgata var. squarrosa

### **Squarrose Knapweed**

Asteraceae, the sunflower family Category: EDRR

#### **Diagnostic Characteristics**

- ♦ Perennial with a woody base that grows 1-1½ feet tall
- Rosette and lower leaves are deeply lobed, upper leaves are entire, linear or bract-like
- Stems are highly branched
- Flowers are rose to purple colored, relatively small, slender, and urn-shaped
- Bract tips are recurved or spreading

#### Background

- ♦ Native to Asia
- Inhabits rangeland and disturbed areas
- Reproduces by seed
- Seeds disperse with the seed head as a unit
- Often confused with Diffuse knapweed
- More adaptable to drought and cold temperatures than Spotted knapweed and Diffuse knapweed





## Syrian Beancaper



Photo: D.O. Clark, The Regents of the University of California



Photo: J.M. DiTomaso, The Regents of the University of California



Photo: J.M. DiTomaso, The Regents of the University of California

## Zygophyllum fabago

## Syrian Beancaper

Zygophyllaceae, the caltrop family Category: EDRR

## **Diagnostic Characteristics**

- Perennial, however, it may act like an annual in areas with severe winters
- Plant is bushy, up to 3 feet tall and 3 feet wide, and branched from a woody crown
- Leaf arrangement is opposite, compound leaves consist of a pair of leaflets, thick, leathery, fleshy, smooth, and hairless
- Flowers are borne in the upper leaf axils, salmon to yellow or white with pinkish veins, and up to 3/4 inch across

#### **Background**

- Native to the Mediterranean region and central Asia
- ♦ Inhabits disturbed areas, non-crop areas, rights-of-way, and abandoned gardens
- Reproduces by seed, vegetatively from lateral creeping roots, and root fragments



Photo: J.M. DiTomaso, The Regents of the University of California



## Tall Hawkweed



Photo: Emmet J Judziewicz, Wisconsin State Herbarium



Photo: Emmet J Judziewicz, Wisconsin State Herbarium



Photo: Kenneth J. Systma, Wisconsin State Herbarium

## Hieracium piloselloides

## Tall Hawkweed

Asteraceae, the sunflower family Category: EDRR

## **Diagnostic Characteristics**

- Perennial with leafless stems, grows to 3 feet tall
- Leaves smooth or very sparsely hairy
- Heads have dandelion-like yellow, ray (strap-like) flowers
- Flowers are long stalked in open clusters
- Stolons absent, root buds present
- Milky latex is exuded when plant is cut or broken

## **Background**

- ♦ Introduced from Europe
- Inhabits pastures, meadows, forest clearings, and disturbed areas
- Reproduces by wind-borne seeds
- Invasive hawkweed that out-competes native plants



Photo: Richard Bauer, Wisconsin State Herbarium



## **Tansy Ragwort**





Photos: J.M. DiTomaso, The Regents of the University of California

## Senecio jacobaea

## **Tansy Ragwort**

Other common names: stinking willie Asteraceae, the sunflower family

Category: Containment

## **Diagnostic Characteristics**

- Fibrous-rooted biennial or short-lived perennial that grows 1-4 feet tall
- Rosette leaves are deeply lobed
- Stems erect, single or branched from the crown
- Leaves deeply cut, blunt-toothed lobed, dark green on top, whitish-green underneath
- Flower heads are yellow, 1 inch wide, daisy-like, with golden or light brown centers, and borne as terminal clusters

## Background

- Native to Eurasia
- Inhabits rights-of-way, pastures, forests, and disturbed sites
- Reproduces by seed
- Seeds typically are moved only a few yards in the wind, however, some survive ingestion by birds
- Toxic to humans and livestock (one of the most commonly poisonous plants to horses)





## **Toothed Spurge**







Photos: Steve Dewey, Utah State University, Bugwood.org

## Euphorbia dentata

## **Toothed Spurge**

Euphorbiaceae, the spurge family Category: Control

## **Diagnostic Characteristics**

- ♦ Annual plant that grows 8-24 inches tall
- Stems are erect or curve upwards, with branches that also curve upwards
- Leaves are typically opposite, ovate to lance-shaped, usually hairy, coarsely toothed and frequently dotted with a few purplish red spots, prominent veins on the underside
- Flowers are small, without petals, yellow-green to green, and form in clusters at the end of shoots and branches

#### **Background**

- Native to the Great Plains region of the U.S.
- Inhabits non-crop areas, rights-of-way, cultivated fields, and gardens
- Reproduces by seed
- Cut plants exude a milky latex that can produce blisters and dermatitis in humans, horses, cattle, and may cause blindness if rubbed into the eye

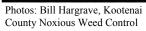




## **Vipers Bugloss**









## Echium vulgare

## **Vipers Bugloss**

Other common names: blueweed Boraginaceae, the borage family

Category: Control

## **Diagnostic Characteristics**

- Winter annual or biennial, grows up to 3 feet tall
- ♦ Leaves are covered with stiff bristly hairs, alternate, lance shaped, with swollen bases
- Flowers are purplish blue, filaments exserted (projected beyond the surrounding parts of the flower)
- Fruits are 4 roughened nutlets

## **Background**

- Introduced from Mediterranean as an ornamental
- Inhabits non-crop areas, rangelands and disturbed sites
- Reproduces by seed
- Has toxic alkaloids, especially toxic to horses and pigs





## Water Hyacinth







Photos: Forest & Kim Starr, Bugwood.org

## Eichhornia crassipes

## Water Hyacinth

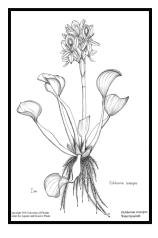
Pontederiaceae, the pickerel-weed family Category: EDRR

## **Diagnostic Characteristics**

- Plant is free-floating
- ♦ Leaves are ovate, 4-8 inches in diameter parallel veins and smooth margins
- Leaf stalks are spongy with bulbous inflated bases
- Produces thick flowering stalk up to 20 inches long
- ♦ Flowers are showy with 8-15 flowers on a single plant, flowers have 6 petals that are bluish in color (note central yellow blotch on top petal)

## Background

- Native to South America.
- Reproduces primarily vegetatively and also by seeds
- Grows to nuisance levels in warmer temperate regions world-wide
- Popular ornamental pond plant



## <u>Infested Counties</u>



## White Bryony









Photos: Richard Old, XID Services

## Bryonia alba

## White Bryony

Other common names: Northwest kudzu Cucurbitaceae, the cucumber family

Category: Containment

## **Diagnostic Characteristics**

- Perennial, herbaceous vine with tendrils that allows it to climb trees and shrubs
- Leaves are palmately lobed, somewhat triangular, upper surface rough and scratchy
- Curling tendrils
- Flowers are yellow to yellow-green, 5-petaled
- Fruit is a green or black berry

## Background

- Native to Europe, was introduced and grown for medicinal purposes
- Birds disseminate the seeds
- Inhabits along fence rows, shrubs, utility poles, and trees
- Reproduces by seed
- Berries are toxic to humans if ingested





## Whitetop







Photos: J.M. DiTomaso, The Regents of the University of California

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#### Cardaria draba

## Whitetop

Other common names: hoary cress, pepperwort

Brassicaceae, the mustard family

Category: Containment

#### **Diagnostic Characteristics**

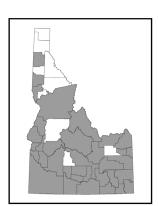
- Perennial that grows up to 2 feet tall
- Root system of vertical and horizontal roots that vigorously produce new shoots at irregular intervals
- Leaves are blue green, alternate, lance shaped
- Upper leaves have 2 lobes clasping the stem, lower leaves are stalked
- ◆ Leaf surface is sparsely to densely hairy, leaf margins may be either smooth or toothed
- Flowers are white, 4 petaled, formed in clusters at the end of each stem which gives the plant a white flat-topped look
- Fruits are heart-shaped seed pods that contain 2 reddish brown seeds

## **Background**

- ♦ Native to Eurasia
- Inhabits disturbed areas, non-crop areas, crops, rangelands, and pastures
- Reproduces by creeping roots, root fragments, and seeds

<u>Infested Counties</u>





## Yellow Devil Hawkweed







Photos: Linda Wilson

## Hieracium glomeratum

## Yellow Devil Hawkweed

Asteraceae, the sunflower family Category: EDRR

## **Diagnostic Characteristics**

- Perennial with leafless stems, grows to 3 feet tall
- Leaves with short stiff hairs on both sides
- Heads have dandelion-like yellow, ray (strap-like) flowers
- ♦ Flower stalk is short in compact flower clusters
- Milky latex is exuded when plant is cut or broken

## Background

- ♦ Native to Europe
- Out-competes native plants
- Inhabits pastures, meadows, forest clearings, and disturbed areas
- Reproduces vegetatively by rhizomes, stolons, and wind borne seeds
- ♦ Increases with grazing



## Yellow Hawkweed







Photos: Richard Old, XID Services, Bugwood.org Hieracium caespitosum
Synonym: Hieracium pratense
Yellow Hawkweed

Other common name: meadow hawkweed

Asteraceae, the sunflower family

Category: Control

## **Diagnostic Characteristics**

- Perennial with fibrous-roots, grows 1-2 feet tall
- Leaves mostly basal, upper leaf surface with long simple hairs
- Flowering stems are leafless with black hairs; occasionally a small leaf appears near the midpoint
- Flowers are yellow, dandelion-like
- Milky latex is exuded when plant is cut or broken

## **Background**

- Introduced from Europe as an ornamental and a herbal remedy
- Inhabits forest meadows, pastures, rights-of-way, and disturbed areas
- Reproduces vegetatively from stolons, rhizomes, and also from seed





## **Yellow Starthistle**







Photos: Steve Dewey, Utah State University, Bugwood.org

#### Centaurea solstitialis

## **Yellow Starthistle**

Other common names: St. Barnaby's thistle, cotton-tip thistle Asteraceae, the sunflower family

Category: Containment

## **Diagnostic Characteristics**

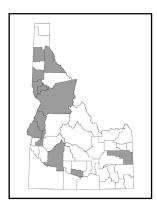
- Winter annual that grows 2-4 feet tall
- Rosette leaves are deeply lobed
- Foliage grayish to bluish-green, covered with fine white cotton-like hairs
- Lower stem leaves sometimes pinnately lobed
- Stem leaves alternate, mostly linear or narrowly oblong
- Leaf bases extend down the stems and give the stems a winged appearance
- Flower heads are bright yellow and develop singly at the end of the branches
- Yellow spines up to ¾ inch long extend from the flower bracts

## **Background**

- Native to the Mediterranean and Asia
- Inhabits rangelands, canyon grasslands, pastures, rights-ofway, and disturbed areas
- Reproduces by seed
- ◆ Toxic to horses, causes chewing disease

## <u>Infested Counties</u>





## Yellow Toadflax







Photos: Steve Dewey, Utah State University, Bugwood.org

## Linaria vulgaris

## **Yellow Toadflax**

Other common names: butter-and-eggs Scrophulariaceae, the figwort family

Category: Containment

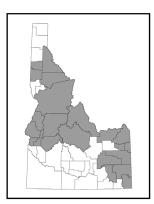
## **Diagnostic Characteristics**

- Perennial that grows up to 3 feet tall
- Stems usually not branched
- Leaves are linear, sessile, and frequently appearing whorled or opposite
- Flowers are bright yellow or whitish, showy, snapdragon-like with an orange throat

## **Background**

- Introduced from Europe as a garden ornamental
- ♦ Inhabits disturbed areas, rights-of-way, cultivated fields, grasslands, and gardens
- Reproduces by extensive root system and seed
- Plant contains a poison that could be toxic to livestock if ingested in sufficient quantities
- Will hybridize with Dalmatian toadflax





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Photo: Terry Spivey, Bugwood.org

