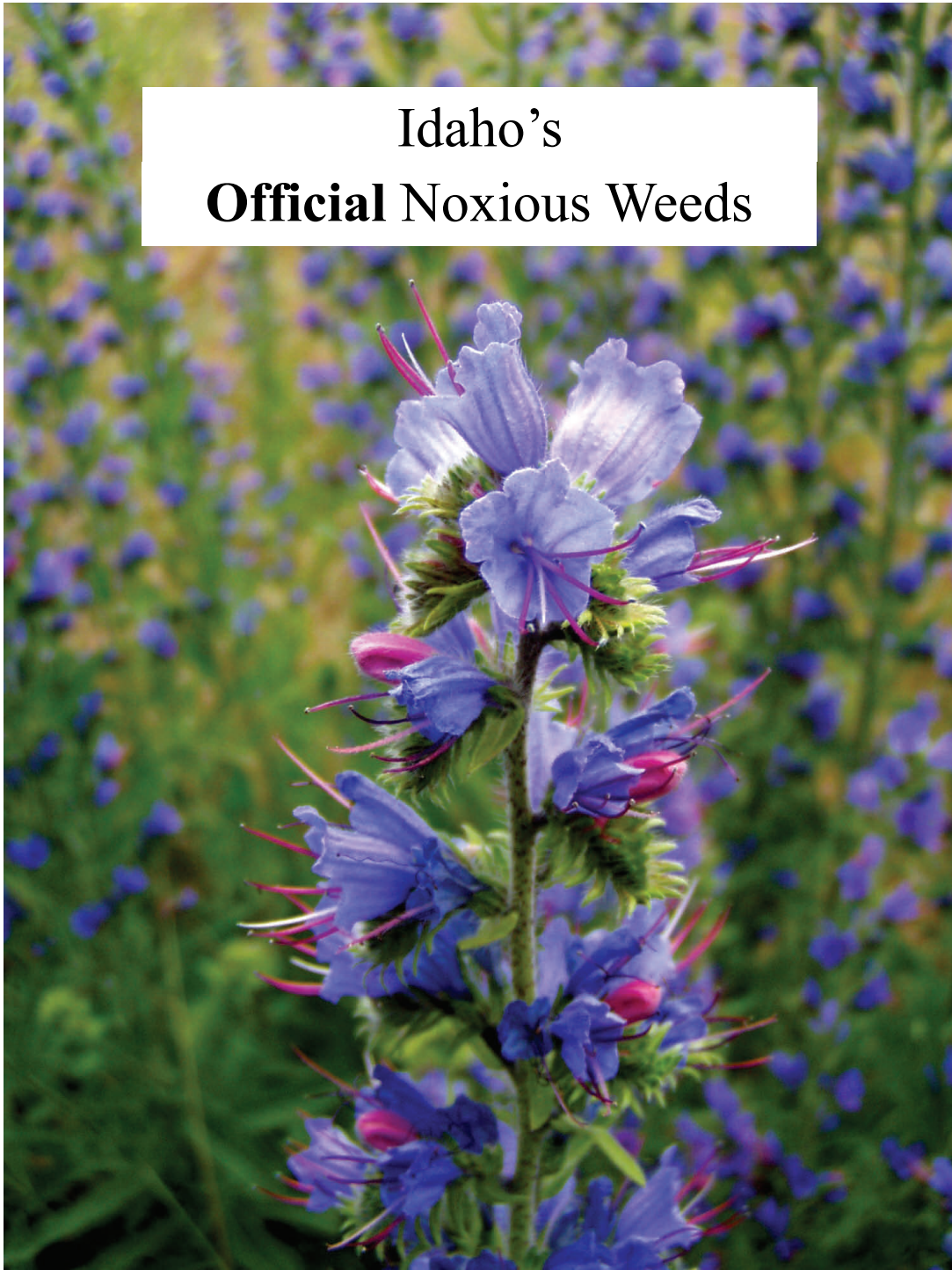


Idaho's
Official Noxious Weeds

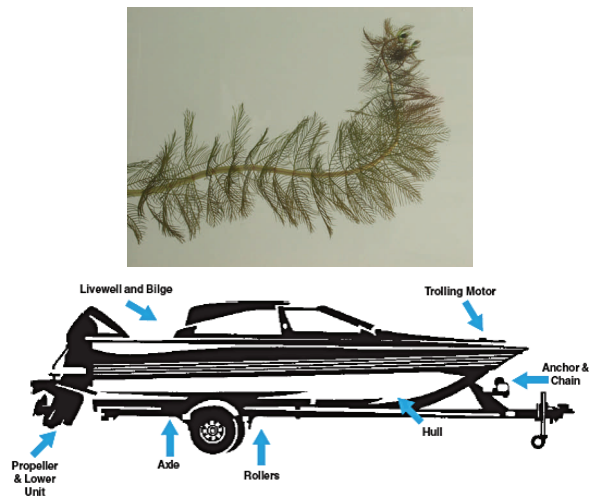


Front cover: Vipers Bugloss growing in Kootenai County
Photo: Bill Hargrave, Kootenai County Noxious Weed Control

Back cover: Purple Loosestrife
Photo: Linda Wilson, Bugwood.org

Help us stop the spread of Eurasian Watermilfoil

Inspect your boat and trailer before and after entering Idaho's waters.
Remove any plants found and dispose of in a trash container



The services of the Idaho State Department of Agriculture are available to everyone irrespective of disability. Requests for Idaho State Department of Agriculture publications in alternate formats will be promptly handled.

Idaho State Department of Agriculture
P.O. Box 790
Boise, Idaho 83701
weeds@agri.idaho.gov
(208) 332-8528

Additional copies can be obtained by contacting the Idaho Weed Awareness Campaign at 1-866-ID-WEEDS or 1-866-439-3337 or www.idahoweedawareness.net

Idaho's Official Noxious Weeds

Includes photographs of seedlings, rosettes,
flowers, and updated distribution maps

Includes information on Idaho's 21 new
Noxious Weeds



In partnership with the
Idaho Weed Superintendents Association
Idaho Weed Coordinating Committee
Idaho Weed Awareness Campaign
Idaho Weed Control Association

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Definition of Noxious Weed Designations (Categories)

Please refer to Noxious Weed Rules, IDAPA 02.06.22

<http://adm.idaho.gov/adminrules/rules/idapa02/0622.pdf>

Statewide Early Detection and Rapid Response (EDRR) Noxious Weed List:

If any of the weeds listed in the EDRR list are found to occur in Idaho, they shall be reported to the Department within ten (10) days following positive identification by the University of Idaho or other qualified authority as approved by the Director. These weeds shall be eradicated during the same growing season as identified.

Statewide Control Noxious Weed List:

Weeds listed in the control list are known to exist in varying populations throughout the state. The concentration of these weeds is at a level where control and/or eradication may be possible. A written plan for weeds on the Statewide Control Noxious Weed List shall be developed by the control authority that specifies active control methods to reduce known populations in not more than five (5) years. The plan shall be available to the Department upon request.

Statewide Containment Noxious Weed List:

Weeds listed in the containment noxious weeds list are known to exist in various populations throughout the state. Weed control efforts may be directed at reducing or eliminating new or expanding weed populations while known and established weed populations, as determined by the weed control authority, may be managed by any approved weed control methodology, as determined by the weed control authority.

Idaho's **Official** Noxious Weeds

Idaho has always recognized the benefits of controlling and managing noxious weeds. As new species of terrestrial and aquatic noxious weeds creep closer to our borders it is imperative that we remain vigilant in our early efforts to detect and identify these noxious weeds.

Weeds cost our state millions of dollars by:

- ✓ Choking streams and waterways
- ✓ Degrading wildlife habitat
- ✓ Crowding or destroying native plants
- ✓ Rendering recreation sites unusable
- ✓ Creating fire hazards in our forests and rangelands
- ✓ Poisoning and injuring livestock and humans

The spread of noxious weeds threaten our water supplies and impact the beauty and biodiversity of natural and economic resources. Weeds recognize no jurisdictional boundaries; they affect rural and urban areas, farmers and ranchers, recreationalists and gardeners alike. When undetected and unmanaged, they spread rapidly, unceasingly, and silently.

This booklet is a tool to educate our citizens and help in the efforts to identify and control the 57 designated noxious weeds in Idaho.

For more information on Idaho's noxious weed management program and how you can become more involved in stopping the spread of invasive weeds visit our web site at www.agri.idaho.gov or call 1-866-IDWEEDS.

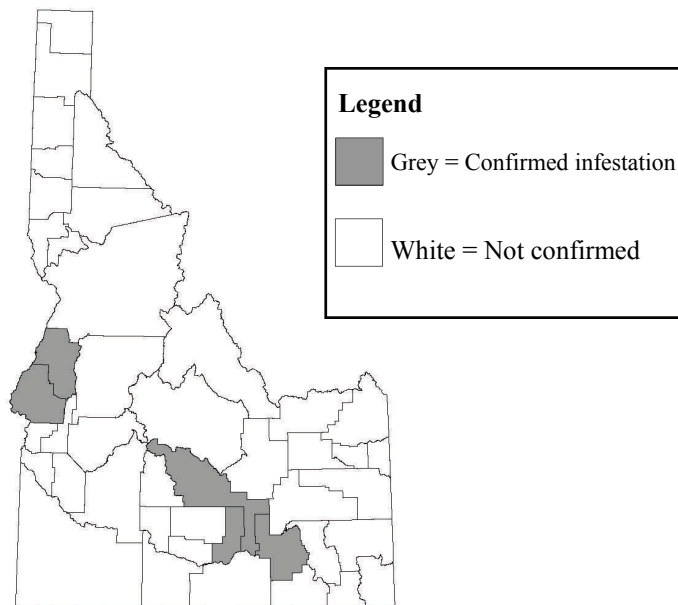


Celia R. Gould, Director
Idaho State Department of Agriculture

Descriptions of Idaho's 57 Noxious Weeds

In this book, you will learn for each of Idaho's 57 Noxious Weeds:

- ◆ Common, scientific, and family names
- ◆ Noxious Weed Designations (Category)
- ◆ Background, including area of the world where the weed originated and how it reproduces
- ◆ Color pictures, including close-ups of key identification features
- ◆ A map of Idaho showing confirmed (Grey pattern) infestations in each county



* Only infestations that have confirmed site specific locations are included in this book. If you are aware of locations that are not represented on the maps, please contact ISDA, or your local County Weed Agent.

Black Henbane



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

Hyoscyamus niger

Black Henbane

Other common names: henbane, hog's bean, insane root

Solanaceae, the nightshade family

Category: Control

Diagnostic Characteristics

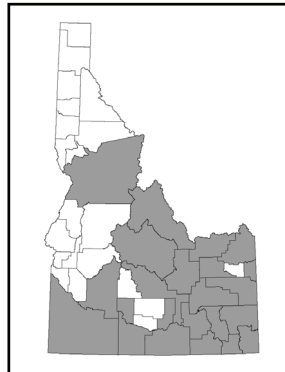
- ◆ An annual or biennial plant that can grow up to 3 feet tall
- ◆ Plant has coarse-toothed foliage that is covered with sticky glandular hairs
- ◆ Leaves alternate, gray-green, 2-8 inches long, covered with hairs, coarsely toothed to pointed pinnate lobes with prominent veins
- ◆ Off-white flowers with deep purple center and veins
- ◆ Plant has a foul odor

Background

- ◆ Native to Eurasia, introduced as an ornamental and medicinal plant
- ◆ Inhabits disturbed open sites, non-crop areas, pastures, fencerows, abandoned gardens, and rights-of-way
- ◆ Reproduces by seed
- ◆ **Toxic to humans and livestock if ingested**
- ◆ Livestock avoid it because of unpleasant odor and bitter taste



Infested Counties



Bohemian Knotweed



Photos: King County Washington,
Noxious Weed Program

Polygonum bohemicum

Bohemian Knotweed

Polygonaceae, the buckwheat family

Category: Control

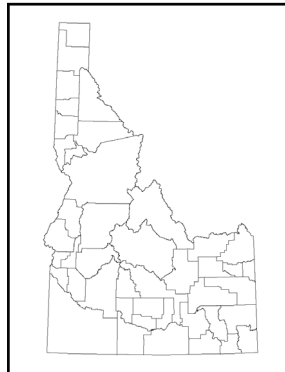
Diagnostic Characteristics:

- ◆ Classified as hybrid between giant and Japanese knotweed
- ◆ Perennial, up to 8 feet tall
- ◆ Coarse foliage, hollow stems, and creeping roots
- ◆ Large, broad, ovate leaves that alternate on the stem, leaf base is square (truncate) to tapered, zig-zag stem (reddish-purple-mottled), swollen nodes, thin papery sheaths
- ◆ Stiff upright male flower clusters

Background

- ◆ Native to Japan, Taiwan, eastern China, and Korea, introduced as ornamentals
- ◆ Inhabits disturbed moist areas, riparian areas, wetland areas, and rights-of-way
- ◆ Reproduces vegetatively from rhizomes, rhizome fragments, stem fragments, and seed; forms dense colonies

Infested Counties



Brazilian Elodea



Photos: Idaho State Department of
Agriculture

Egeria densa

Brazilian Elodea

Other common names: egeria, Brazilian waterweed, anacharis
Hydrocharitaceae, the waterweed family

Category: EDRR

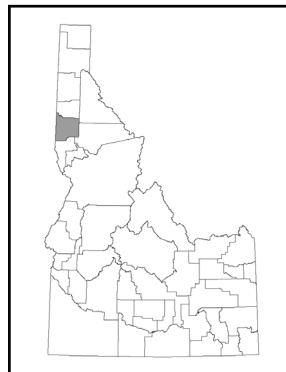
Diagnostic Characteristics

- ◆ Leaves in whorls of 3 to 6
- ◆ Leaves are linear to oblong, 1-1 ¼ inches long and ⅛ inch wide
- ◆ Finely toothed leaf margins with a toothless leaf midrib
- ◆ Flowers with 3 white petals and 3 green sepals
- ◆ Showy flowers with petals ⅓ inch long

Background

- ◆ Native to South America, introduced as an aquarium plant
- ◆ Reproduces by stems fragments, forms dense mats at the water surface, and out-competes native vegetation
- ◆ Dense growth impedes swimming and boating

Infested Counties



Buffalobur



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

Solanum rostratum

Buffalobur

Solanaceae, the nightshade family

Category: Control

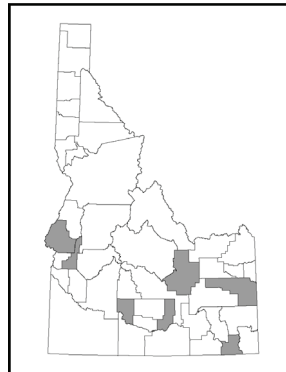
Diagnostic Characteristics

- ◆ An erect annual, that can grow up to 2 feet tall
- ◆ Drought tolerant and can grow in wide variety of ecological conditions
- ◆ Entire plant, except for the flower petals, is covered by straight yellow spines
- ◆ Leaves are deeply lobed, some lobes are nearly to the midvein and covered with short star-like hairs
- ◆ Flowers are 1 inch wide, five-petaled and bright yellow in color
- ◆ Fruit is a dry berry that is completely enclosed in a spiny bur-like calyx
- ◆ Seeds are crumpled, flat and black

Background

- ◆ Native to the Great Plains region of the U.S.
- ◆ Inhabits disturbed areas, rights-of-way, pastures, meadows, cultivated fields, dry rangeland, lawns, and non-crop areas
- ◆ Reproduces by seed
- ◆ Buffalobur is a common contaminant of bird seed and is often found growing near bird feeders

Infested Counties



Canada Thistle



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

Cirsium arvense

Canada Thistle

Other common names: corn thistle, creeping thistle

Asteraceae, the sunflower family

Category: Containment

Diagnostic Characteristics

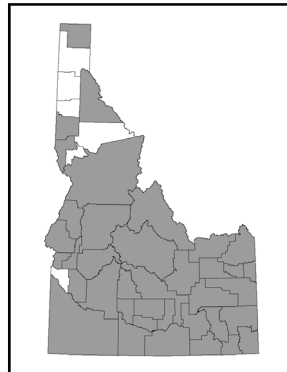
- ◆ Erect perennial, grows 1-4 feet tall, with extensive creeping roots
- ◆ Grooved stems branch only at the top
- ◆ Leaves are sessile, alternate, oblong to lanceolate, deeply divided, with spiny margins
- ◆ Upper leaf surface is dark green and smooth, while the lower surface is light green
- ◆ Flower heads are purple, numerous, often clustered, urn shaped, and appear on the upper stems

Background

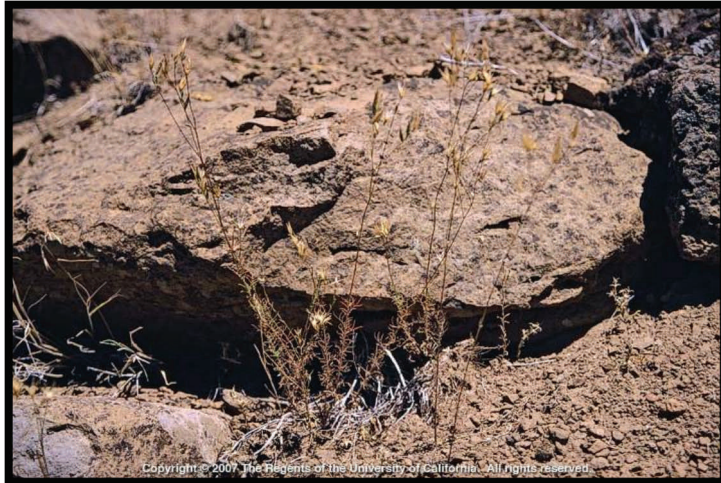
- ◆ Native to Eurasia
- ◆ Inhabits waste areas, crops, pastures, rangeland, and rights-of-way
- ◆ Reproduces vegetatively by creeping roots, root fragments, and seed
- ◆ A very aggressive weed that can form dense patches
- ◆ Plants are male or female



Infested Counties



Common Crupina



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

Crupina vulgaris

Common Crupina

Other common names: bearded creeper

Asteraceae, the sunflower family

Category: Control

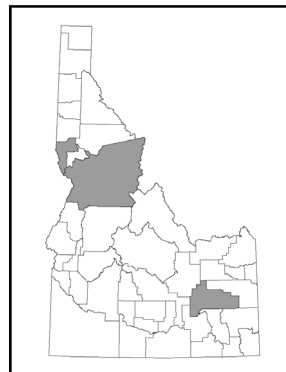
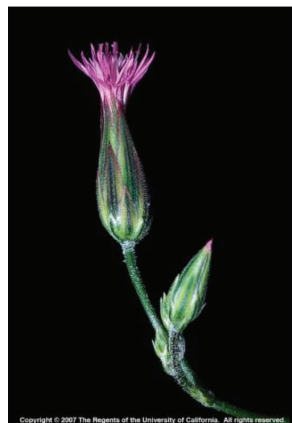
Diagnostic Characteristics

- ◆ Erect winter annual varies from 1-3 feet tall
- ◆ Plants exist as basal rosettes until flower stems develop in spring
- ◆ Stem leaves have a coarse rough texture, alternate, and finely dissected
- ◆ Flower heads are slender urn-shaped
- ◆ Flower heads are pink to purple and consist of only disk flowers
- ◆ Seeds are black-brown, about the size of a wheat seed, with a ring of dark bristly hairs at the point of attachment, giving it the appearance of a fishing dry fly

Background

- ◆ Native to the Mediterranean
- ◆ Inhabits rangeland, forests, rights-of-way, dry south-facing slopes, and pastures
- ◆ Reproduces by seed

Infested Counties



Dalmatian Toadflax



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

Linaria dalmatica ssp. *Dalmatica*

Synonym: *Linaria genistifolia* ssp. *dalmatica*

Dalmatian Toadflax

Other common names: broad-leaf toadflax, wild snapdragon

Scrophulariaceae, the figwort family

Category: Containment

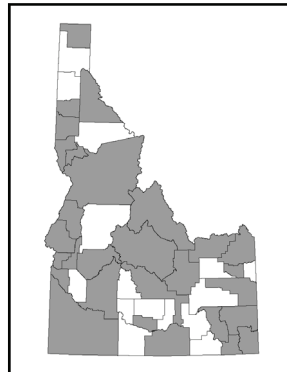
Diagnostic Characteristics

- ◆ Perennial that grows up to 3 feet tall
- ◆ Extensive system of vertical and creeping roots
- ◆ Leaves alternate, usually bluish-gray and waxy, ovate to lance-shaped, sessile, tips tapered to a point, base clasping the stem
- ◆ Flowers are showy, yellow, snapdragon-like, with orange or white centers

Background

- ◆ Native to the Mediterranean region, introduced as a garden ornamental
- ◆ Inhabits disturbed open sites, pastures, rangeland, forest clearings, and rights-of-way
- ◆ Reproduces by extensive root system and seed
- ◆ Will hybridize with yellow toadflax

Infested Counties



Diffuse Knapweed



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

Centaurea diffusa

Diffuse Knapweed

Other common names: tumble knapweed, bushy knapweed

Asteraceae, the sunflower family

Category: Containment

Diagnostic Characteristics

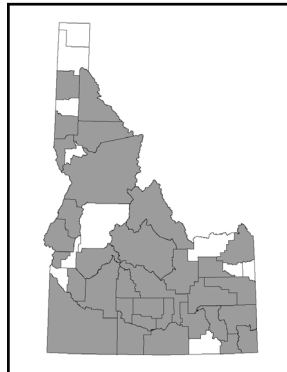
- ◆ Bushy biennial that can grow up to 3 feet in height
- ◆ Basal rosettes exist until flowering stems are produced
- ◆ Leaves alternate
- ◆ Lower stem leaves deeply 1- or 2-pinnate-lobed
- ◆ Upper leaves entire, linear or bract-like
- ◆ Flower heads are slender urn-shaped, solitary or in clusters of 2-3 at the ends of the branches
- ◆ Flower heads consist of white to purple disc flowers interspersed with long bristles on the receptacle; Bracts under the flower have yellow spines with teeth appearing as a comb along the spine margins

Background

- ◆ Native to Eurasia
- ◆ Inhabits rangelands, sandy river shores, gravel banks, rock outcrops, pastures, non-crop areas, and rights-of-way
- ◆ Reproduces by seed, stems break off, and tumble in the wind
- ◆ Can form large dense stands



Infested Counties



Dyer's Woad



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

Isatis tinctoria

Dyer's Woad

Other common names: Marlahan mustard

Brassicaceae, the mustard family

Category: Control

Diagnostic Characteristics

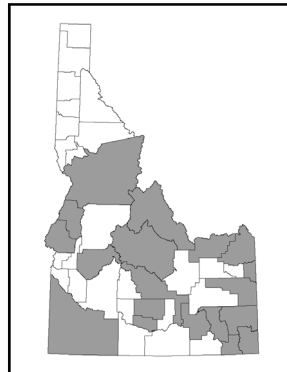
- ◆ Winter annual, biennial or short-lived perennial, grows from 1-4 feet tall
- ◆ Basal rosette leaves are oblanceolate to elliptic, bluish-green, covered with a powdery white bloom
- ◆ Stem leaves alternate, clasping, lance shaped, prominent whitish midvein
- ◆ Flowers are 4 petaled, bright yellow, and in clusters on the branch tips
- ◆ Fruits hang from the stem, dark purplish brown to black, teardrop shaped, and each fruit contains only one seed

Background

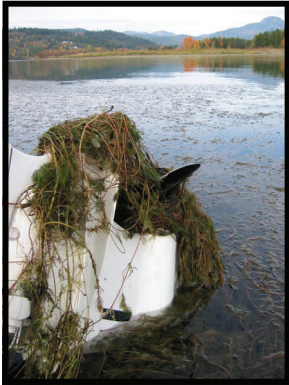
- ◆ Native to Europe, cultivated for centuries as a medicinal herb, and a source for blue dye
- ◆ Brought to U.S. by early settlers
- ◆ Inhabits rights-of-way, disturbed sites, rangeland, pastures, and agronomic crops
- ◆ Reproduces by seed



Infested Counties



Eurasian Watermilfoil



Photos: Idaho State Department of Agriculture

Myriophyllum spicatum

Eurasian Watermilfoil

Other common names: spike watermilfoil, Eurasian milfoil, milfoil
Haloragaceae, the watermilfoil family

Category: Control

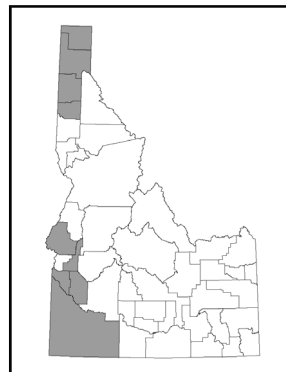
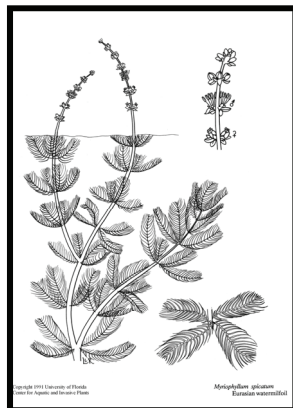
Diagnostic Characteristics

- ◆ Plant is a submersed perennial with feather-like leaves
- ◆ Leaves are arranged around the stem in whorls of four
- ◆ Leaves generally have 12 or more leaflet **pairs** (northern watermilfoil usually has fewer than 12 leaflet pairs)
- ◆ Leaves typically limp when removed from the water
- ◆ Flowers are minute and pink, arranged in whorls on reddish spikes that stand above the water surface
- ◆ Plant stems below the flowering spike double in thickness

Background

- ◆ Native to Eurasia and Northern Africa
- ◆ Introduced as an aquarium plant
- ◆ Reproduces primarily by plant fragments
- ◆ Forms dense mats of vegetation on the water's surface
- ◆ Out-competes native vegetation, impedes navigation, and recreation

Infested Counties



Field Bindweed



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



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



Photo: J.K. Clark, The Regents of the University of California

Convolvulus arvensis

Field Bindweed

Other common names: morning glory, creeping jenny, field morning glory, perennial morning glory, small bindweed
Convolvulaceae, the morningglory family

Category: Containment

Diagnostic Characteristics

- ◆ Herbaceous perennial with vine-like stems
- ◆ Stems are prostrate or climbing, 1-4 feet long, and twine around and over other plants or trail along the ground
- ◆ Leaves alternate, arrowhead-shaped to oblong or nearly round with pointed lobes at the bases
- ◆ Flowers are white to pink, funnel shaped, and borne in leaf axils

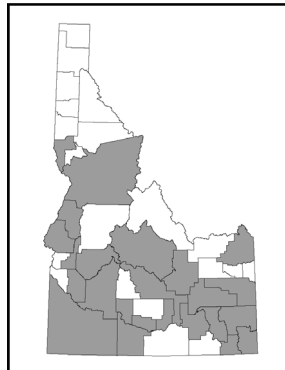
Background

- ◆ Native to Europe
- ◆ Inhabits cultivated fields, orchards, gardens, pastures, rights-of-way, and non-crop areas
- ◆ Reproduces by seed and vegetatively from deep, creeping roots and rhizomes
- ◆ Considered one of the worst weeds of agricultural fields
- ◆ Seeds are viable up to 50 years
- ◆ Plant can form dense tangled mats



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

Infested Counties



Giant Hogweed



Heracleum mantegazzianum

Giant Hogweed

Apiaceae, the carrot or parsley family

Category: EDRR

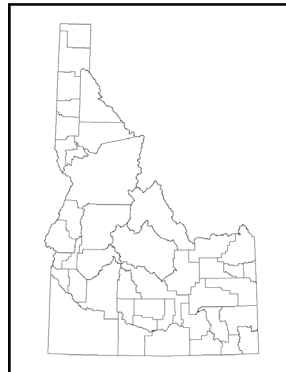
Diagnostic Characteristics

- ◆ Perennial, can reach 8-15 feet tall when flowering
- ◆ Leaves are large, 3-5 feet wide, compound, and deeply incised
- ◆ Underside of the leaves have short hairs that are stiff and dense
- ◆ The stems are green, 2-4 inches in diameter, and hollow
- ◆ The stems have dark reddish-purple spots
- ◆ Petioles have short, coarse white hairs at the base
- ◆ Flowers in second or third year

Background

- ◆ Native to Asia, introduced as an ornamental
- ◆ Inhabits vacant lots, rights-of-way, non-crop areas, riparian areas, prefers moist areas
- ◆ Reproduces by seed and vegetatively by buds on crown
- ◆ **Plant exudes a sap that causes photo-dermatitis in humans**
- ◆ Closely resembles cow parsnip (native) (*H. lanatum*/ *H. maximum*), except the native is much shorter (2-8 feet)

Infested Counties



Giant Knotweed



Polygonum sachalinense

Giant Knotweed

Other common names: elephant ear bamboo, Sakhalin knotweed

Polygonaceae, the buckwheat family

Category: Control

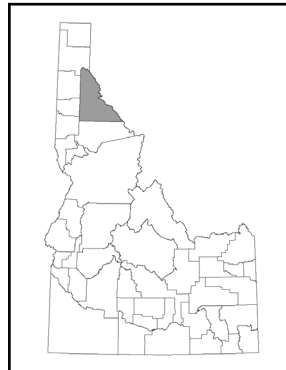
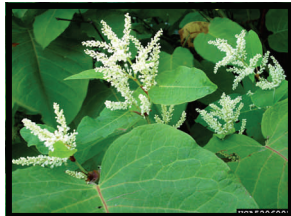
Diagnostic Characteristics:

- ◆ Perennial, up to 12 feet tall
- ◆ Coarse foliage, hollow stems, and creeping roots
- ◆ Very large ovate leaves that grow to 12 inches long, alternate on the stem, leaf base heart-shaped (cordate)
- ◆ Flowers are greenish white (male) and white (female) borne in the leaf axils

Background

- ◆ Native to Japan, Taiwan, eastern China, and Korea, introduced as ornamentals
- ◆ Inhabits disturbed moist areas, riparian areas, wetland areas, and rights-of-way
- ◆ Reproduces vegetatively from rhizomes, rhizome fragments, stem fragments, and seed; forms dense colonies

Infested Counties



Hoary Alyssum



Berteroa incana

Hoary Alyssum

Other common names: hoary false madwort

Brassicaceae, the mustard family

Category: Containment

Diagnostic Characteristics

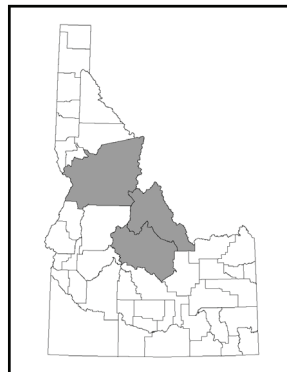
- ◆ Annual, sometimes biennial
- ◆ Leaves are grayish-green, lance shaped, alternate, and margins entire
- ◆ The entire plant is covered with small, star-shaped hairs which cause it to feel rough to the touch
- ◆ Flowers are white, 4-petaled, petals are prominently notched at the tip
- ◆ Fruit is an oval pod (silicle) with a short beak, covered with star-shaped hairs

Background

- ◆ Native to Europe
- ◆ Inhabits dry areas that are disturbed, non-crop areas, and rangelands
- ◆ Reproduces by seed



Infested Counties



Houndstongue



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

Cynoglossum officinale

Houndstongue

Other common names: beggar's ticks, beggar's lice, dog bur

Boraginaceae, the borage family

Category: Containment

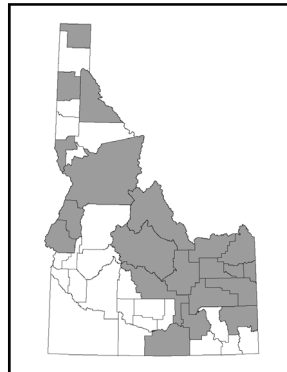
Diagnostic Characteristics

- ◆ Biennial or short-lived perennial that grows up to 4 feet tall
- ◆ Live plants have a distinctive sweet musty odor
- ◆ Basal rosette leaves, rough and hairy, resemble a hound's tongue
- ◆ Upper leaves are lance shaped, hairy, coarse, and alternate on the stem
- ◆ Flowers are reddish-purple
- ◆ Fruits consist of 4 prickly nutlets

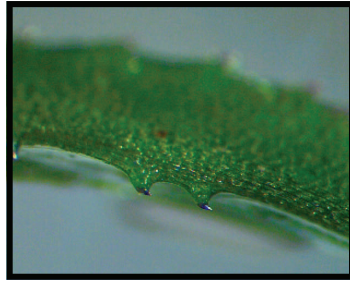
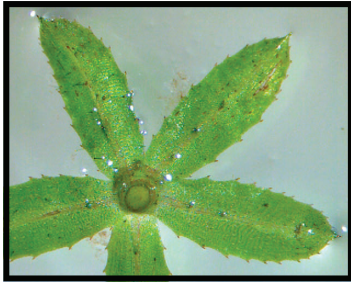
Background

- ◆ Introduced from Europe as a seed contaminant
- ◆ Inhabits disturbed areas, crops, rangelands, and forested areas
- ◆ Reproduces by seed, dispersed by hooked seeds
- ◆ **Toxic to livestock, especially horses**

Infested Counties



Hydrilla



Photos: Vic Ramey, University of Florida/
IFAS Center for Aquatic and Invasive
Plants. Used with permission

Hydrilla verticillata

Hydrilla

Other common names: Florida elodea, waterthyme

Hydrocharitaceae, the waterweed family

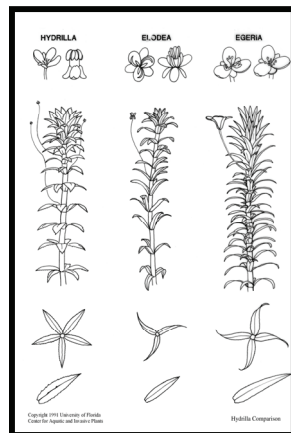
Category: EDDR

Diagnostic Characteristics

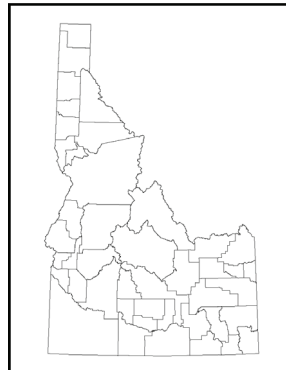
- ◆ Leaves are pointed in whorls of four to eight
- ◆ Leaf margins are saw-toothed with one or more “tooth” on the underside leaf midrib
- ◆ Flowers are small and white in color
- ◆ Scaly winter buds called turions produced from the leaf axils
- ◆ Tubers are produced from roots

Background

- ◆ Native to Africa, Australia, and parts of Asia
- ◆ Considered the most problematic aquatic plant in the United States
- ◆ Extremely aggressive plant; interferes with irrigation projects, recreation, and navigation
- ◆ Spreads through fragments and turions



Infested Counties



Japanese Knotweed



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

Polygonum cuspidatum

Japanese Knotweed

Other common names: Japanese bamboo, fleece flower

Polygonaceae, the buckwheat family

Category: Control

Diagnostic Characteristics:

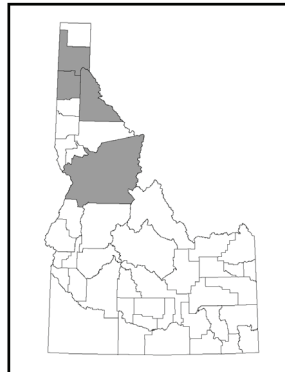
- ◆ Perennial, up to 8 feet tall
- ◆ Coarse foliage, hollow stems, and creeping roots
- ◆ Large, broad, ovate leaves that alternate on the stem, leaf base is square (truncate) to tapered, zig-zag stem (reddish-purple-mottled), swollen nodes, thin papery sheaths
- ◆ Flowers are green white to cream, borne in plume-like clusters in the leaf axils, and at the ends of stems

Background

- ◆ Native to Japan, Taiwan, eastern China, and Korea, introduced as ornamentals
- ◆ Inhabits disturbed moist areas, riparian areas, wetland areas, and rights-of-way
- ◆ Reproduces vegetatively from rhizomes, rhizome fragments, stem fragments, and seed; forms dense colonies



Infested Counties



Johnsongrass



Photo: J.K. Clark, The Regents of the University of California



Photo: J.K. Clark, The Regents of the University of California



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

Sorghum halepense

Johnsongrass

Other common names: Aleppo grass, Cuba grass, Egyptian millet

Poaceae, the grass family

Category: Control

Diagnostic Characteristics

- ◆ Perennial, rhizomatous, grows up to 6 feet tall
- ◆ Leaf blades are flat, smooth to lightly hairy with conspicuous whitish mid-veins
- ◆ Ligules are short and membranous, with a terminal fringe of fine hairs
- ◆ Large open panicles, pyramid shaped, bearing many shiny, reddish to purple spikelets

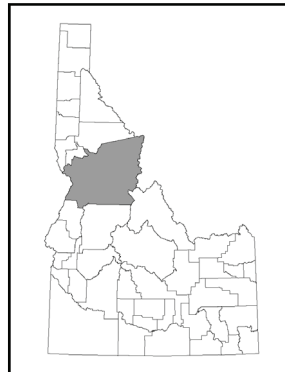
Background

- ◆ Native to the Mediterranean, introduced for forage and hay
- ◆ Inhabits disturbed sites, rights-of-way, and non-crop areas
- ◆ Reproduces by seed, and vegetatively by rhizomes, acts as an annual in most of Idaho, but in lower elevations it acts as a perennial
- ◆ **Foliage can be toxic when stressed by drought or after frost, may be poisonous to livestock if ingested**



Photo: J.K. Clark, The Regents

Infested Counties



Jointed Goatgrass



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

Aegilops cylindrica

Jointed Goatgrass

Poaceae, the grass family

Category: Containment

Diagnostic Characteristics

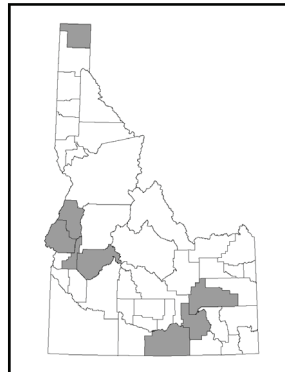
- ◆ Winter annual, can grow up to 3 feet tall
- ◆ Leaf blades flat and spreading, margins usually having a fringe of hair
- ◆ Lower and upper leaf surfaces usually sparsely covered with fine hairs
- ◆ Spikes cylindrical, more than 10 times longer than they are wide, appear as a series of spikelets stacked on top of each other

Background

- ◆ Native to western Asia and Mediterranean
- ◆ Inhabits grain fields (especially winter wheat), grasslands, rights-of-way, pastures, and other dry disturbed sites
- ◆ Reproduces by seed; untarped grain trucks are likely sources of introduction along roadways
- ◆ Resembles winter wheat and closely related, both species can hybridize



Infested Counties



Leafy Spurge



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

Euphorbia esula

Leafy Spurge

Other common names: esula spurge

Euphorbiaceae, the spurge family

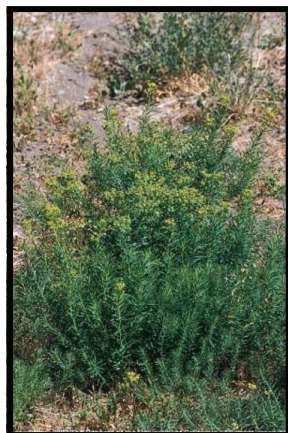
Category: Containment

Diagnostic Characteristics

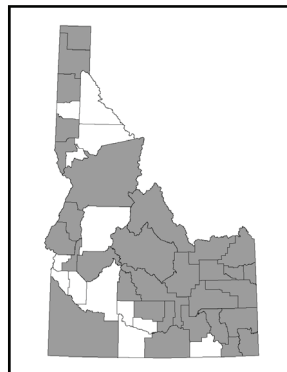
- ◆ Perennial weed up to 3 feet tall
- ◆ Crowns produce pink buds where new shoots can develop
- ◆ Stems are thickly clustered
- ◆ Leaves alternate, are linear to narrowly oblanceolate shaped
- ◆ Stems and leaves exude a milky white latex when cut or broken
- ◆ Flowers are yellow-green, surrounded by heart-shaped, showy, yellow-green bracts

Background

- ◆ Native to southwestern Europe
- ◆ Inhabits rangelands, stream banks, non-crop areas, disturbed sites, and rights-of-way
- ◆ Reproduces by seed and vegetatively from extensive creeping roots
- ◆ **Milky latex in all parts of the plant can produce blisters and dermatitis in humans, cattle, horses, and may cause permanent blindness if rubbed into the eye**



Infested Counties



Matgrass



Nardus stricta

Matgrass

Other common names: wirebent, moor matgrass

Poaceae, the grass family

Category: Control

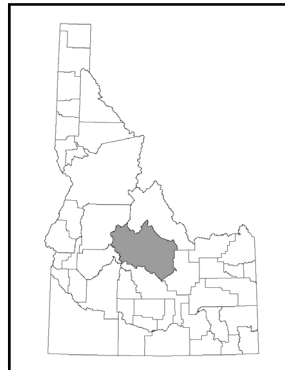
Diagnostic Characteristics

- ◆ Perennial bunchgrass, fine-textured, with tufts reaching 3 feet across
- ◆ Leaves are long up to 16 inches, wiry in appearance, ¼ inch wide but appear narrower because the blades are tightly folded
- ◆ Lower leaves bent at nearly a right angle to the stem
- ◆ Spikelets are only on one side of the stem, small, straw colored and tipped by short, straight awns

Background

- ◆ Native to eastern Europe
- ◆ Inhabits moist areas such as wet meadows
- ◆ Severed plant tufts stick to hooves of grazing animals and reproduce when transported to new locations
- ◆ Not palatable to most livestock

Infested Counties



Meadow Knapweed



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

Centaurea pratensis

Synonym: Centaurea debeauxii ssp. thuillieri

Meadow Knapweed

Asteraceae, the sunflower family

Category: Control

Diagnostic Characteristics

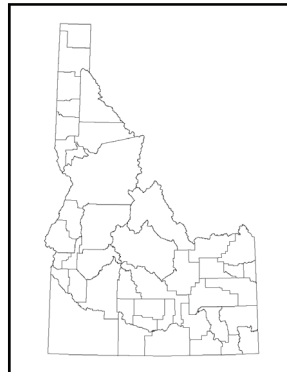
- ◆ Perennial plant that grows from a woody crown up to 3½ feet tall, with upright stems that branch near the middle
- ◆ Basal leaves up to 6 inches long and more than an inch wide
- ◆ Lower leaves can be entire, lobed or toothed; middle and upper leaves are linear
- ◆ Pink to purplish-red flowers borne at the ends of branches
- ◆ Flower heads are the shape of a globe
- ◆ Brown bracts with comb-like fringe, overlap adjacent bracts

Background

- ◆ Native to Europe
- ◆ Inhabits moist rights-of-way, sand/gravel bars, river banks, irrigated pastures, moist meadows, and forest openings
- ◆ Reproduces primarily by seed
- ◆ This plant is considered a hybrid between black (*C. nigra*) and brown knapweed (*C. jacea*)



Infested Counties



Mediterranean Sage



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

Salvia aethiopsis

Mediterranean Sage

Other common names: African sage

Lamiaceae, the mint family

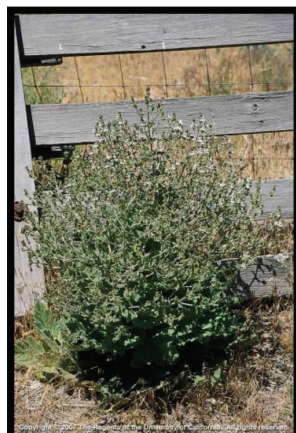
Category: Control

Diagnostic Characteristics

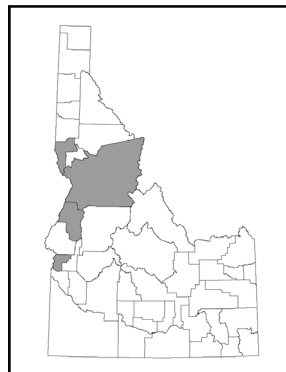
- ◆ Biennial, grows up to 3 feet tall
- ◆ Rosette leaves ovate and densely covered with woolly grayish white hairs
- ◆ Lower leaves ovate to triangular, have petioles, irregularly lobed to deeply incised, 4 to 12 inches long
- ◆ Stems, new leaves, and leaf lower surfaces are densely covered with fine, white woolly hairs
- ◆ Upper leaves are smaller than lower leaves and clasp the stem
- ◆ Stems are square
- ◆ Flowers are white to yellowish, borne in clusters on profusely branched stems

Background

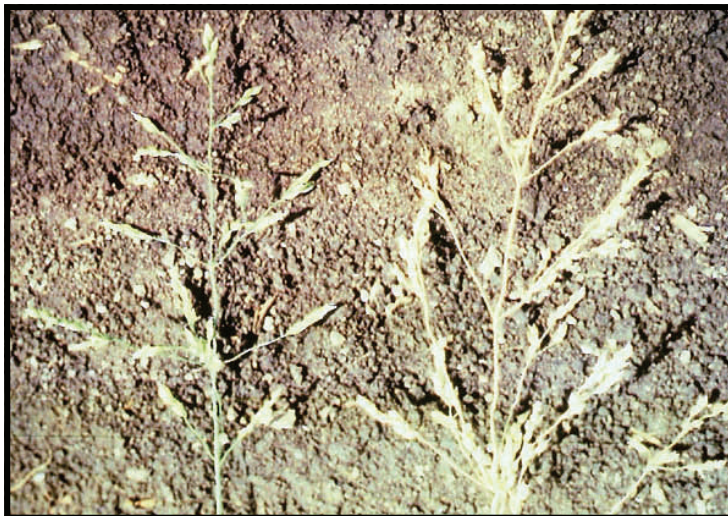
- ◆ Native to Europe
 - ◆ Inhabits rangelands, disturbed areas, rights-of-way, and open forests; prefers dry areas
 - ◆ Reproduces by seed, mature plants break off and tumble in the wind
 - ◆ Crushed leaves have sage odor
-



Infested Counties



Milium



Photos: Wyoming Weed and Pest
Council

Milium vernale

Milium

Other common names: early millet, spring milletgrass

Poaceae, the grass family

Category: Containment

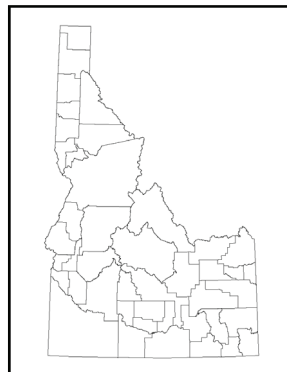
Diagnostic Characteristics

- ◆ Annual winter grass, erect in shape, that grows up to 2 feet tall
- ◆ Leaves are up to 4 inches long and ¼ inch wide with veins that appear roughened
- ◆ Ligules are membranous, ¼ inch long, and auricles are lacking
- ◆ Panicles are open, sparse, bright green to purplish, and up to 8 inches long

Background

- ◆ Native to southern Europe and western Asia
- ◆ Inhabits winter wheat and pastures
- ◆ Reproduces by seed
- ◆ A significant weed problem in Europe in winter wheat

Infested Counties



Musk Thistle



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

Carduus nutans

Musk Thistle

Other common names: nodding thistle, nodding plumeless thistle
Asteraceae, the sunflower family

Category: Control

Diagnostic Characteristics

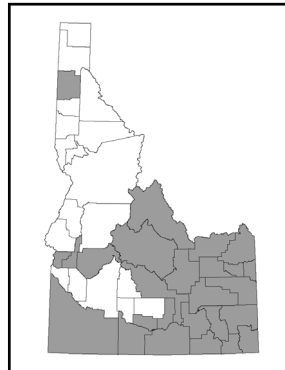
- ◆ Biennial or winter annual that can grow up to 6 feet tall
- ◆ Plants exist as basal rosettes until flowering stems develop
- ◆ Basal leaves elliptic to lance-shaped, pinnately lobed, and with prickly toothed margins
- ◆ Leaves 1-2 pinnate lobed, non-hairy to sparsely hairy
- ◆ Stems narrow winged, non-hairy to woolly
- ◆ Flower heads are 1½- 3 inches wide, spherical, solitary, nodding, and consist of purple to pink disk flowers; bracts surrounding flowers are spine-tipped, overlapping in several rows

Background

- ◆ Native to Eurasia, likely introduced as an ornamental
- ◆ Inhabits non-crop areas, rangelands, pastures, meadows, forests, streambanks, and rights-of-way
- ◆ Reproduces by seed
- ◆ Can hybridize with plumeless thistle



Infested Counties



Orange Hawkweed



Photos: Michael Shephard,
Bugwood.org

Hieracium aurantiacum

Orange Hawkweed

Other common names: king devil, red devil, devil's paintbrush

Asteraceae, the sunflower family

Category: Control

Diagnostic Characteristics

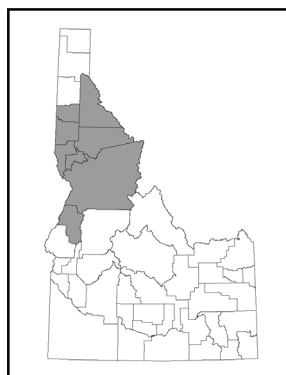
- ◆ Perennial with fibrous-roots (this is deceptive due to the rhizomes), grows 1-2 feet tall
- ◆ Leaves mostly basal, upper leaf surface with long simple hairs
- ◆ Flowers are strap shaped with notched upper margins, orange-red, and in compact clusters
- ◆ Flowering stems are leafless with black hairs or occasionally a small leaf appears near the midpoint
- ◆ Milky latex is exuded when the plant is cut or broken

Background

- ◆ Introduced as an ornamental and an herbal remedy
- ◆ Inhabits forest meadows, pastures, rights-of-way, and disturbed areas
- ◆ Reproduces vegetatively from stolons, rhizomes, and seed
- ◆ Seed reproduction is generally less important than vegetative reproduction in existing populations
- ◆ Forms dense colonies



Infested Counties



Oxeye Daisy



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

Chrysanthemum leucanthemum
Synonym: Leucanthemum vulgare lam.

Oxeye Daisy

Asteraceae, the sunflower family

Category: Containment

Diagnostic Characteristics

- ◆ Perennial, grows 10-24 inches tall
- ◆ Basal leaves are toothed spatula-like
- ◆ Flower heads are solitary at the end of branches, composed of white ray and yellow disk flowers
- ◆ Flower heads 1-1½ inches wide

Background

- ◆ Introduced as an ornamental from Eurasia
- ◆ Inhabits meadows, rights-of-way, and non-crop areas
- ◆ Reproduces by seed and creeping roots



Infested Counties

