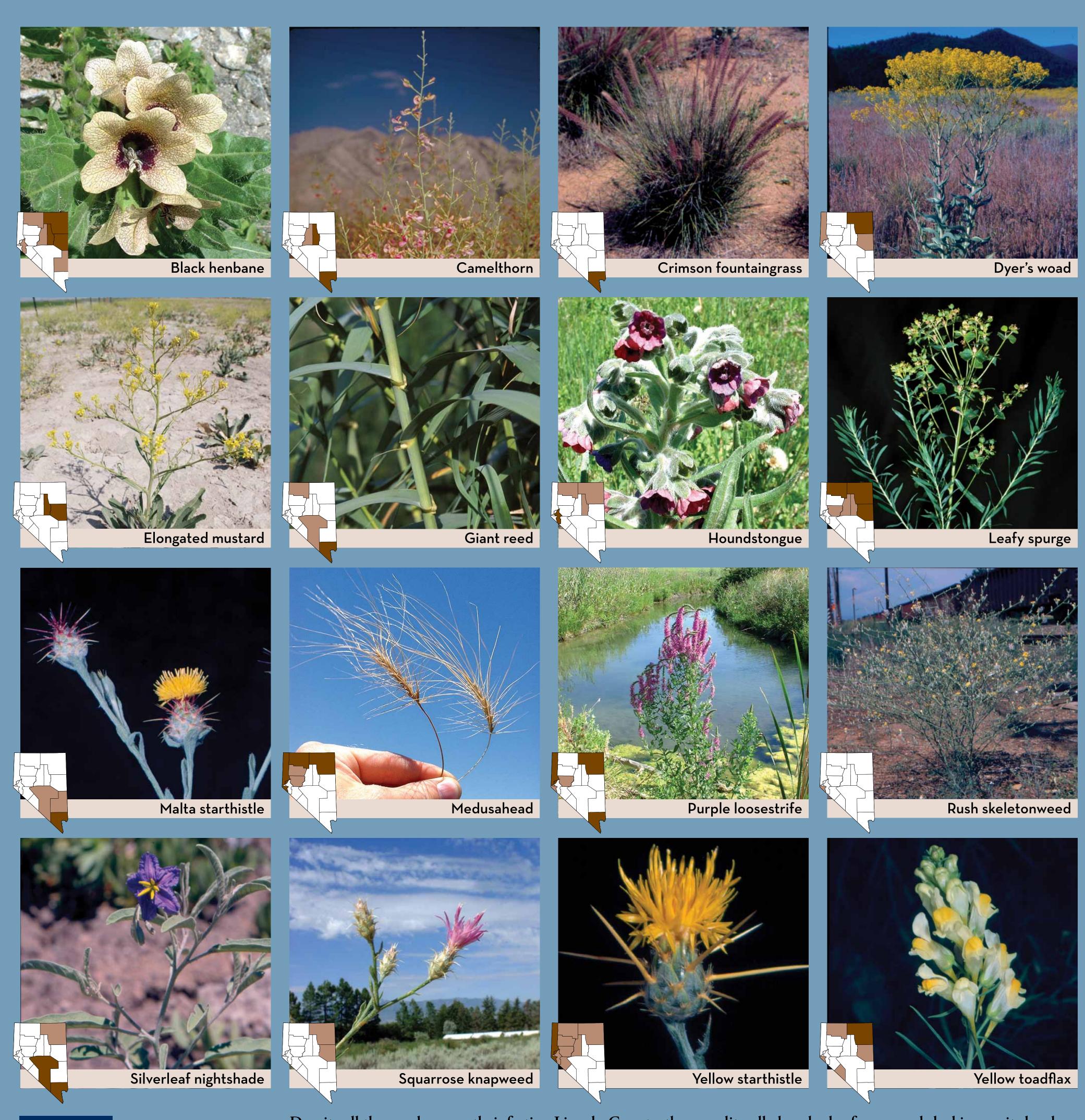
WEEDS TO WATCH

New Weed Threats for Lincoln County



University of Nevada Cooperative Extension

Despite all the weeds currently infesting Lincoln County, there are literally hundreds of new weeds lurking on its borders. The weeds on this poster are of particular concern because they are known to spread rapidly, cause damage to desirable habitats and be difficult to control. The best approach for these weeds is early detection and rapid response. This involves diligent monitoring for new invasions and prompt action to eliminate them. The maps are shaded to provide current abundance information for each species: NOT KNOWN RARE COMMON

Black henbane (Hyoscyamus niger): Annual or biennial. **I.D.:** Up to 3 feet tall; stems, leaves and seed pods covered with sticky hairs; leaves alternate, lance-shaped to oblong, with prominent, pale leaf veins; leaf margins lobed or toothed; lower leaves have a short petiole, upper leaves have no petiole; flower funnel-shaped with a purple center and five fused petals with purple veins; seed pods are vase-shaped. Other: Often infests roadsides, waste areas, field borders and pastures; toxic to humans and livestock but rarely consumed by animals due to foul odor and taste.

Camelthorn (Alhagi maurorum): Perennial. I.D.: 1.5 to 4 feet tall; stem has spines with yellow tips; leaves alternate, simple, narrow to oblong, with hairs on lower surface; flowers pink to purple; seed pods are reddish-brown, curved and tipped with a small spine; pods deeply indented between seeds. Other: Often found in roadsides, field borders and along waterways.

Crimson fountaingrass (Pennisetum setaceum): Perennial. I.D.: Bunchgrass, up to 5 feet tall; leaf margins have long hairs, particularly near the collar; inflorescence a spike with purplish bristles; can be droopy. Other: Grows best in climates with mild winters; often infests disturbed areas such as roadsides, desert areas, washes, and waste areas; can be a fire hazard; ornamental cultivars that do not produce viable seed are not classified as Noxious in Nevada.

Dyer's woad (Isatis tinctoria): Biennial, sometimes annual or perennial. I.D.: Up to 4 feet tall; leaves lance-shaped, bluish-green and smooth (hairless) with a distinct white mid-vein; margins are wavy to smooth; leaf base clasps the stem; flowers yellow with four petals and have a flat-topped appearance; mature seed pods dark brown to black; dry plants with attached seed pods remain standing into winter. Other: Often infests waste areas, roadsides, rangeland, pastures and crop fields.

Elongated mustard (Brassica elongata): Biennial, short-lived perennial or winter annual. I.D.: Up to 2 feet tall; basal leaves elliptic to oblong with margins that are slightly toothed or wavy; upper leaves are sessile or have short stalks; flowers have yellow petals; fruits green, erect and on stalks. Other: Infests roadsides and desert communities; presently only found in Eureka and White Pine counties.

Giant reed (Arundo donax): Perennial. I.D.: Grass, up to 25 feet tall; stem semiwoody, inflexible, hollow except at nodes; resembles bamboo; leaves alternate, blade is flat, margins are rough; leaf base is lobed, clasps the stem and is fringed with long hairs; light brown to purple flower plume-like with numerous fine branches. Other: Grows best in moist soils; historically planted to reduce erosion and sometimes planted today as an ornamental.

Houndstongue (Cynoglossum officinale): Biennial (sometimes annual or perennial). I.D.: Up to 4 feet tall; stem covered with long hairs; leaves alternate, lance-shaped, with a rough texture and covered with long hairs; only lower leaves have petioles; leaves decrease in size from bottom to top of plant; flowers purplish-red with five petals and occur in clusters; seeds turn brown when mature and are covered with short prickles that can attach to clothing or animal fur. Other: Grows best in moist areas; often found in pastures, roadsides, fence lines, waste areas and along waterways; toxic to livestock, especially horses; has a distinctive odor that may cause animals to avoid it.

Leafy spurge (Euphorbia esula): Perennial. **I.D.:** Up to 3 feet tall; base of plant often woody; entire plant contains milky, white sap; leaves alternate, linear, with no petiole and smooth margins; flowers small, showy, green to yellow and clustered at tips of stems; bracts below flowers are heart- to kidney-shaped and have the appearance of flower petals; produces a spherical capsule with three chambers. Other: Often found in pastures, waste areas, rangelands, field borders and along waterways; sap can irritate skin, eyes and the digestive tracts of humans and animals (sheep and goats are immune).

Malta starthistle (Centaurea melitensis): Annual. I.D.: 1 to 3 feet tall; leaves graygreen, and covered with dense, fine hairs; leaves alternate, linear to oblong with smooth, toothed or wavy margins; flowers yellow; base of flower is vase-shaped, and covered with cotton-like hairs and stout, purple to brown colored spines . Other: Often infests rangeland, pastures, crop fields, waste areas, roadsides.

Medusahead (Taeniatherum caput-medusae): Annual. I.D.: Grass, 0.5 to 2 feet tall; stem sometimes covered with short hairs; collar region usually has long hairs, auricles and a membranous ligule; seedhead a spike, awns are stiff, straight or twisted and barbed; spikes often remain intact on dry plants through winter. Other: Grows best on clay soils; primarily infests rangeland; unpalatable to grazing animals due to high levels of silica in the foliage and long, stiff awns; matures two to four weeks later than other annual grasses.

Purple loosestrife (Lythrum salicaria): Perennial. I.D.: Up to 6 feet tall; stem has four to five sides and is covered with short hairs; leaves mostly opposite or whorled, narrow to lance-shaped with smooth margins, smooth (hairless) to hairy with no petioles; flowers have five to seven pink to purple petals surrounding a yellow center; each petal has a dark mid-vein and appears wrinkled or crushed. Other: Grows best in wet areas; often found in wetlands and along the edges of ponds and waterways; historically used as an ornamental plant but has escaped cultivation.

Rush skeletonweed (Chondrilla juncea): Perennial. I.D.: Up to 4 feet tall; stems contain white, milky sap; lower portion of stem is covered with coarse, downwardpointing, reddish-brown hairs; rosette leaves resemble dandelion; stems have very few leaves; leaves narrow with smooth margins; flowers yellow. Other: Grows best in welldrained soils; often infests roadsides, rangelands and waste areas; very difficult to control due to lack of leaf surface.

Silverleaf nightshade (Solanum elaeagnifolium): Perennial. I.D.: 1 to 3 feet tall; stem covered with dense, short hairs and sometimes with red to yellow spines; leaves alternate, oval to lance-shaped with wavy or lobed margins; covered with tiny hairs that are star-shaped upon magnification; flowers star-shaped, purple to blue with five petals and yellow stamens; berries are round, shiny, yellow, and resemble tiny tomatoes. Other: Often infests rangeland, roadsides, waste areas and crop fields; toxic to livestock and humans.

Squarrose knapweed (Centaurea virgata var. squarrosa): Perennial. **I.D.:** Up to 2 feet tall; grows as a basal rosette prior to bolting; leaves alternate; lower leaves pinnately divided and often covered with short grayish hairs; upper leaves linear with smooth margins; flowers pink to purple; base of flower is covered with comb-like bracts that are tipped with a spine that curves out and downward. Other: Often infests rangelands, waste areas and roadsides.

Yellow starthistle (Centaurea solstitialis): Annual. **I.D.:** 1 to 6 feet tall; stems winged; leaves blue- or gray-green and covered with fine hairs; rosette leaves are oval to linear with deeply lobed margins; stem leaves are alternate, linear to oblong with smooth to wavy margins; flowers yellow; base of flower is covered with cotton-like hairs and straw-colored spines. Other: Often infests rangeland, pastures, cultivated fields, waste areas and roadsides; causes "chewing disease" in horses by damaging the area of the brain that controls fine motor movements – particularly of the mouth – resulting in starvation or dehydration.

Yellow toadflax (Linaria vulgaris): Perennial. I.D.: Up to 3 feet tall; woody base; leaves alternate, linear, with smooth margins; flowers bright yellow to white, sometimes with an orange-bearded throat and a yellow spur; look like snapdragons. Other: Grows best in coarse soils; often infests rangelands, waste areas and roadsides; toxic to livestock if ingested in large quantities.

Weed Impacts

All weeds impact their environment by replacing desired vegetation and reducing forage availability and habitat quality. Impacts for specific weeds are stated when they are more severe. (e.g., they are toxic to animals).

Weed Management

Weed management decisions are dependent on habitat and surrounding vegetation, and are not listed in this publication. For those recommendations, please reference the Nevada Noxious Weed Field Guide

(http://www.unce.unr.edu/publications/files/nr/2010/sp1001.pdf) or the Pacific Northwest Weed Management Handbook (http://uspest.org/pnw/weeds).

Contact

If you have seen these weeds, contact your local University of Nevada Cooperative Extension, BLM, USFS or conservation district office: http://www.unce.unr.edu/contact/ personnel.

References:

Creech, E., Schultz, B. & Blecker, L. 2010. Nevada Noxious Weed Field Guide. University of Nevada Cooperative Extension Special Publication: SP-10-01. DiTomaso, J. M. & Healy, E. A. 2007. Weeds of California and Other Western States. Davis, CA: University of California.

Authors:

Lisa Blecker, Research Coordinator, University of Nevada Cooperative Extension; J. Earl Creech, Extension Agronomist, Utah State University; Jay Davison, Area Forage and Alternative Crops Specialist, University of Nevada Cooperative Extension; Brad Schultz, Extension Educator, University of Nevada Cooperative Extension; Holly Gatzke, Extension Educator, University of Nevada Cooperative Extension.

Copyright © 2011, University of Nevada Cooperative Extension, An EEO/AA institution.

Financial support provided by: USFS, NDOA and USDA-NIFA.

Photo credits:

Black henbane, Houndstongue, Medusahead, Purple loosestrife, Squarrose knapweed by Nate Belliston, Uinta County Weed Department; Camelthorn by J. P. Clark, © 2008 Regents of the University of California; Crimson fountaingrass, leafy spurge, Malta starthistle, Rush skeletonweed, Silverleaf nightshade, Yellow toadflax by Joe DiTomaso, © Regents of the University of California; Dyer's woad by Steve Orloff, © 2008 Regents of the University of California; Elongated mustard by Earl Creech, Utah State, University; Giant reed by James H. Miller, USDA-USFS, bugwood.org; Yellow starthistle by Jack Kelly Clark, © 2008 Regents of the University of California.



provider and employer

