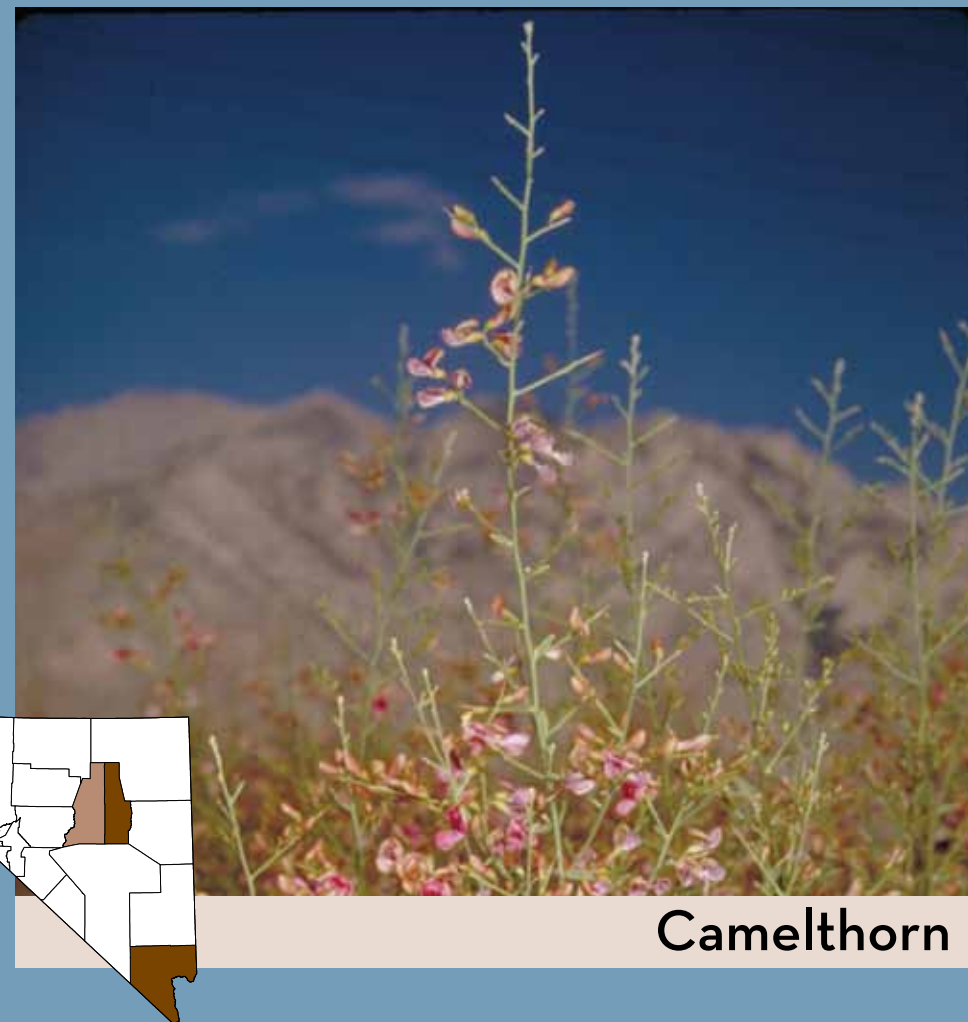


WEEDS TO WATCH

New Weed Threats for Northern Nye and Esmeralda Counties



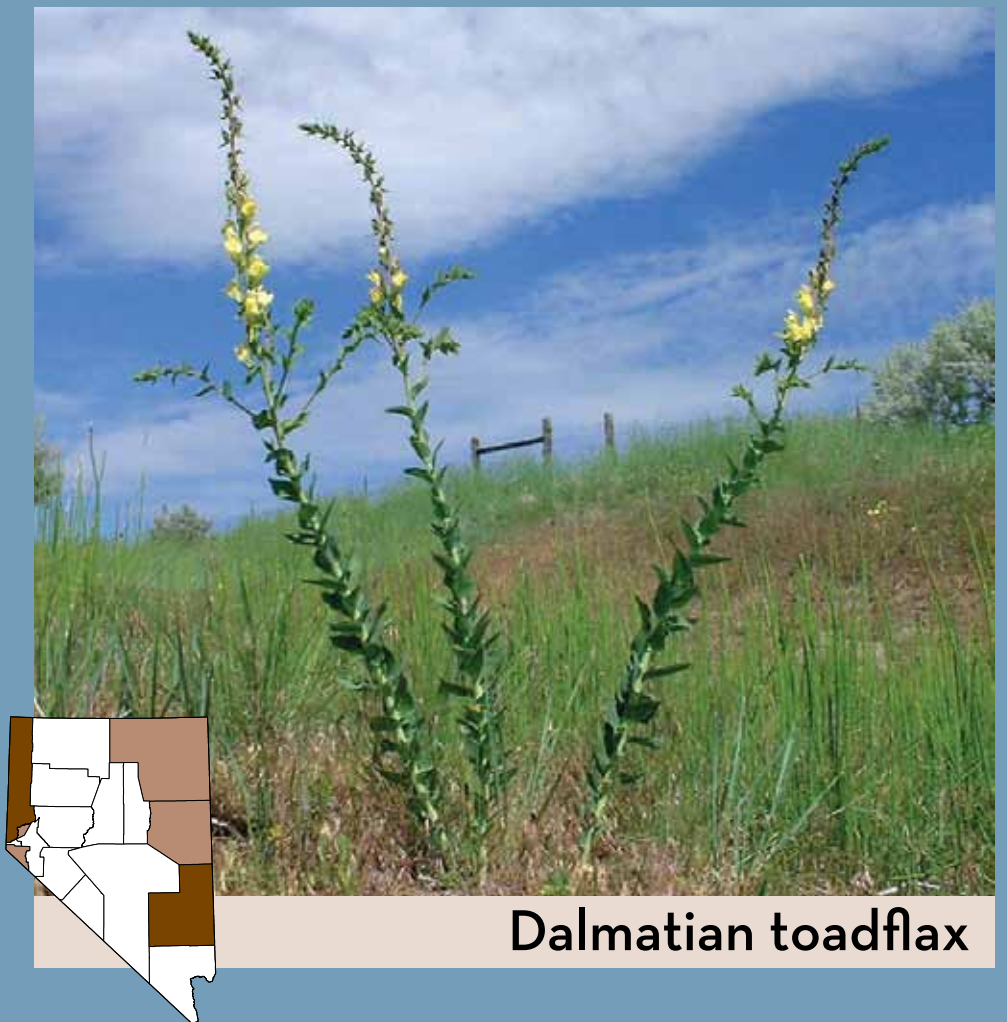
African rue



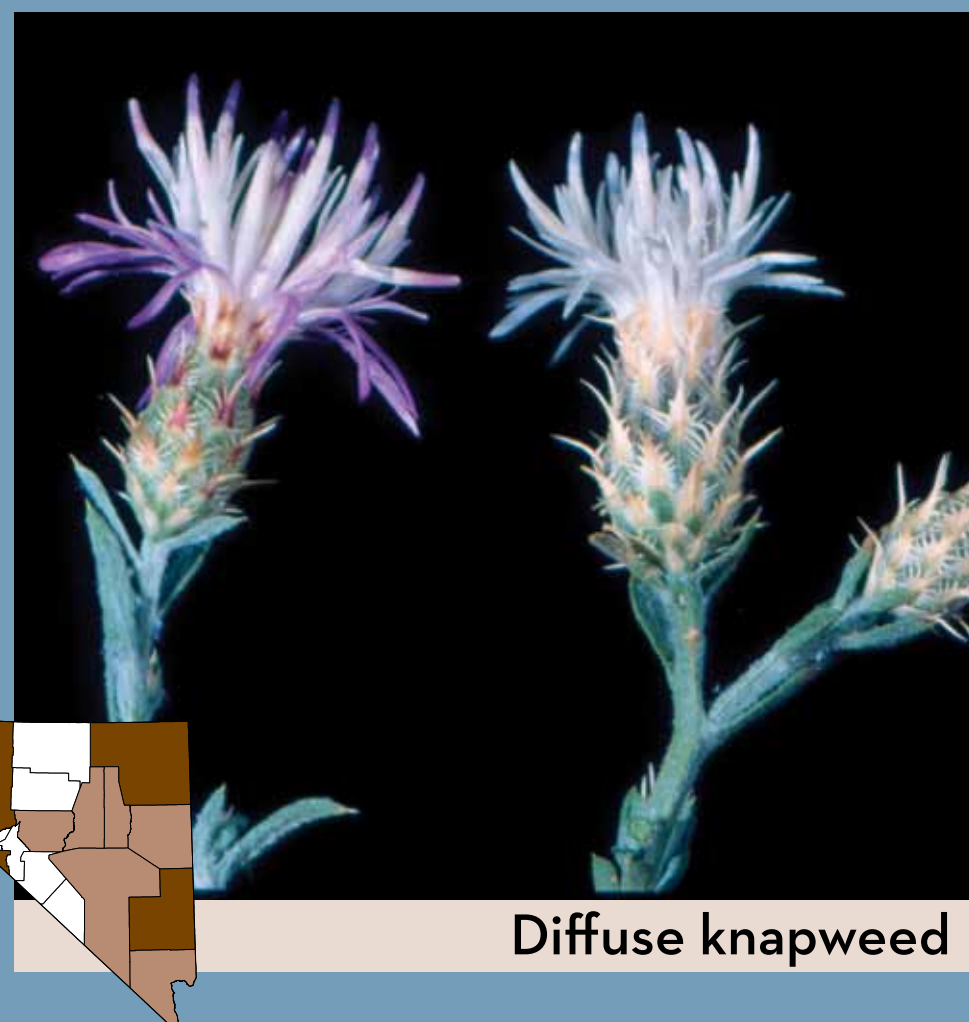
Camelthorn



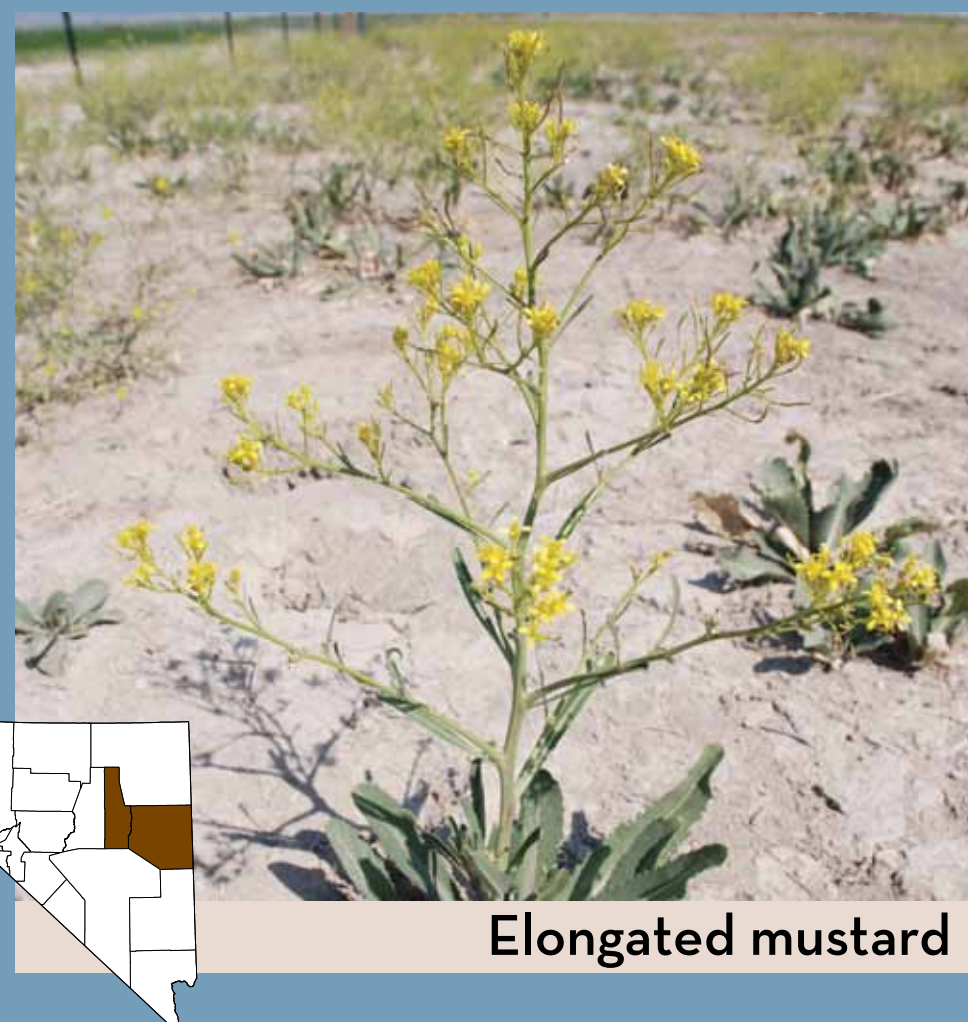
Canada thistle



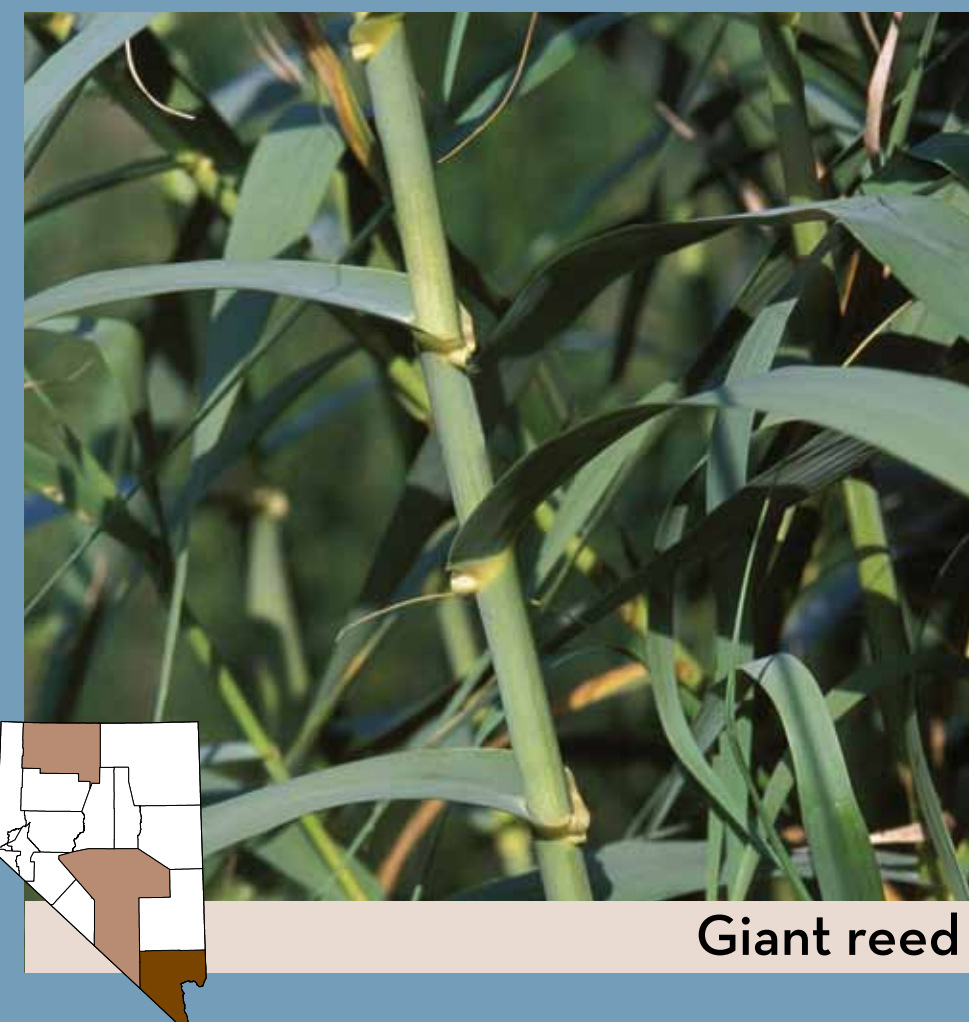
Dalmatian toadflax



Diffuse knapweed



Elongated mustard



Giant reed



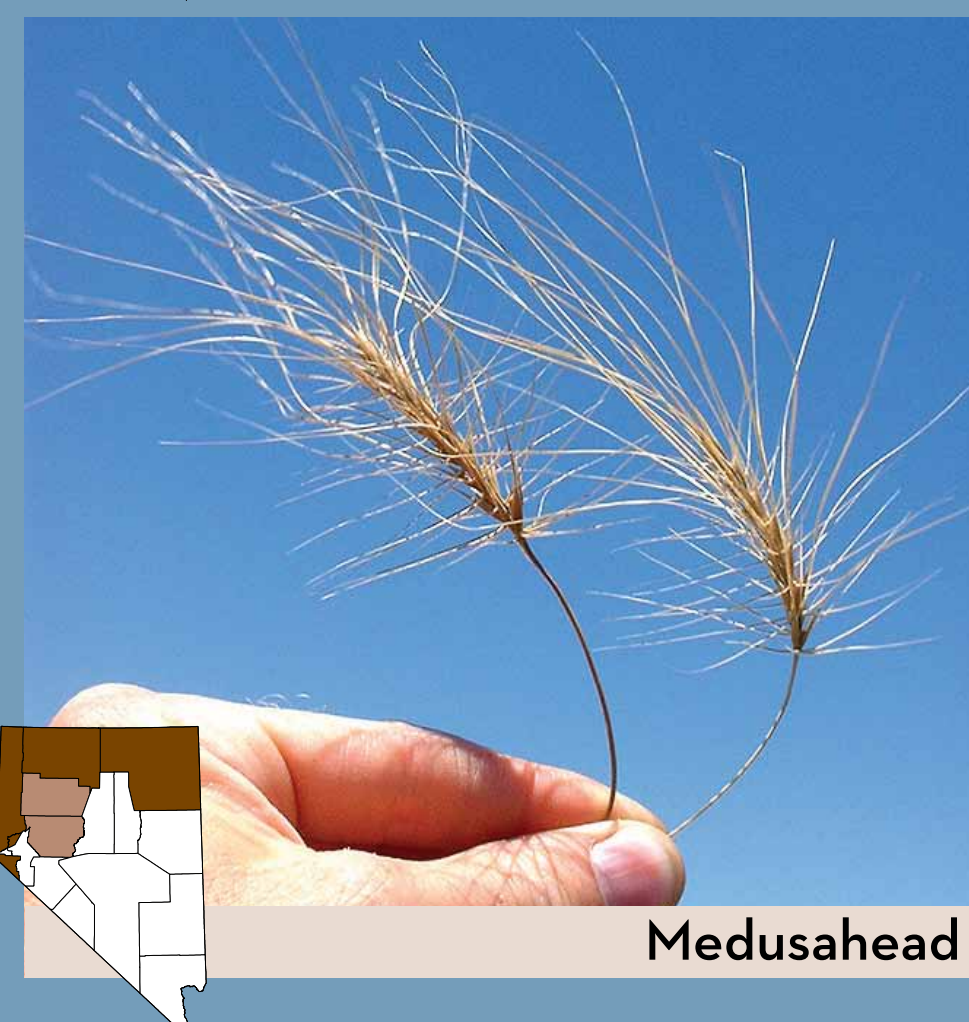
Johnsongrass



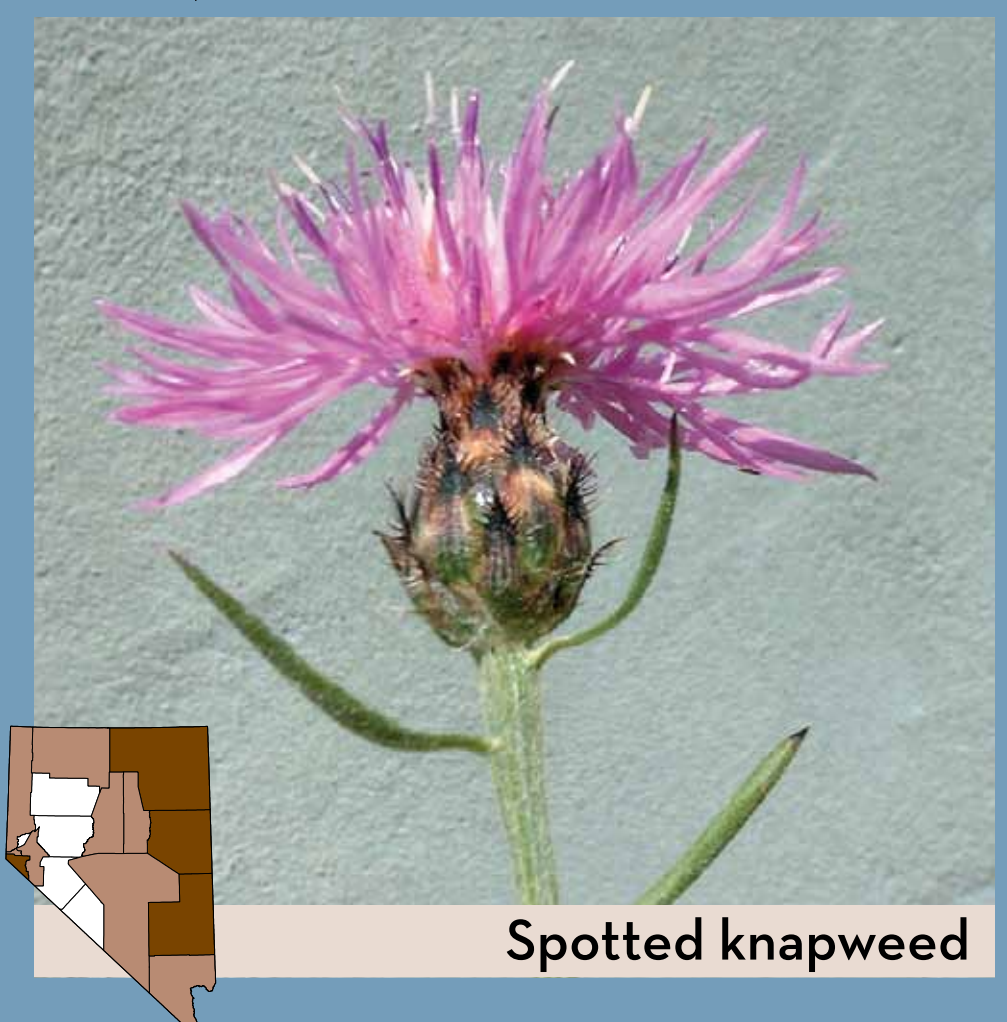
Jointed goatgrass



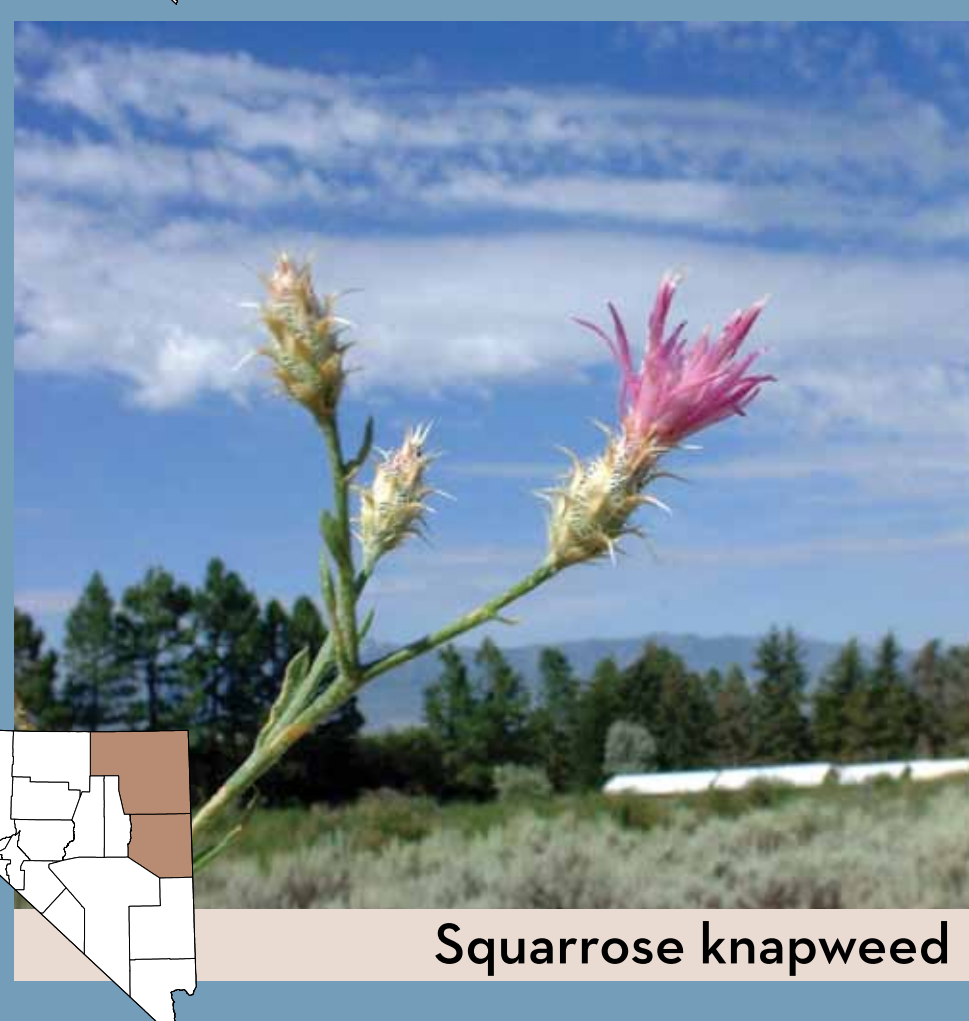
Malta starthistle



Medusahead



Spotted knapweed



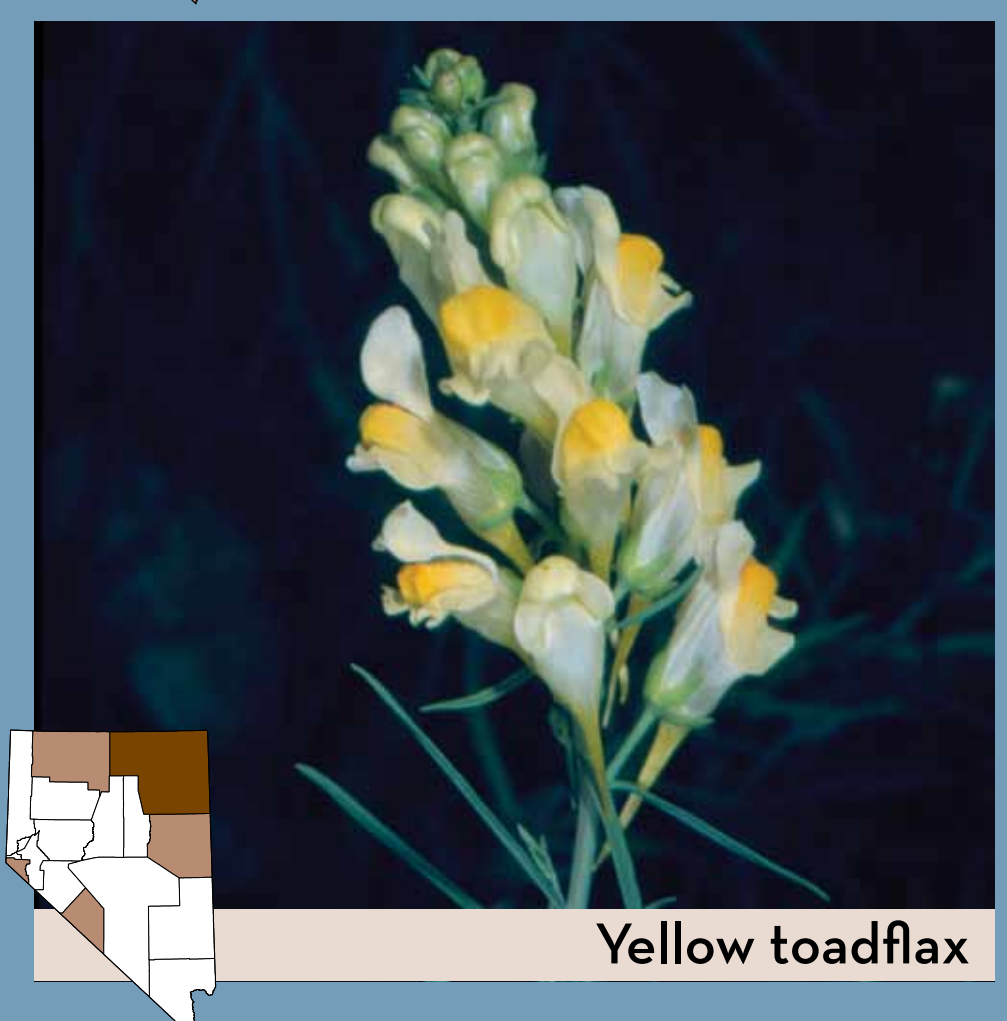
Squarrose knapweed



Waterhemlock



Yellow starthistle



Yellow toadflax



University of Nevada
Cooperative Extension

Despite all the weeds currently infesting Northern Nye and Esmeralda Counties, 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**

African rue (*Peganum harmala*): Perennial. **I.D.:** Up to 2 feet tall and bushy; leaves alternate, bright green and deeply divided; leaflets linear and fleshy; flowers have five white petals and a yellow center; seed pod a small, round capsule with two to four chambers and can be green, orange or brown; woody taproot. **Other:** Grows best in dry, disturbed sites; often infests roadsides, waste areas, washes and desert areas; all plant parts poisonous to livestock and humans.

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.

Canada thistle (*Cirsium arvense*): Perennial. **I.D.:** Up to 4 feet tall; leaves alternate, oblong or lance-shaped, shiny and smooth (hairless); leaf margins are wavy, lobed or toothed with spiny edges; flowers pink, purple or white; base of flower has no spines and is covered with green to purple bracts with dark tips; extensive root system. **Other:** Often found in pastures, hay fields, waste areas and along waterways.

Dalmatian toadflax (*Linaria dalmatica*): Perennial. **I.D.:** Up to 4 feet tall; stem and leaves smooth and waxy; leaves alternate, dense, lance- to heart-shaped, have smooth margins and are blue-green; leaves clasp the stem; flowers yellow, sometimes with an orange-bearded throat and a long spur; look like snapdragons. **Other:** Often infests rangelands, waste areas and roadsides; may be toxic to livestock if ingested in large quantities.

Diffuse knapweed (*Centaurea diffusa*): Biennial (sometimes annual or perennial). **I.D.:** Up to 2 feet tall; stem rough and covered with short, stiff hairs; leaves alternate, lower leaves pinnately divided, sometimes covered with short grayish hairs; upper leaves linear with smooth margins; flowers white or pale purple; flower base covered with yellow, comb-like bracts tipped with a narrow spine. **Other:** Often infests rangelands, waste areas and roadsides; dry, mature plants often break off and tumble in the wind to spread seed.

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 semi-woody, 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.

Johnsongrass (*Sorghum halepense*): Perennial. **I.D.:** Grass, up to 8 feet tall; stems slightly flattened; leaves have a white mid-vein and are mostly hairless except near collar; ligule is membranous and tipped with fine hairs; no auricles; seeds are reddish-brown. **Other:** Grows best in moist soils; often found in fields, pastures, fence rows, roadsides and along waterways; plants can be toxic to livestock after frost or drought.

Jointed goatgrass (*Aegilops cylindrica*): Annual. **I.D.:** Grass, 15 to 30 inches tall; leaves are alternate and simple; auricles at leaf base are hairy; flower stalk a long, cylindrical spike; long awns protrude from either side of the spike. **Other:** Found mostly in wheat fields, but also grows on roadsides, waste areas, alfalfa fields and pastures; a common contaminant of wheat seed.

Malta starthistle (*Centaurea melitensis*): Annual. **I.D.:** 1 to 3 feet tall; leaves gray-green, 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.

Spotted knapweed (*Centaurea biebersteinii*): Biennial. **I.D.:** Up to 4 feet tall; leaves alternate, gray-green, pinnately divided, dotted with resin and sometimes covered with small grayish hairs; upper leaves smaller and narrower with few to no lobes; flowers white to purple; base of flower is covered with bracts with dark, comb-like tips that give the appearance of spots. **Other:** Grows best on dry, well-drained soils; often infests rangelands, waste areas and roadsides.

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.

Waterhemlock (*Cicuta maculata*): Perennial. **I.D.:** Up to 5 feet tall; stem has purple streaks; leaves pinnately compound; leaflets are lance-shaped with toothed margins; flowers small, white and arranged in umbrella-like clusters. **Other:** Grows best in moist soils; often found in crop fields, roadsides, waste areas and along waterways; highly toxic to animals and humans.

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 North-west 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. Whitson, T. (ed). 2006. Weeds of the West. Las Cruces, NM: Western Society of Weed Science.

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; Amy Meier, 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:

African rue, Diffuse knapweed, Johnsongrass, Jointed goatgrass, Malta starthistle, Waterhemlock, Yellow toadflax by Joe DiTomaso © 2008 Regents of the University of California; Camelthorn by J. P. Clark, © 2008 Regents of the University of California; Canada thistle by Steve Dewey, Utah State University, bugwood.org; Dalmatian toadflax, Medusahead, Spotted knapweed, Squarrose knapweed by Nate Belliston, Uinta County Weed Department; 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.



USDA is an equal opportunity provider and employer

