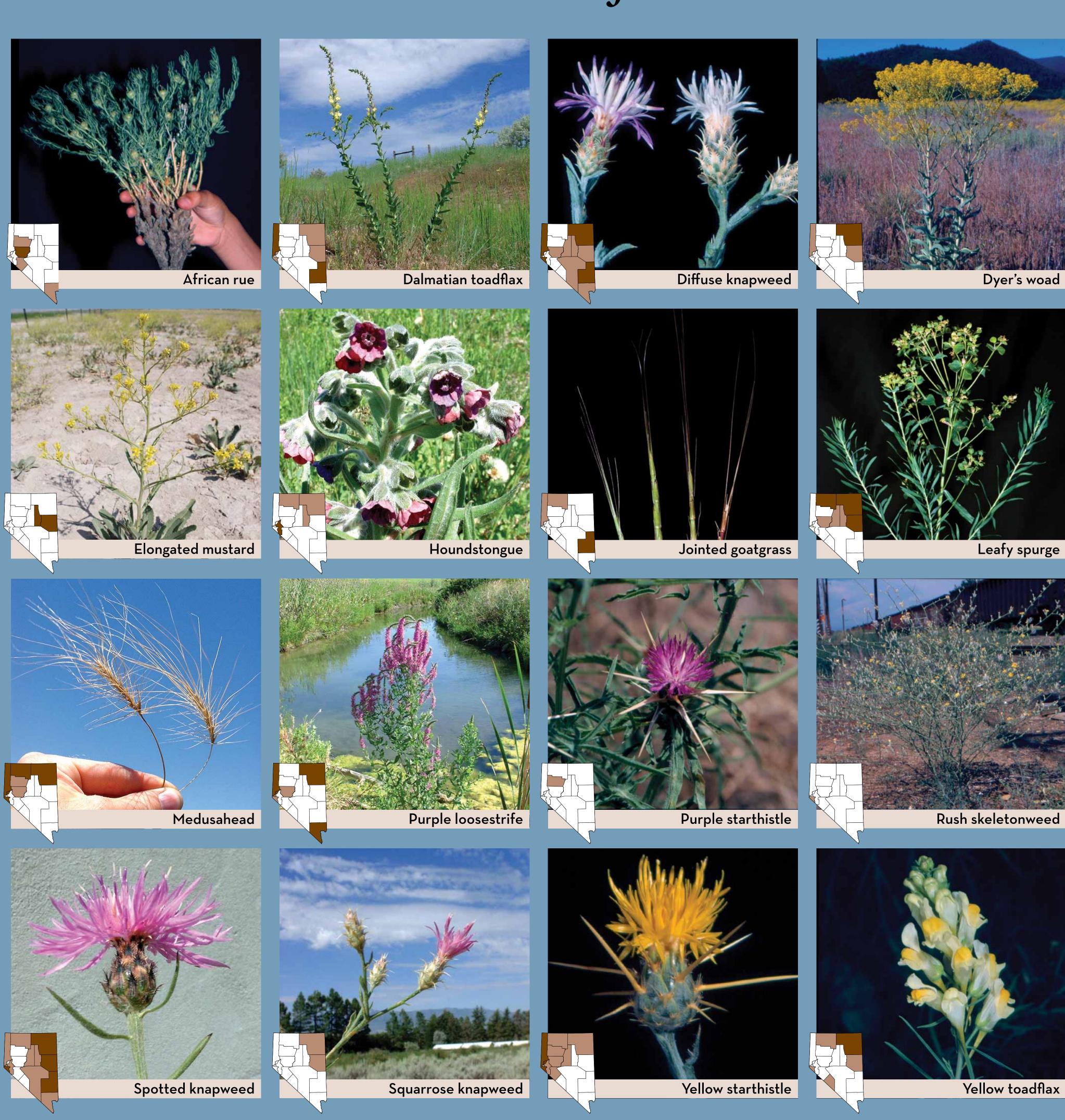
# WEEDS TO WATCH

# New Weed Threats for Nevada



University of Nevada Cooperative Extension Despite all the weeds currently infesting Nevada, 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.

**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.

**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.

**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.

**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.

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.

**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).

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.

**Purple starthistle** (Centaurea calcitrapa): Annual or perennial. **I.D.:** Up to 4 feet tall, stems covered with hairs; leaves alternate, pinnately divided, covered with short grayish hairs and dotted with resin; flowers pink to purple; base of flower is covered with stout, straw-colored spines; older rosettes have a circle of straw-colored spines at the center. **Other:** Grows best in sites with heavy, fertile soils; often infests rangelands, waste areas and roadsides.

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, downward-pointing, reddish-brown hairs; rosette leaves resemble dandelion; stems have very few leaves; leaves narrow with smooth margins; flowers yellow. Other: Grows best in well-drained soils; often infests roadsides, rangelands and waste areas; very difficult to control due to lack of leaf surface.

**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.

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).

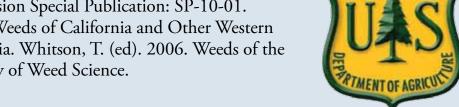
## Contact

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:

**Authors:** 

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 Socienty of Weed Science.







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