

# WEEDS TO WATCH

## *New Weed Threats for Clark and Southern Nye Counties*



African rue



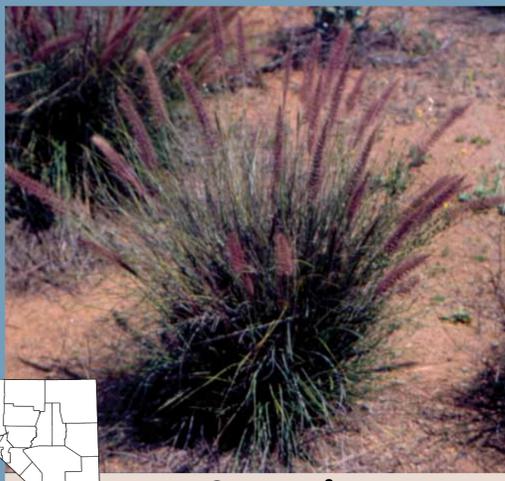
Athel tamarisk



Canada thistle



Chastetree



Crimson fountaingrass



Dalmation toadflax



Diffuse knapweed



Hoary cress



Leafy spurge



Musk thistle



Ravennagrass



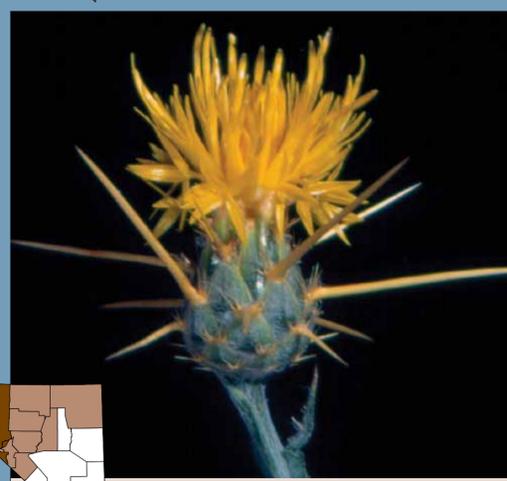
Scotch thistle



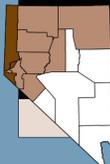
Spotted knapweed



Tree tobacco



Yellow starthistle



Yellow toadflax



Despite all the weeds currently infesting Clark and Southern Nye 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**



University of Nevada  
Cooperative Extension

**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.

**Athel tamarisk** (*Tamarix spp.*): Perennial. **I.D.:** Shrub or small tree; up to 20 feet tall, reddish-brown bark; leaves alternate, deciduous, green to blue-green, small, overlapping and scale-like; turn yellow to red in autumn; flowers tiny with five white to pink petals. **Other:** Often found along edges of waterways, lakes, and ponds; high concentration of salt in fallen leaves can impact growth of other plants.

**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.

**Chastetree** (*Vitex agnus-castus*): Perennial. **I.D.:** Shrub or small tree up to 15 feet tall; leaves are simple and teardrop-shaped; upper leaf surface is pale green, covered with short, dense hairs; lower leaf surface grayish-white; foliage has a spicy fragrance when crushed; flowers are arranged in terminal clusters in panicles. **Other:** Grows along shorelines and moist areas; poor soil stabilizer; develops monocultures that exclude more desired native vegetation; releases allelopathic compounds that make soil hydrophobic and increases drought stress of native species.

**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.

**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.

**Hoary cress** (White top; *Cardaria draba*): Perennial. **I.D.:** 0.5 to 2 feet tall; stem and leaves covered with short hairs; leaves alternate, oblong to lance-shaped; lower leaves have short petioles; bases of upper leaves have lobes that clasp the stem; flowers white and occur in clusters that give plant a flat-topped appearance. **Other:** Grows best in disturbed, alkaline soils; often found in pastures, fields, roadsides, rangelands, waste areas and along waterways.

**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).

**Musk thistle** (*Carduus nutans*): Biennial. **I.D.:** 2 to 6 feet tall; stems winged and spiny; leaves dark green with a light green mid-vein, alternate and sometimes hairy; margins are deeply lobed and spiny; rosette leaves have pale edges; flowers large and pink to purple; head often nods or droops; stem below head usually spineless; base of flower is covered with spine-tipped bracts that are usually purple. **Other:** Often infests roadsides, over-grazed pastures and waste areas.

**Ravennagrass** (*Saccharum ravennae*): Perennial. **I.D.:** Bunchgrass, up to 12 feet tall; leaf blades are un-lobed and covered with long, fuzzy hairs; leaves distributed on the stem up to the base of the inflorescence; flowers grow in plumes; spikelets are silky and hairy. **Other:** Inhabits moist places, such as ditches, marshes and riparian areas; introduced as an ornamental and escaped cultivation.

**Scotch thistle** (*Onopordum acanthium*): Biennial. **I.D.:** Up to 12 feet tall; stem and leaves covered with woolly, gray hairs; winged stems; leaves alternate; oblong, margins are lobed or toothed with stiff spines; flowers white to purple; base of flower is round and covered with green, purple or yellow bracts, each tipped with a spine. **Other:** Infests pastures, rangeland, roadsides and waste areas; forms dense stands that are difficult for humans and animals to penetrate.

**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.

**Tree tobacco** (*Nicotiana glauca*): Perennial. **I.D.:** Shrub or tree, up to 20 feet tall; wood soft; leaves alternate, ovate to elliptical, often grayish green; yellow tubular flowers. **Other:** Often found on roadsides, fields, washes, riparian areas; prefers open, sandy or gravelly sites; all plant parts are highly toxic to humans and livestock if ingested.

**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. Global Invasive Species Database. 2007. *Vitex rotundifolia*. Available from: <http://www.issg.org/database/species/ecology.asp?si=1110&fr=1&sts=> [Accessed November 23, 2010].

## 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.

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

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

## Photo credits:

African rue, Crimson fountaingrass, Diffuse knapweed, Hoary cress, Leafy spurge, Musk thistle, Ravennagrass, Tree tobacco, Yellow toadflax by Joe DiTomaso, © 2008 Regents of the University of California; Athel tamarisk, Dalmatian toadflax, Scotch thistle, Spotted knapweed by Nate Belliston, Uinta County Weed Department; Canada thistle by Steve Dewey, Utah State University, bugwood.org; Chastetree by National Park Service; Yellow starthistle by Jack Kelly Clark, © 2008 Regents of the University of California.



USDA is an equal opportunity provider and employer