

Carson River Watershed Forum

A watershed approach to Yellow
Starthistle management

Carson Water Subconservancy District, Nevada Department of Agriculture, Dayton Valley
Conservation District, Storey Country and Carson City Weed Coalition

Yellow Starthistle, *Centaurea solstitialis*

Identification

Family Asteraceae

Stems Stiff, wiry, 1-6 ft. tall and usually branched; wings extended down stem.

Leaves Blue to gray-green, 1.5-6 in. long and densely covered in fine hairs.

- Rosette leaves are oval to strap-like with deeply lobed edges. Stem leaves are alternate, strap-like to oblong with smooth to wavy edges.

Flower Yellow, located singly at branch tips or axils; base of flower is vase-shaped, 0.5-0.75 in. in diameter. Covered with cotton-like hairs and stout, straw-colored spines 0.5-1 in. long.

Roots Deep tap root.



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Yellow Starthistle, *Centaurea solstitialis*



Yellow Starthistle, *Centaurea solstitialis*

Biology

- Native to Eurasia
 - Introduced to California in 1850
- 10 – 15 million acres of infestation in California
- Winter annual, found below 7,000 feet
- Germination – fall through spring
- Proliferates on road sides and disturbed areas
- Suspected allelopathy



Yellow Starthistle, *Centaurea solstitialis*

Ecological Impacts

- Forms dense colonies
- Depletes soil moisture
- Creates extensive thatch layer
- Prevents germination of desirable species
- Poisonous to horses – causes a neurological disorder called “chewing disease”



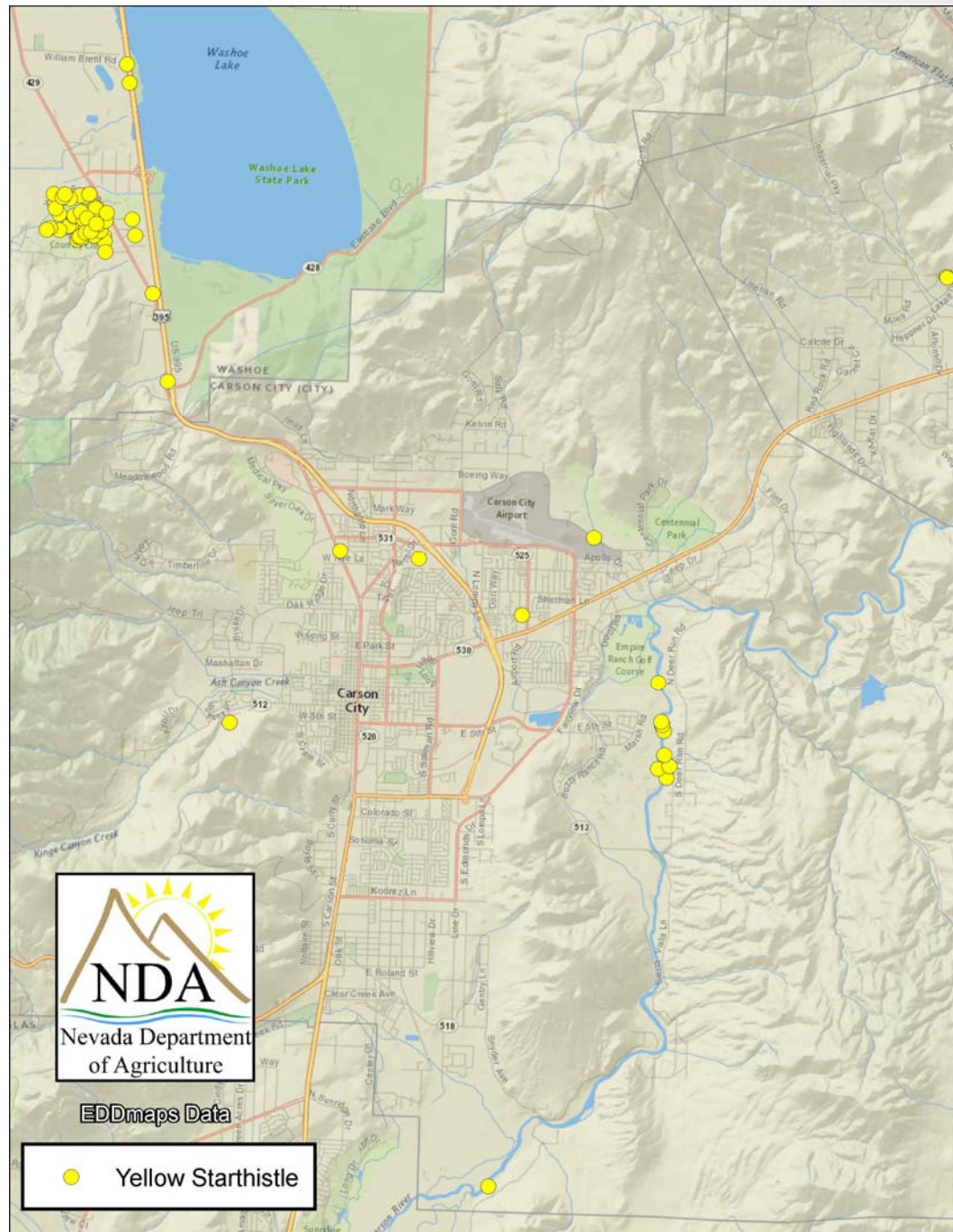
Yellow Starthistle, *Centaurea solstitialis*

Control

- Hand pulling, repeat 2-3 years to deplete the seed bank.
- Mowing can help reduce seed production.
 - Best done in late season at the early flowering stage.
- Tilling can be effective in agricultural landscapes.
- Apply **2,4-D, Aminopyralid, Dicamba or Glyphosate.**



Yellow Starthistle Distribution Carson City, NV



Carson City - Yellow Starthistle site



Yellow Starthistle, *Centaurea solstitialis*

- Lot size: 14.74 Acres
- Landowner: Los Angeles
- Infestation size: low
- Treated immediately
 - Great example of early detection, rapid response



Yellow Starthistle, *Centaurea solstitialis*

Next steps?

- Continued monitoring and treatment of known infestations.
- Increased monitoring along suspected vectors, Highway 50 and the Carson River.



Questions?



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