

Control Methods

Yellow starthistle is an annual, so for successful control, seed production must be stopped!

Mechanical - Properly timed intensive grazing by cattle, sheep, or goats can greatly reduce the amount of yellow starthistle. Mid to late summer burning for three consecutive years has also reduced starthistle populations. Pulling plants in a small population or cultivation of larger populations can be effective.

Biological - Since 1986, an array of bio-control agents have been introduced to control yellow starthistle. Presently the hairy weevil (*Eustenopus villosus*) and the false peacock fly (*Chaetorellia succinea*) are the most effective and widely distributed. Although not effective on small, scattered infestations, bio-control should be part of any large control program.

Yellow starthistle is not shade tolerant, so early growth of tall, shading plants may reduce starthistle growth. It also does not tolerate irrigation.

Chemical - Early spring treatments (before bolting) with clopyralid have season-long effects. One good integrated method is to treat in the spring with clopyralid and glyphosphate (to kill the annual grasses), and then plant a perennial grass in the fall. A second treatment with clopyralid is needed the next spring. This has eliminated yellow starthistle for several years. Yellow starthistle can also be controlled with soil active herbicides such as diuron, chorsulfuron, or simazine. There are also effective foliar applications of 2,4-D and dicamba. As always, read and follow herbicide label directions carefully.

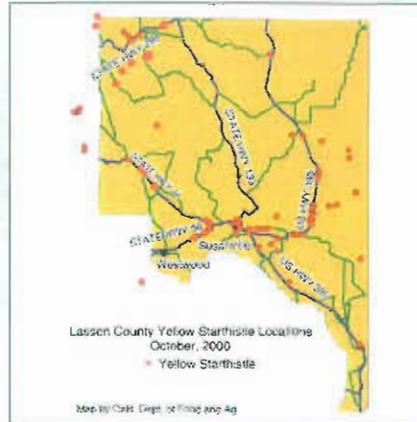
History

Yellow starthistle came from the Mediterranean Basin of southern Eurasia in the 1880s, probably in contaminated grain or alfalfa seed. The first recorded collection in California was in 1869.

Distribution

Yellow starthistle has spread widely, especially in California, Oregon, and Idaho. Much of the California's Central Valley and foothill areas are heavily infested.

However, most of northeastern California is still free of yellow starthistle. That is why keeping it from spreading is a priority for our area!



For More Information:

- Bureau of Land Management's Eagle Lake Field Office at (530) 257-0456
<http://www.ca.blm.gov/eaglelake/noxweeds.html>
- University of California Cooperative Extension Office at (530) 251-8133
- Lassen County Department of Agriculture at (530) 251-8110

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YELLOW STARHISTLE

AKA: *Centaurea solstitialis*

A Menace to the West!



**Lassen County
Special Weed Action Team**

www.cdfa.ca.gov/wma

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Why should I care about noxious weeds?

When noxious weeds spread, they impact the environment. They reduce the biodiversity of native plant communities and rapidly displace other plants that provide habitat for wildlife and food for people and livestock. Some weeds are poisonous to livestock.

Weeds also have an economic impact by reducing the land's productivity and by decreasing the quality and value of crop and livestock production. Some noxious weeds are so competitive that they crowd out all other desirable plants.

Weeds can increase maintenance costs and reduce the usefulness and value of recreation areas. Who wants to hike in yellow starthistle?



Yellow starthistle can completely infest an area, as seen on the Bizz Johnson Trail near Susanville.

What can I do?

- ☛ Drive only on established roads and trails away from weed-infested areas.
- ☛ When using pack animals, carry only feed that is certified weed free.
- ☛ Beginning 96 hours before entering backcountry areas, feed pack animals only food that is certified weed free.
- ☛ Remove weed seeds from pack animals by brushing them thoroughly and cleaning their hooves before transporting.
- ☛ If you find a few weeds without flowers or seeds, pull them and leave them where found. If flowers or seeds are present, place the plants in a plastic bag or similar container and then dispose of them.
- ☛ Don't pick the flowers of these weed species and take them home. They are very competitive and can easily trigger a new infestation in your own backyard.
- ☛ If you find a weed-infested area, let the land owner or manager know so that they can take steps to control the weeds (or notify your local Department of Agriculture).
- ☛ Noxious weed seeds or plant parts may attach themselves to tires, shoelaces, camping equipment, construction equipment, garden tools, or any other surface that contacts an infested area. These seeds or plant parts can then travel hundreds of miles before falling to an uninfested area. To avoid starting a new infestation, please clean all surfaces before leaving any area.

What does yellow starthistle look like and how does it grow?

HABITAT: Yellow starthistle is an annual weed that spreads extremely fast in dry, open areas such as rangelands and dry pastures. It multiplies particularly rapidly on disturbed soil sites such as roadsides but will also invade undisturbed open areas.

GROWTH: Seeds for this annual species germinate in the fall and winter at lower elevations, and generally in spring and summer at higher elevations, any time there is adequate moisture and temperature. Plants start out as a rosette with whitish-green leaves flat to the ground. The basal leaves have deeply lobed edges and pointed tips. In late spring to summer, the plants bolt and send up flowering stalks. Stem leaves are smaller and not lobed.



FLOWERS: The distinctive flowering head has a tuft of yellow flowers at the top. Rigid yellow spines about 3/4 inch long extend from each seed head.

HEIGHT: The taprooted plants grow up to 3-4 feet tall but can be very short on poor soil (only inches high). Even on poor soils, plants can still flower and produce seed.

SEEDS: Yellow star thistle produces a large number of seeds, which are spread as the spiny heads hitch a ride on animal fur, clothing, or vehicles, or in hay or straw. Most seeds germinate the following year, but some can persist and sprout several years later.