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# Centaurea solstitialis (yellow starthistle)

Centaurea solstitialis (yellow starthistle) is a bushy winter annual (family Asteraceae) that invades 12 million acres in California. Yellow starthistle inhabits open hills, grasslands, open woodlands, fields, roadsides, and rangelands, and it is considered one of the most serious rangeland weeds in the state. It propagates rapidly by seed, and a large plant can produce nearly 75,000 seeds. Several insects from the Mediterranean region, including weevils and flies, have been employed as biocontrol agents for yellow starthistle with minor success.

Cal-IPC Inventory rating: High

Yellow starthistle flowerheads

Photo courtesy Bob Case

#### Cal-IPC Resources on Centaurea solstitialis

- California Invasive Plant Inventory Assessment Form (pdf) [http://www.cal-ipc.org/ip/inventory/PAF/Centaurea solstitialis.pdf] Information gathered by Cal-IPC on the impacts, rate of spread, and distribution of invasive plants in California. Does not include management information.
- Species account from *Invasive Plants of California's Wildlands* [http://www.cal-ipc.org/ip/management/ipcw/pages /detailreport.cfm@usernumber=28&surveynumber=182.php] Includes biology and management information.
- Cal-IPC News [http://www.cal-ipc.org/resources/news/index.php] Articles from our quarterly newsletter. Each issue is available as a pdf. List of articles on Centaurea solstitialis [http://www.cal-ipc.org/ip/management/plant\_profiles/Centaurea solstitialis.php#news].
- Cal-IPC Symposium Proceedings [http://www.cal-ipc.org/symposia/archive/index.php] Presentations and papers from our annual Symposium. List of articles on Centaurea solstitialis. [ip/management/plant\_profiles/Centaurea\_solstitialis.php#proc]
- Weed Worker's Handbook (pdf) [http://www.cal-ipc.org/ip/management/wwh/index.php] Includes reproduction factors and treatment options.
- Yellow Starthistle Management Guide [http://www.cal-ipc.org/ip/management/yst.php] Provides a comprehensive overview of treatment methods for yellow starthistle, including each method's advantages and disadvantages, timing, and best fit in a strategic management plan.

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# Other Resources on Centaurea solstitialis

• USDA PLANTS database [http://plants.usda.gov/java/nameSearch?keywordquery=Centaurea+solstitialis&mode=sciname&submit.x=10&submit.y=11] - Federal database with information on identification and distribution, and links to websites in individual states.

- Jepson Online Interchange for California Flora [http://ucjeps.berkeley.edu/cgi-bin/get\_cpn.pl?1946&expand=1] Information on taxonomy, biology, and distribution from the UC Berkeley Jepson Herbarium.
- CalFlora [http://www.calflora.org/cgi-bin/species\_query.cgi?where-calrecnum=1853] Distribution information by county based on submitted observations and herbarium specimens.
- The Nature Conservancy Management Summary [http://www.invasive.org/gist/esadocs.html] Information compiled by TNC land managers. Photos included for some species.
- CalPhotos [http://calphotos.berkeley.edu/cgi/img\_query?query\_src=ucjeps&where-genre=Plant&where-taxon=Centaurea+solstitialis] Images of plants taken mostly in California.
- Natural Resource Projects Inventory [http://www.ice.ucdavis.edu/nrpi/speciesform.htm] State database with information on resource management projects throughout California. Query by the species of interest.

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