

QUESTION	COMMENTS	REFERENCE	RANKING
<b>Social</b>			
1. Restrict human access?	“An erect annual or short-lived perennial herb, to 75 cm high.” Stems much-branched which terminate in a single floret armed with spines approximately 1 to 2.5 cm long. “This thistle often occurs in dense patches which restrict stock movement.” “It can also...reduce access to recreational areas.” People access recreational facilities with difficulty.	P & C (2001) DiTomaso (2001) <sup>1</sup>	<b>MH</b>
2. Reduce tourism?	As above. Some recreational activities may be affected.		<b>MH</b>
3. Injurious to people?	“...injure dogs and grazing animals particularly in the eyes, mouth and feet.” Potential to harm humans as well. Spines present throughout the year.	P & C (2001)	<b>H</b>
4. Damage to cultural sites?	Dense infestations likely to cause moderate negative visual effect.		<b>ML</b>
<b>Abiotic</b>			
5. Impact flow?	Terrestrial species.	P & C (2001)	<b>L</b>
6. Impact water quality?	Terrestrial species.	P & C (2001)	<b>L</b>
7. Increase soil erosion?	It has become a weed in Australia on neglected areas and roadsides, occasionally invading unimproved grazing land.” The plant has a taproot about 20 cm long with numerous laterals. Not likely to increase soil erosion.	P & C (2001)	<b>L</b>
8. Reduce biomass?	It has become a weed in Australia on neglected areas and roadsides, occasionally invading unimproved grazing land.” In dense patches, biomass may increase.	P & C (2001)	<b>L</b>
9. Change fire regime?	“Additionally, dense infestations of yellow starthistle may change the fire regime by changing the fuel characteristics at a given site. ...dried skeletons of yellow starthistle can provide fuel for late summer wildfires.” Likely to increase the frequency of fire risk in late summer.	Zouhar (2002) <sup>2</sup>	<b>ML</b>
<b>Community Habitat</b>			
10. Impact on composition (a) high value EVC	EVC=Plains grassland (E); CMA=Goulburn Broken; Bioreg=Victorian Riverina; VH CLIMATE potential. Not known as an environmental weed in Victoria. However in the U.S. “ <i>C. solstitialis</i> is a winter annual that can form dense impenetrable stands. Over the past 40 years, <i>C. solstitialis</i> has spread exponentially to infest rangelands [and] native grasses. <i>C. solstitialis</i> is best adapted to open grasslands.” Major displacement of grasses/forbs.	DiTomaso (2001)	<b>MH</b>
(b) medium value EVC	EVC=Heathy woodland (D); CMA=Port Phillip; Bioreg=Central Victorian Uplands; VH CLIMATE potential. “ <i>C. solstitialis</i> is best adapted to open grasslands.” Population density reduced due to overstorey cover.	DiTomaso (2001)	<b>ML</b>
(c) low value EVC	EVC=Montane dry woodland (LC); CMA=North East; Bioreg=Northern Inland Slopes; VH CLIMATE potential. Impact as in 10(b) above.	DiTomaso (2001)	<b>ML</b>
11. Impact on structure?	Not known as an environmental weed in Victoria (it is not documented in Carr <i>et al</i> 1992). However, in the U.S., “ <i>C. solstitialis</i> is a winter annual that can form dense impenetrable stands that displace desirable vegetation in natural areas, rangelands and other places. <i>C. solstitialis</i> is best adapted to open grasslands.” Potential to have a major effect on grasses/forbs.	DiTomaso (2001)	<b>ML</b>
12. Effect on threatened flora?			

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<b>Fauna</b>			
13. Effect on threatened fauna?			
14. Effect on non-threatened fauna?	"In addition, <i>C. solstitialis</i> infestations can reduce wildlife habitat and forage...and decrease native plant and animal diversity." Reduction in habitat for fauna spp. leading to a reduction in numbers.	DiTomaso (2001)	<b>MH</b>
15. Benefits fauna?	No documented benefits.		<b>H</b>
16. Injurious to fauna?	"This thistle often occurs in dense patches which...injure dogs and grazing animals particularly in the eyes, mouth and feet." Potentially injurious to fauna spp.	P & C (2001)	<b>H</b>
<b>Pest Animal</b>			
17. Food source to pests?	Not known as a food source to pests in Australia.		<b>L</b>
18. Provides harbor?	Not known to provide harbor.		<b>L</b>
<b>Agriculture</b>			
19. Impact yield?	"St Barnaby's thistle competes with pastures and crops for moisture and nutrients and the large rosettes shade useful pasture species. Stories are quoted from north-eastern Victoria...of wheat crops with a potential yield of 2 tonnes per hectare being reduced to practically nothing." Serious impact on yield.	P & C (2001)	<b>H</b>
20. Impact quality?	"Contributes to vegetable fault in wool. Seed can also be spread...as a contaminant of agricultural produce including commercial seed." Level of impact not quantified; consider to be a minor component	P & C (2001)	<b>ML</b>
21. Affect land value?	Although the plant can have a serious detrimental effect on agricultural yield, control is relatively straightforward by repeated shallow cultivations and by, "encouraging legume-based pastures which provide maximum competition to the weed." Left untreated, the land value may be affected.	P & C (2001)	<b>M</b>
22. Change land use?	Although the plant can have a serious detrimental effect on agricultural yield, control is relatively straightforward by repeated shallow cultivations and by, "encouraging legume-based pastures which provide maximum competition to the weed." Land use may be restricted during treatment period.	P & C (2001)	<b>M</b>
23. Increase harvest costs?	Not known to increase harvest costs.		<b>L</b>
24. Disease host/vector?	None evident.		<b>L</b>

<sup>1</sup> DiTomaso, J 2001. *Centaurea solstitialis*. Element Stewardship Abstract. Available: <http://tncweeds.ucdavis.edu/esadocs/documnts/centsol.html> The Nature Conservancy. Date accessed 05/05/03

<sup>2</sup> Zouhar, K. 2002. *Centaurea solstitialis*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2003, April). Fire Effects Information System, [Online] <http://www.fs.fed.us/database/feis/plants/forb/censol/all.html> Date accessed 05/05/03