

QUESTION	COMMENTS	REFERENCE	RANKING
<b>Social</b>			
1. Restrict human access?	“An erect annual or biennial herb, commonly 60 to 120 cm high. Winged stems with spines on the wings; stem leaves deeply divided into lobes, the tip of each lobe ending in a stout yellowish spine. Dense patches of spear thistle are common in much of southern Australia. Patches may become so dense that they are impenetrable to stock.” Potentially a major impediment to humans. IN Vic not impenetrable – not like pushing through boxthorn more nuisance value	P & C (2001)	<b>ML</b>
2. Reduce tourism?	Spiny nature of plant and dense infestations would restrict some recreational activities does not occur in dense patches in rec areas	P & C (2001)	<b>ML</b>
3. Injurious to people?	Spines present throughout the year. “Dead plants often remain standing for one or two years.”	P & C (2001)	<b>MH</b>
4. Damage to cultural sites?	Dense infestation likely to create a moderate negative visual impact. Middens do get covered in thistles		<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?	“During winter an extensive root system, consisting of several branched fleshy storage roots, develops. Rosettes grow rapidly through spring, reaching a diameter of about 60 cm. Normally, rosettes persist through summer and continue growth into the second autumn and winter.” Not likely to contribute to soil erosion.	DPIWE (2002) <sup>1</sup>	<b>L</b>
8. Reduce biomass?	“As a weed it occurs...particularly [in] annual pastures and neglected areas.” Dense infestations may increase biomass.	P & C (2001)	<b>L</b>
9. Change fire regime?	“Dead plants often remain standing for one or two years.” In dense infestations this dry matter may lead to an increase in the frequency of fire risk.	P & C (2001)	<b>ML</b>
<b>Community Habitat</b>			
10. Impact on composition (a) high value EVC	EVC=Dry valley forest (V); CMA=West Gippsland; Bioreg=Highlands – Southern Falls; VH CLIMATE potential. Although it grows best on exposed sites, in Victoria, it is known to occur in a wide range of vegetation communities including woodlands and forests. It occurs in medium to large populations. The rosettes are large suppressing germination of other species. Carr <i>et al</i> (1992) consider <i>C. vulgare</i> to be a serious threat to one or more vegetation formations in Victoria. Minor displacement of species in the lower stratum.	P & C (2001) Carr <i>et al</i> (1992)	<b>ML</b>
(b) medium value EVC	EVC=Grassy woodland (D); CMA=East Gippsland; Bioreg=East Gippsland Uplands; H to VH CLIMATE potential. Impact as in 10(a) above.	P & C (2001) Carr <i>et al</i> (1992)	<b>ML</b>
(c) low value EVC	EVC=Montane dry woodland (LC); CMA=East Gippsland; East Gippsland Uplands; VH CLIMATE potential. Impact as in 10(a) above.	P & C (2001) Carr <i>et al</i> (1992)	<b>ML</b>
11. Impact on structure?	In Victoria, <i>Cirsium vulgare</i> invades a wide range of vegetation communities including woodlands and forests, and occurs in medium to large populations. Likely to have a major impact on 20-60% of the floral strata.	Carr <i>et al</i> (1992)	<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?	<i>C. vulgare</i> occurs in medium to large populations in a great number of vegetative communities. "Dense patches of spear thistle are common in much of southern Australia. The spiny nature of the plant deters animals from grazing" Infestations are likely to have minor reduction on habitat for fauna species.	Carr <i>et al</i> (1992) P & C (2001)	<b>ML</b>
15. Benefits fauna?	No benefits to fauna species.		<b>H</b>
16. Injurious to fauna?	No evidence of injury to fauna, however, animals avoid the plant due to its spiny nature, and dead plants can remain standing for one to two years. Potential to harm fauna species.	P & C (2001)	<b>M</b>
<b>Pest Animal</b>			
17. Food source to pests?	Not documented as a food source to pests. However, the "fleshy roots of spear thistle have been prized in the past as a bait for rabbit poisoning," and rabbits are known to use the plants for harbor. Rabbits may eat the roots of growing plants. Wild pigs love em	P & C (2001) Wood pers comm	<b>MH</b>
18. Provides harbor?	"...thick patches of the weed provide effective harbour for rabbits." But only temporarily	P & C (2001)	<b>MH</b>
<b>Agriculture</b>			
19. Impact yield?	"A large spear thistle rosette covers about one-third of a square metre and, because it is not readily grazed by stock, the carrying capacity of paddocks with dense patches of thistle is reduced considerably."	P & C (2001)	<b>MH</b>
20. Impact quality?	"...contaminated hay is downgraded in quality and price. The plant is an important component of vegetable fault of wool."	P & C (2001)	<b>ML</b>
21. Affect land value?	"Spear thistle is so well established in much of southern Australia this it is accepted as a permanent part of the vegetation." As such, its presence is unlikely to affect land values greatly.	P & C (2001)	<b>L</b>
22. Change land use?	"The level of spear thistle infestations varies from year to year which reflects the changing opportunities for seedling establishment provided by climate and grazing pressure in the autumn." Grazing activities may change somewhat to ensure minimal infestations to limit impact on agricultural return. However, it doesn't affect what they [farmers] do, accept or tolerate	P & C (2001)	<b>M</b>
23. Increase harvest costs?	Shearing costs may increase as, "spines in wool also cause difficulties in shearing."	P & C (2001)	<b>M</b>
24. Disease host/vector?	"There is veterinary evidence that the spiny leaves and bracts are responsible for transmitting virus diseases, including myxomatosis and scabby mouth, between animals."	P & C (2001)	<b>M</b>

<sup>1</sup> Department of Primary Industries Water and Environment Tasmania. 2002. *Spear Thistle (Scotch Thistle) Cirsium vulgare (Savi) Ten.* Available: <http://www.dpiwe.tas.gov.au/inter.nsf/WebPages/RPIO-523A2F?open> Last accessed 30/04/03.