

Scientific Name: *Silybum marianum*

Common name: Variegated thistle

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	“An erect annual or biennial herb, commonly 90 to 180 cm high. Stem leaves spiny, stiff and often reflexed; flower heads surrounded by large stiff reflexed bracts ending in sharp spines. Variegated thistle is very competitive in pastures and, when well established, eliminates most other plants.” The size of the plant, its spiny nature and its possible population density would be highly annoying to humans.	P & C (2001)	MH
2. Reduce tourism?	In dense patches, some recreational activities may be affected.		MH
3. Injurious to people?	“The spines in the leaves, stems and flower bracts can injure the delicate parts of animals and provide sites for infection.” Potentially harmful to humans; spines present for most of the year.	P & C (2001)	MH
4. Damage to cultural sites?	Dense infestations may create a negative visual impact.		ML
Abiotic			
5. Impact flow?	Terrestrial species.	P & C (2001)	L
6. Impact water quality?	Terrestrial species.	P & C (2001)	L
7. Increase soil erosion?	“Clumps of variegated thistle leave the soil bare at the end of summer.” Moderate probability of soil erosion.	P & C (2001)	ML
8. Reduce biomass?	“A weed of cultivated land, roadsides, neglected areas and, most importantly, grazing land.” Invader generally replaces biomass.	P & C (2001)	ML
9. Change fire regime?	“Clumps of variegated thistle leave the soil bare at the end of summer.” Little fuel remains to establish or support fire. No change to fire regime.	P & C (2001)	L
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Plains grassland (E); CMA=Port Phillip; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential. Is very competitive in open situations such as pasture, roadsides and neglected areas. When well established it eliminates most other vegetation. Major displacement of grasses/forbs.	P & C (2001)	MH
(b) medium value EVC	EVC=Lowland forest (D); CMA=Corangamite; Bioreg=Otway Plain; VH CLIMATE potential. Impact similar to 10(a) above, though forest canopy may restrict population density.	P & C (2001)	MH
(c) low value EVC	EVC=Lowland forest (LC); CMA=Glenelg Hopkins; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential. Impact similar to 10(b) above.	P & C (2001)	MH
11. Impact on structure?	“Variegated thistle is very competitive in pastures and, when well established, eliminates most other plants.” Occurs in open situations. Likely to have a major impact on grasses and forbs.	P & C (2001)	ML
12. Effect on threatened flora?			

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Fauna			
13. Effect on threatened fauna?			
14. Effect on non-threatened fauna?	“Variegated thistle is very competitive in pastures and, when well established, eliminates most other plants.” Potential to significantly decrease useful fodder for fauna species.	P & C (2001)	ML
15. Benefits fauna?	No known benefits.		H
16. Injurious to fauna?	“The spines in the leaves, stems and flower bracts can injure the delicate parts of animals and provide sites for infection.” Similar threat to fauna species.	P & C (2001)	MH
Pest Animal			
17. Food source to pests?	Not known as a food source to pest animals.		L
18. Provides harbor?	“Seedlings prefer disturbed soil on which to establish so sheep camps, rabbit warrens and cultivated fire breaks are suitable sites. Dense clumps of variegated thistle provide harbour for vermin animals, particularly rabbits.” Capacity to provide permanent harbor	P & C (2001)	H
Agriculture			
19. Impact yield?	“Variegated thistle is very competitive in pastures and, when well established, eliminates most other plants.” Level of impact not documented. Assume serious impact on carrying capacity.	P & C (2001)	H
20. Impact quality?	Not a serious weed of cropping. “Contamination of hay is also important [as a means of seed dispersal] because plants are flowering when hay is cut.” Possible major impact on hay quality.	P & C (2001)	MH
21. Affect land value?	“In Victoria, an estimated 4.8 million hectares is infested.” Like <i>Cirsium vulgare</i> (spear thistle), which infests 9.7 million hectares in Victoria, <i>Silybum marianum</i> , may be, “so well established in much of southern Australia that it is accepted as a permanent part of the vegetation.” Little impact on land value.	P & C (2001) (see entry for <i>Cirsium vulgare</i> p209)	L
22. Change land use?	Predominantly a weed of cultivated land on fertile soils, control can be effected by, “encouraging pasture species able to utilise the raised fertility and compete with the weed species.” Little change to land use.	P & C (2001)	L
23. Increase harvest costs?	Not known to affect harvest costs.		L
24. Disease host/vector?	None evident.		L