Impact Assessment Record

Scientific Name: *Scolymus maculatus* L. Common name: spotted thistle

QUESTION	COMMENTS	RATING	CONFIDENCE
Social			
1. Restrict human access?	"Because of its spininess, dense patches of this weed become impenetrable to stock." As an annual herb with many branches to 50-100cm (Parsons & Cuthbertson, 1992), dense patches of this plant may impede individual access at certain times of the year.	**ML**	**MH**
2. Reduce tourism?	The tendency for this spiny shrub to invade disturbed sites (Parsons & Cuthbertson, 1992), including along pathways (Neuz & Bermejo, 1994) would make it obvious to the average visitor, but probably wouldn't prevent recreational use of the area.	**ML**	**MH**
3. Injurious to people?	Minor injury may occur from late winter to late summer, when the spiny branches of this plant are present (Parsons & Cuthbertson, 1992).	**ML**	**MH**
4. Damage to cultural sites?	As an annual herb with many branches to 50-100cm and yellow flowers (Parsons & Cuthbertson, 1992), dense patches of this plant may have a moderate visual effect at certain times of the year.	**ML**	**MH**
Abiotic			
5. Impact flow?	Terrestrial species (Parsons & Cuthbertson, 1992).	**L**	**MH**
6. Impact water quality?	Terrestrial species (Parsons & Cuthbertson, 1992).	**L**	**MH**
7. Increase soil erosion?	This plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992) so it is unlikely to leave bare patches of soil in summer when it dies off, having little or no impact on erosion.	**L**	**MH**
8. Reduce biomass?	This plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992) so it is unlikely to have any net impact on biomass as a carbon sink.	**ML**	**MH**
9. Change fire regime?	This annual plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992). However, since "nothing will either eat it or approach it" (Maiden, 1908), this plant may allow grassy fuel loads to increase in the absence of grazing, increasing the likelihood of fire.	**ML**	**H**
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Plains Grassy Woodland (E), CMA=Wimmera, Bioreg.=Wimmera, CLIMATE=M. This plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992), but its rapid growth may compete with low shrub and ground layer vegetation for space, water and nutrients. Sparse infestations.	**L**	**MH**
(b) medium value EVC	EVC=Box Ironbark Forest (D), CMA=Wimmera, Bioreg.=Goldfields, CLIMATE=M. This plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992), but its rapid growth may compete with low shrub and ground layer vegetation for space, water and nutrients. Sparse infestations.	**L**	**MH**

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(c) low value EVC	EVC=Lowland forest (LC), CMA=Wimmera, Bioreg.=Wimmera, CLIMATE=M. This plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992), but its rapid growth may compete with low shrub and ground layer vegetation for space, water and nutrients. Sparse infestations.	**L**	**MH**
11. Impact on structure?	This plant has relatively sparse aerial growth that does not appear to shade out ground flora beneath its canopy (see picture in Parsons & Cuthbertson, 1992).	**L**	**MH**
12. Effect on threatened flora?	No information found.	**MH**	**L**
Fauna			
13. Effect on threatened fauna?	No information found.	**MH**	**L**
14. Effect on non-threatened fauna?	"Dense patches…reduce available grazing…Even sparse stands are avoided by stock…because of the spines…further reducing the grazing area" (Parsons & Cuthbertson, 1992). "Nothing will either eat it or approach it" (Maiden, 1908). This plant may reduce the food available to grazing fauna, reducing numbers of individuals, but not causing local extinctions.	**MH**	**MH**
15. Benefits fauna?	"Harbour vermin" (Parsons & Cuthbertson, 1992) and so may provide habitat for small native fauna also.	**MH**	**MH**
16. Injurious to fauna?	From late winter to late summer the spiny branches of this plant are present (Parsons & Cuthbertson, 1992) which may injure fauna at some times of the year.	**MH**	**MH**
Pest Animal			
17. Food source to pests?	"Nothing will either eat it or approach it" (Maiden, 1908). Unlikely to be a food source to pests.	**L**	**H**
18. Provides harbor?	"Harbour vermin" (Parsons & Cuthbertson, 1992).	**MH**	**MH**
Agriculture			
19. Impact yield?	"Dense patches…reduce available grazing…Even sparse stands are avoided by stock…because of the spines…further reducing the grazing area" (Parsons & Cuthbertson, 1992). Also grows in cornfields (PFAF, 2000) and its rapid growth may compete with crops for space, water and nutrients.	**MH**	**MH**

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QUESTION	COMMENTS	RATING	CONFIDENCE
20. Impact quality?	"Spiny seed head catches in wool or contaminates fodder" (Parsons & Cuthbertson, 1992).	**ML**	**MH**
21. Affect land value?	Can be controlled by persistent and thorough cultivation through successive seed germinations or with common herbicides (Parsons & Cuthbertson, 1992). Unlikely to impact land value.	**L**	**MH**
22. Change land use?	The ability to control this annual weed using conventional methods (Parsons & Cuthbertson, 1992) means that land use should not have to change much, if at all.	**L**	**MH**
23. Increase harvest costs?	The ability to control this annual weed using conventional methods (Parsons & Cuthbertson, 1992) will cause a minor increase to the cost of harvest.	**MH**	**MH**
24. Disease host/vector?	No record of this weed as an alternative host or vector for agricultural diseases in Parsons & Cuthbertson (1992).	**L**	**MH**

References cited:

Neuz, F and Bermejo, JEH 1994, *Neglected horticultural crops* Plant Production and Protection Series, No. 26, p. 303-332.
Maiden, JH "Another Bad Weed for New South Wales,' *Agricultural Gazette of N.S.W.*, vol. 19, p. 1029-1030.
Parsons WT & Cuthbertson EG, 1992 *Noxious Weeds of Australia* (2nd ed.) CSIRO Publishing, Australia.
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Revisions

Date Revised by Revision