

QUESTION	COMMENTS	REFERENCE	RANKING
<b>Social</b>			
1. Restrict human access?	A bushy perennial herb, 30 cm tall and 75 cm wide. In dense infestations, its growth habit may present a minor nuisance to pedestrian traffic.	Blood (2001)	<b>L</b>
2. Reduce tourism?	A low growing plant (30 cm); dense patches would have a minor effect on aesthetics, recreational activities not seriously affected.	P & C (2001)	<b>ML</b>
3. Injurious to people?	The plant is not toxic, but the fruit has 10 backward-curved hooked spines; not known to be harmful or cause injury.	P & C (2001)	<b>ML</b>
4. Damage to cultural sites?	Roots or growth habit unlikely to cause structural damage. Dense patches would create a moderate negative visual impact on a cultural site.	Blood (2001)	<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?	In one area in Victoria where horehound has flourished, soil erosion has increased markedly.	P & C (2001)	<b>MH</b>
8. Reduce biomass?	Generally invades neglected areas such as fence lines, roadsides, channel banks, around buildings, on sheep camps and neglected urban areas. Biomass would increase.	P & C (2001)	<b>L</b>
9. Change fire regime?	Bushy perennial. Increase in biomass would likely cause an increase in the intensity of fire risk.	Moerkerk (2000) <sup>1</sup>	<b>ML</b>
<b>Community Habitat</b>			
10. Impact on composition (a) high value EVC	EVC=Plains grassy woodland (E); CMA=North Central; Bioreg=Goldfields; VH CLIMATE potential Prefers open areas. "...has the potential for dense establishment." "Seedlings do not establish in dense pastures." Impact lessened with overstorey cover. Major displacement of grasses/forbs.	Moerkerk (2000) P & C (2001)	<b>MH</b>
(b) medium value EVC	EVC=Riverine grassy woodland (D); CMA=Goulburn Broken; Bioreg=Murray Fans; VH CLIMATE potential Impact as in 10(a) above.	Moerkerk (2000) P & C (2001)	<b>MH</b>
(c) low value EVC	EVC=Rocky outcrop shrubland (LC); CMA=Wimmera; Bioreg=Central Victorian Uplands; VH CLIMATE potential. Impact as in 10(a).	Moerkerk (2000) P & C (2001)	<b>MH</b>
11. Impact on structure?	"Has the potential to establish in pastures and open areas as dense monocultures." It is present in Victoria in medium to large populations. Monoculture in lower stratum.	Moerkerk (2000) 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?	In Victoria it is widespread in medium to large populations and invades dry coastal vegetation, mallee shrubland, lowland grassland & grassy woodland, and rock outcrop vegetation. "Because of its bitter taste, horehound is not palatable to stock." "Horehound is relatively drought tolerant and has the potential for dense establishment in many more areas of Australia." This plant would reduce the habitat for fauna species.	Carr <i>et al</i> (1992) P & C (2001)	<b>MH</b>
15. Benefits fauna?	No benefits apparent.		<b>H</b>
16. Injurious to fauna?	Burrs are not injurious; no toxic properties.	P & C (2001)	<b>L</b>
<b>Pest Animal</b>			
17. Food source to pests?	Not known as a food source to pest animals.		<b>L</b>
18. Provides harbor?	A low growing plant (30 cm tall) it may provide limited harbor for rodents or rabbits in low densities. The plant does occur near rabbit warrens mainly due to the seeds sticking to the animal's fur.	P & C (2001)	<b>MH</b>
<b>Agriculture</b>			
19. Impact yield?	In pasture, each plant occupies a large area thus reducing grazing considerably.	P & C (2001)	<b>MH</b>
20. Impact quality?	"The meat of animals forced to eat it is tainted with a strong flavour." Minor impact on the quality of product. "The burrs become matted in wool and are difficult to remove, causing a loss in value of the fleece."	Blood (2001) P & C (2001)	<b>MH</b>
21. Affect land value?	Although infestations can be readily controlled with appropriate management techniques such as repeated cultivation, the presence of the weed, "... impacts on agricultural productivity." It may reduce the value of land somewhat.	DPIWE Tas <sup>2</sup>	<b>M</b>
22. Change land use?	"Ideally, the pasture should not be grazed in its first year in order to give maximum competition to any horehound seedlings." Temporary reduction in agricultural activity.	P & C (2001)	<b>M</b>
23. Increase harvest costs?	No known impact on harvesting costs.		<b>L</b>
24. Disease host/vector?	None evident.		<b>L</b>

<sup>1</sup> Moekerck, M., 2000, [http://weedman.horsham.net.au/weeds/marrubium\\_vulgare/marrubium\\_vulgare.htm](http://weedman.horsham.net.au/weeds/marrubium_vulgare/marrubium_vulgare.htm), viewed 07/04/03

<sup>2</sup> Department of Primary Industries, Water and Environment, *Horehound* (*Marrubium vulgare*), <http://www.dpiwe.tas.gov.au/inter.nsf/WebPages/RPIO-4ZYW5L?open>, viewed 07/04/03