

Scientific Name: *Foeniculum vulgare*

Common name: Fennel

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	An erect multi-stemmed perennial herb commonly 1.5 to 2.0 metres high. It is found along waterways, drainage lines and in seasonally moist locations within grasslands and woodlands. Dense infestations may restrict access to waterways. A soft, herbaceous plant the high growth of the plant may be a nuisance to people.	Muyt (2001)	ML
2. Reduce tourism?	Dense infestations along waterways may restrict some recreational activities.	Muyt (2001)	MH
3. Injurious to people?	The National Occupational Health and Safety Commission documents <i>F. vulgare</i> as causing photosensitivity through skin contact with the plant or its juices.	NOHSC ¹	ML
4. Damage to cultural sites?	Not an aggressive root system; structure not affected. Dense infestations would create have a moderate negative visual effect.	Muyt (2001)	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?	A perennial herb that in dense infestations eliminates most other ground flora, but retains good ground cover. It has a stout branched taproot to around 1 metre deep with many laterals. Not likely to contribute to soil erosion.	P & C (2001) Muyt (2001)	L
8. Reduce biomass?	Grows mostly in open, disturbed areas, such as roadside, railway easements, channels and drains. Minor effect on biomass. Dense infestations may increase biomass.	P & C (2001)	ML
9. Change fire regime?	Flower stems partly die back in winter. Images of dense infestations show increased dry matter. Possible minor increase to the frequency of fire risk.	P & C (2001) TNC ²	ML
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Plains grassland (E); CMA=West Gippsland; Bioreg=Highlands – Southern Falls; VH CLIMATE potential “Grows best in open, unshaded situations. Once established, fennel excludes almost all other vegetation.” Major displacement of species within different strata.	P & C (2001)	MH
(b) medium value EVC	EVC=Shrubby woodland (R); CMA=Corangamite; Bioreg=Central Victorian Uplands; VH CLIMATE potential Impact as in 10(a) above. Population density may be limited due to overstorey cover.	P & C (2001)	MH
(c) low value EVC	EVC=Heathy woodland (LC); CMA=Port Phillip; Bioreg=Gippsland Plain; VH CLIMATE potential Impact as in 10(b) above.	P & C (2001)	MH
11. Impact on structure?	“Dense infestations eliminate most other ground-flora and severely impede overstorey regeneration.” Major effect on ground flora.	Muyt (2001)	ML
12. Effect on threatened flora?			

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Fauna			
13. Effect on threatened fauna?			
14. Effect on non-threatened fauna?	While livestock may find the plant palatable, its widespread distribution in medium to large populations suggests that native fauna do not significantly graze on it. With its dominant nature, it is likely to reduce habitat.	CEPPC ³ Carr <i>et al</i> (1992)	MH
15. Benefits fauna?	No documented benefits.		H
16. Injurious to fauna?	“Apparently animals graze the fennel stubble without ill effects.” Not known to cause injury to native fauna.	P & C (2001)	L
Pest Animal			
17. Food source to pests?	No evidence of the plant providing food to pest species.		L
18. Provides harbor?	Dense infestations may provide harbor for minor pests such as rodents.		ML
Agriculture			
19. Impact yield?	Not a serious weed of pasture or cropping. “It does not establish in grazed pastures or cultivated paddocks. Herb growers note that tomatoes and beans do not grow in association with fennel, suggesting possible allelopathic effect.” Likely to have some effect in those situations.	P & C (2001)	ML
20. Impact quality?	Not a serious weed of pasture or cropping. “When growing on headlands of arable crops, seedlings often occur in the crops.” Minor impact on quality through seed contamination.	P & C (2001)	ML
21. Affect land value?	Not a serious weed of pasture or cropping. Not likely to affect land value.	P & C (2001)	L
22. Change land use?	Not a serious weed of pasture or cropping. Land use not affected.	P & C (2001)	L
23. Increase harvest costs?	No increase in harvest costs.		L
24. Disease host/vector?	None evident.		L

¹ National Occupational Health and Safety Commission. <http://www.nohsc.gov.au/OHSInformation/NOHSCPublications/fulltext/docs/h5/02797-10.htm> Last accessed 02/04/03

² The Nature Conservancy - Photographs. <http://tncweeds.ucdavis.edu/esadocs/foenvulg.html> Last accessed 02/04/03

³ California Exotic Pest Plant Council. *Yellow Starthistle Management with Grazing, Mowing and Competitive Plantings*. http://ucce.ucdavis.edu/freeform/ceppc/documents/1996_Symposium_Proceedings1824.pdf Last accessed 02/04/03