

Scientific Name: *Parthenium hysterophorus*

Common name: Parthenium weed

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	An erect annual herb 30 cm to 150 cm high. "...an aggressive coloniser of fallows, wasteland, roadsides, and overgrazed pastures." Dense infestations may impede individual access, though not seriously.	P & C (2001)	ML
2. Reduce tourism?	Weeds would be obvious, but recreational activities would not be greatly affected.		ML
3. Injurious to people?	"Regular contact with the plant, usually over a prolonged period, produces an acute form of dermatitis, and asthma in humans." Potentially harmful for most of the year.	P & C (2001)	MH
4. Damage to cultural sites?	Dense patches would create a negative visual effect.		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?	"Parthenium weed becomes established in disturbed, degraded or bare soil." Vigorous growth ("In good conditions Parthenium weed can germinate, flower and set seed within four weeks.") would provide some protection against erosion.	Trounce (1998) ¹	L
8. Reduce biomass?	"Parthenium weed becomes established in disturbed, degraded or bare soil." Likely to increase biomass.	Trounce (1998)	L
9. Change fire regime?	Although the woody stems remain after the plant dies, there would be insufficient fuel to support fire. Low risk of fire.	Bob Trounce pers. comms ²	L
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Plains grassland (); CMA=North Central; Bioreg=Victorian Riverina; H to VH CLIMATE potential. It is not a problem in undisturbed vegetation. However, native pastures may not be able to compete with parthenium weed, and dense infestations can eliminate most other species.	Trounce (1998) P & C (2001)	MH
(b) medium value EVC	Does not appear likely to invade medium value EVCs in Victoria.		L
(c) low value EVC	Does not appear likely to invade low value EVCs in Victoria.		L
11. Impact on structure?	"Parthenium weed is a vigorous species that colonises weak pastures with sparse ground cover." "Most seeds germinate at the one time, producing a mat of seedlings. The young rosettes, with their leaves closely appressed to the soil prevent the emergence of other species leading to pure stands of parthenium weed." Open situations only; affects grasses and forbs.	NRM ³ 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?	As an aggressive coloniser it would impact on the food source of native species.	P & C (2001)	ML
15. Benefits fauna?	No benefits		H
16. Injurious to fauna?	Causes contact dermatitis and asthma in humans. "Cattle may also be affected, and more importantly, pass the toxic principle into their milk." Potential also to be harmful to fauna.	P & C (2001)	ML
Pest Animal			
17. Food source to pests?	No evidence of pest species using the plant as a food source.		L
18. Provides harbor?	Not known to provide harbor.		L
Agriculture			
19. Impact yield?	"The weed is a menace to agriculture because it competes with pastures and reduces carrying capacity." "Some grain sorghum crops are infested with sufficient parthenium weed plants to suppress yield." Because of its aggressive nature impact on yield likely to be of major significance.	Trounce (1998) P & C (2001)	MH
20. Impact quality?	Meat from animals who graze the plant is badly tainted, "and unfit for the table unless the animals are grazed on parthenium-free paddocks for at least a month prior to slaughter." Major impact on quality.	P & C (2001)	MH
21. Affect land value?	"If allowed to spread, the weed will become a serious and persistent problem in NSW, resulting in a downgrading of property values."	Trounce (1998)	H
22. Change land use?	"Parthenium weed will become dominant if pastures are overgrazed and not managed properly. Carrying capacity will be reduced and the area will cease to be economically viable." This could lead to a serious loss of income.	Trounce (1998)	H
23. Increase harvest costs?	Not know to affect harvesting activities.		L
24. Disease host/vector?	None evident.		L

¹ Trounce, R., 1998, *Parthenium weed*, New South Wales Department of Agriculture, Agfact 07.6.15, 4th Ed, <http://www.agric.nsw.gov.au/reader/1894>, viewed 14/04/03

² Bob Trounce, Agronomist Weeds, NSW Agriculture, Orange. Personal communications 14/04/03

³ Department of Natural Resources and Mines, 2003, *Parthenium weed*, State of Queensland, <http://www.nrm.qld.gov.au/factsheets/pdf/pest/PP2.pdf>, viewed 14/04/03