Scientific Name: *Centaurea nigra* Common name: Black knapweed

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	An erect perennial herb to 20 to 90 cm high. A common plant of meadows in its native range, it has little impact on human access.	P & C (2001) WSNWCB[1]	**L**
2. Reduce tourism?	The plant is not likely to affect recreational activities. Its presence may a have a minor effect on the aesthetics of an area.		**ML**
3. Injurious to people?	It does not have any spines or burrs, nor is the plant toxic. The roots and seeds have been used ancient European medicines.	P & C (2001)	**L**
4. Damage to cultural sites?	*C. nigra* has been shown to be aggressive and invasive in pastures and meadows. Its presence would create a moderate visual impact.	WSNWCB	**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?	The plant is aggressive and competes well against grasses, and the aerial parts of the plant die off in autumn. It has the potential to leave areas of bare soil, possibly resulting in erosion.	WSNWCB Fisher *et al*[2]	**ML**
8. Reduce biomass?	Replaces grass species. Little or no change in biomass.	Fisher *et al*	**ML**
9. Change fire regime?	Competes well against grasses. Similar fire potential as displaced vegetation. Little change to frequency of fire risk.		**L**
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Plains grassland (E); CMA=Glenelg Hopkins; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential. It is an aggressive and invasive species in pastures and meadows in the U.S. Potential to seriously affect grasses and ground covers.	WSNWCB	**MH**
(b) medium value EVC	EVC=Grassy dry forest (D); CMA=Glenelg Hopkins; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential. Similar impact as in 10(a) above. More commonly occurs in open areas (roadsides, pasture, waste places). Therefore, population density may be restricted by overstorey cover.	Moore & Frankton (1974)[3]	**ML**
(c) low value EVC	EVC=Lowland forest (D); CMA=Glenelg Hopkins; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential. Similar impact as in 10(b) above.	Moore & Frankton (1974)	**ML**
11. Impact on structure?	It invades overgrazed or underdeveloped pastures, and there is evidence that the plants produce allelopathic compounds reducing germination and early seedling development of some other species. It may have a major negative impact on the lower stratum. In the U.S., it is aggressive and invasive in pastures and meadows.	P & C (2001) WSNWCB	**ML**
12. Effect on threatened flora?			

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QUESTION	COMMENTS	REFERENCE	RANKING
Fauna			
13. Effect on threatened fauna?			
14. Effect on non-threatened fauna?	Not known as a serious weed of natural ecosystems in Victoria (it is not recorded in Carr *et al* (1992)). Its presence in pastures reduces carrying capacity. Assume its presence would also reduce available food for non-threatened fauna	P & C (2001)	**ML**
15. Benefits fauna?	No known benefits.		**H**
16. Injurious to fauna?	No known toxic principles.		**L**
Pest Animal			
17. Food source to pests?	Not known as a food source for pest animals.		**L**
18. Provides harbor?	A perennial herb with erect stems and narrow leaves; the aerial parts die back leaving little vegetative cover. Unlikely to provide harbor.	P & C (2001)	**L**
Agriculture			
19. Impact yield?	Its presence in pasture reduces the carrying capacity. Considered to be allelopathic. Competes well against grasses. Considered a serious crop weed, but impact in cropping situations not known. In the U.S., it is known as aggressive, invasive species, particularly in pastures and meadows.	P & C (2001) Fisher *et al* Dellow & Trounce[4] WSNWCB	**MH**
20. Impact quality?	No known impact on quality of harvest/produce.		**L**
21. Affect land value?	"It was first recorded in Victoria in 1910 and now occurs in limited infestations." Likely to be little or no change in land value.	P & C (2001)	**L**
22. Change land use?	The recommended method of control is to use herbicides; cultivation is not effective. Land used for grazing purposes may be restricted while control activities undertaken. Temporary loss of land use.	P & C (2001)	**M**
23. Increase harvest costs?	No evidence of increasing harvest costs.		**L**
24. Disease host/vector?	None evident		**L**

[1] Washington State Noxious Weed Control Board, Black Knapweed, http://www.nwcb.wa.gov/weed_info/blackknapweed.html, viewed 30/06/03.
[2] Fisher, GEJ., Baker, LJ., Tiley, GED., 1996, Herbage production from swards containing a range of grass, forb and clover species and under extensive management, *Grass and Forage Science*, Vol 51, No 1, pp. 58-72, (CAB abstract).
[3] Moore, R., Frankton, C. 1974. *The Thistles of Canada.* Canada Department of Agriculture.
[4] Dellow, JJ., Trounce, RB., 2001, Knapweed Centuarea spp, bulletin from NSW Agriculture, Australia (CAB abstract).