Scientific Name: *Lycium ferocissimum* Common name: African boxthorn

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	"A dense spiny shrub to five metres high and wide. Extremely sharp spines prevent any movement through dense stands." In one reported infestation some roads were practically impassable. The spines are strong enough to puncture pneumatic tyres. Serious impact on human access.	Muyt (2001) P & C (2001)	**H**
2. Reduce tourism?	Dense infestations likely to have a major impact on recreation. The plant is known to invade roadsides, sand dunes, and waterways. It tolerates salt spray, which indicates its potential to affect recreation in beachside and other coastal areas.	Muyt (2001) P & C (2001)	**H**
3. Injurious to people?	The stems and tips of branches are equipped with sharp rigid spines to 2 – 15 cm long, which are present all year. The fruit is believed to be toxic to humans.	Muyt (2001) P & C (2001)	**H**
4. Damage to cultural sites?	The root system comprises an extensive deep, branched taproot. However, there is no evidence to suggest the root system is vigorous enough to cause structural damage. With growth to 5 metres high and 3 metres wide, the presence of the plant would seriously affect the aesthetics of an area. But more likely visual effect rather than structural – if boxthorns in middens – would have rabbits	P & C (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?	"An erect shrub to 5 m high and 3 m across. African boxthorn make an effective hedge plant, producing a dense thicket." Not likely to increase soil erosion.	P & C (2001)	**L**
8. Reduce biomass?	African boxthorn grows to a great size when left unchecked. Originally planted as a hedging plant, the areas it invades suggest the plant's presence would increase biomass.	P & C (2001)	**L**
9. Change fire regime?	"African boxthorn make an effective hedge plant, producing a dense thicket." With the increase in biomass there is a likelihood of a moderate increase in the frequency and intensity of fire risk.	P & C (2001)	**MH**
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Grassy woodland (E); CMA=Wimmera; Bioreg=Goldfields; VH CLIMATE potential "…shades and crowds out other vegetation preventing any regeneration occurring. It is an extremely tough species adapted to a wide range of conditions." Can grow to 5 m high. Major displacement of dominant species within different layers.	Muyt (2001) P & C (2001)	**MH**
(b) medium value EVC	EVC=Grassy dry forest (D); CMA=North Central; Bioreg=Goldfields; VH CLIMATE potential Impact as in 10(a) above.	Muyt (2001) P & C (2001)	**MH**
(c) low value EVC	EVC=Lowland forest (LC); CMA=Corangamite; Bioreg=Victorian Volcanic Plain; VH CLIMATE potential Impact as in 10(a) above.	Muyt (2001) P & C (2001)	**MH**
11. Impact on structure?	"…shades and crowds out other vegetation preventing any regeneration occurring. Commonly a harbor for rabbits so there is little other vegetation." Major impact on the floral strata and minor effects on layers.	Muyt (2001)	**MH**
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?	Dense thickets may deny animals access to watering points. Interferes with sea lion breeding.	P & C (2001) Blood (2001)	**ML**
15. Benefits fauna?	African boxthorn commonly provides habitat and food for smaller native animals.	Muyt (2001)	**MH**
16. Injurious to fauna?	The spines damage stock, therefore, potential to injure fauna species Although spines – not much impact fauna can move through plant easily and use it for cover/harbor. Storm petrels get caught up on them Sth channel fort at some time of year.	Blood (2001)	**ML**
Pest Animal			
17. Food source to pests?	Birds and foxes commonly eat seeds. Bird species not documented; assume equal potential for introduced and native species. Fruits heavily over autumn-winter, some ripe fruit may be present at other times of the year. The fruit is a breeding place for fruit fly, dried fruit beetles, tomato fly and the common housefly.	Muyt (2001) P & C (2001)	**MH**
18. Provides harbor?	"Thickets commonly harbor rabbits." Rabbits frequently burrow under clumps.	Muyt (2001) P & C (2001)	**H**
Agriculture			
19. Impact yield?	"Large clumps obviously eliminate considerable ares of pasture and can also impede stock movement." Animals seldom graze the plant because of the sharp spines. The reduction in available pasture would have major impact on yield. Not known as a problem in cropping situations.	P & C (2001)	**MH**
20. Impact quality?	Not known to affect quality of produce.	Blood (2001)	**L**
21. Affect land value?	Dense infestations minimise available pasture. Applying herbicides and excavating plants is the best method of control. Cost of control would affect land values in grazing areas.	P & C (2001)	**M**
22. Change land use?	Left unchecked, African boxthorn can grow to a great size. Dense infestations minimise available pasture. Without implementing a management plan, the land would become useless for agricultural activity. Could not think of examples where boxthorn changed landuse – can be controlled after a long period of time (ie thick dense thickets easily with bulldozer	P & C (2001)	**ML**
23. Increase harvest costs?	Not known to affect cropping situations.		**L**
24. Disease host/vector?	None evident.		**L**