Impact Assessment Record

Scientific Name: *Tamarix aphylla* Common name: athel pine, tamarisk

QUESTION	COMMENTS	REFERENCE	RANKING
Social			
1. Restrict human access?	"A small spreading tree to 10 m high. [It] branches almost from the base and can be an extremely useful breakwind and shade tree." Well established, dense infestations may be a major impediment to humans.	P & C (2001)	**MH**
2. Reduce tourism?	In some infestations in Australia, it forms a monoculture. Likely to have a serious impact on aesthetics.	P & C (2001)	**MH**
3. Injurious to people?	The plant has no known toxic or potentially injurious properties.		**L**
4. Damage to cultural sites?	The root system comprises a strong woody rootstock with and extensive web of deeply penetrating secondary and succeeding roots. 'It threatens heritage buildings by disrupting foundations and walls'. The potential to have a moderate structural effect.	P & C (2001), ARMCANZ (2001)	**MH**
Abiotic			
5. Impact flow?	In Australia, it is naturalised along the banks of permanent and ephemeral river systems in the Northern Territory. It does not affect flow.	P & C (2001)	**L**
6. Impact water quality?	Terrestrial species	P & C (2001)	**L**
7. Increase soil erosion?	"It is also useful in stabilising moving sand dunes or mullock heaps." Deep, extensive root system. Tree provides permanent cover. Would not contribute to erosion.	P & C (2001)	**L**
8. Reduce biomass?	It has replaced dominant native species (*Eucalyptus carnaldulensis* and *E. microtheca*) along the Finke River N.T. Invader replaces biomass.	P & C (2001)	**ML**
9. Change fire regime?	"Athel tamarisk is a fire-adapted species. The high ash content and salt content of its foliage make it hard to burn even when dry. Because of their fire-resistant qualities of Athel tamarisk foliage, it is a good species for use in fire shelterbelts."	Tesky (1992)	**L**
Community Habitat			
10. Impact on composition (a) high value EVC	EVC=Blackbox chenopod woodland (E); CMA=Goulburn Broken; Bioreg=Victorian Riverina; Climate=VH. "It…exudes large quantities of salt through the leaves, salting the surrounding soil. Athel pine displaces Eucalypts and other native vegetation with fewer native herbs persisting in areas of thick athel pine." Major displacement of species in mid stratum.	ARMCANZ (2001)	**MH**
(b) medium value EVC	EVC= Lignum swampy woodland (D); CMA=North Central; Bioreg=Murray Mallee; Climate=VH.		**MH**
(c) low value EVC	EVC= Riparian Forest (LC); CMA=Goulburn Broken; Bioreg=Highlands-Northern =Fall; Climate=VH.		**MH**
11. Impact on structure?	In some infestations in Australia, it forms a monoculture. Serious impact in all strata.	P & C (2001)	**H**
12. Effect on threatened flora?	This species is not documented as posing an additional risk to threatened flora.		**MH**

Impact Assessment Record

Scientific Name: *Tamarix aphylla* Common name: athel pine, tamarisk

QUESTION	COMMENTS	REFERENCE	RANKING
Fauna			
13. Effect on threatened fauna?	This species is not documented as posing an additional risk to threatened fauna.		**MH**
14. Effect on non-threatened fauna?	"…the replacement of the native trees not only reduces bird abundance, it also changes the structure of bird communities. Reptiles…were also affected." Reduces habitat leading to a reduction in numbers.	Beckmann (1990)	**MH**
15. Benefits fauna?	No known benefits. Dense growth may provide shelter for small bird species.	Beckmann (1990)	**H**
16. Injurious to fauna?	No known toxic principles. "Athel tamarisk foliage contains phenolic acids which may prevent herbivory."	Tesky (1992)	**L**
Pest Animal			
17. Food source to pests?	Not known as food source to pests. See comment in Q16 above.		**L**
18. Provides harbor?	Not known to provide harbor.		**L**
Agriculture			
19. Impact yield?	Where it has occurred along the Finke River N.T., it has, "…considerably reduced the available grazing area." Potential to have a major impact on the quantity of yield by reducing carrying capacity.	P & C (2001)	**MH**
20. Impact quality?	Not a weed of cropping. Plants take 2 to 3 years to flower. No burrs; plants are not grazed.	P & C (2001)	**L**
21. Affect land value?	Primarily a weed of natural ecosystems. Unlikely to affect the value of grazing land.		**L**
22. Change land use?	Primarily a weed of natural ecosystems. Change in land use not required.		**L**
23. Increase harvest costs?	Not a weed of cropping.		**L**
24. Disease host/vector?	None evident.		**L**

References:

Agriculture and Resource Management Council of Australia & New Zealand, Australian & New Zealand Environment & Conservation Council and Forestry Ministers, (2001) *Weeds of National Significance Athel Pine (Tamarix aphylla) Strategic Plan.* National Weeds Strategy Executive Committee, Launceston.

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