

Lake Eyre Basin

Information Sheet



Priority Weeds

Number IS02

A major issue confronting land managers in the Lake Eyre Basin is the control and eradication of weeds. These impact adversely on production, biodiversity, flora, fauna and lifestyle and cost the community, industry and government millions of dollars in control measures and lost production.



The cost of control and lost production, together with the environmental and social costs, means that weeds impact on the whole nation.

Weeds can be as attractive as a swath of Salvation Jane or as uninviting as a parkinsonia thicket.

All Australians can assist in controlling weeds by ensuring that:

- Declared weeds are not grown in gardens

A weed is a pest plant – a plant growing out of context and out of control. It can be as small as couch grass or as large as a prickly acacia tree.

Where European practices have suppressed natural controls like competing species and fire, native plants such as gidgee (*Acacia cambagei*) and emu bush (*Eremophila spp.*) can become problem plants and require management. Weeds, however, which require control and eradication, have been introduced from overseas. Some have been brought in as garden plants (rubber vine) or as shade or fodder trees (prickly acacia) to improve livestock production, while others have entered the country as contaminants in grains, seeds, machinery (parthenium) and manufactured goods.

Weeds have the capacity to change the face of the landscape. They are very adaptable, produce prolific amounts of seed, out-compete native species, and have adverse impacts on flora, fauna and land productivity.



The cost of ongoing planning and control is a huge economic burden.



- Driving off the road surface in areas signed as roadside infestations is avoided
- Vehicles that have been off-road in infested areas are washed down
- Livestock moving from infested to clean areas are quarantined long enough to allow internally carried seeds to be passed – externally carried seeds should be washed off
- Machinery moved from infested to clean areas is washed down



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Priority Weeds of the Lake Eyre Basin

Weed	Prickly Acacia (<i>Acacia nilotica</i>)	Mesquite (<i>Prosopis spp.</i>)	Athel Pine (<i>Tamarix aphylla</i>)	Parkinsonia (<i>Parkinsonia aculeata</i>)	Rubber Vine (<i>Cryptostegia grandiflora</i>)	Parthenium (<i>Parthenium hysterophorus</i>)
Details						
Type	Small tree	Small tree	Small tree	Small tree	Vine	Annual herb
Growth habit	To 15 metres	3 to 15 metres	To 10 metres	2 to 8 metres	2 to 30 metres	To 2 metres
Suitable environment	North of latitude 32°S	Clay and alluvial soils	Arid area water courses	Riparian areas, stock dams	Tropical northern Australia	Disturbed or bare ground
Seed production	30,000/square metre per year	100,000/square metre per year	Can reproduce from seed but mainly vegetatively from broken branches being washed down streams	2,000/square metre per year	8 million/hectare per year	15,000 per plant
Seed viability	15 years	2 to 50 years		50 years	1 year +	10 years
Seed spread method	Water, animal droppings	Domestic, feral and native animal droppings		Water	Water, wind, animals	Water, vehicles and machinery, grain, livestock
Environmental impact	Smothers native vegetation, alters biodiversity	Out-competes native vegetation, alters biodiversity	Prevents growth of native flora, lowers water-table	Smothers native vegetation, alters biodiversity	Out-competes native vegetation, alters biodiversity	Suppresses native plants, irritant to humans and animals
Country of origin	Indian subcontinent	The Americas	Middle East	Tropical America	Madagascar	Tropical America
Entry method and reason	Imported as ornamental shade tree, used for fodder	Imported as shade tree	Imported as shade tree	Imported as ornamental shade tree	Imported as ornamental	Accidental – on machinery, in pasture seed
Control	Chemical, biological, mechanical, pasture management	Chemical, biological, mechanical, pasture management	Chemical, mechanical	Chemical, biological, mechanical	Fire, biological, chemical, mechanical	Chemical, biological, pasture management
National infestation area (estimate)	6 million hectares	800,000 hectares	600 kilometres of Finke River (also in the Ross and Palmer rivers)	800,000 hectares	700,000 hectares (occurs across 34 million hectares)	8.2 million hectares +
National annual cost (estimate)	\$9 million	Not available, but potentially greater than prickly acacia	Not available	Not available, but potentially greater than prickly acacia	Greater than \$18 million	Greater than \$24 million

Other significant weeds in the Lake Eyre Basin are Bathurst burr (*Xanthium spinosum*), Noogoora burr (*Xanthium pungens*), Salvation Jane or Paterson's curse (*Echium plantagineum*), onion weed (*Asphodelus fistulosus*), ruby dock (*Rumex vesicarius*), buffel grass (*Cenchrus ciliaris*) and even common couch grass (*Cynodon dactylon*).



The prolific onion weed.

Weed management is a priority of the Lake Eyre Basin natural resource management process. The Cross-Catchments Weeds Initiative has been established to coordinate efforts and source funding to assist land managers in the control and eradication of weeds. The Initiative works closely with the Weeds of National Significance Program which coordinates management activities nationally.