

Parthenium weed

Parthenium hysterophorus

HABIT	STEMS & ROOTS	LEAVES	FLOWERS	FRUIT & SEED
				
<p>A fast-maturing branching annual herb. Able to germinate, grow, mature and set seed in 28 days.</p> <p>Toxic to stock and can cause allergic reactions in people.</p>	<p>An erect stem up to 2m high becoming woody with age, and a deep tap root.</p>	<p>Pale green, lobed leaves, covered with soft fine hairs.</p>	<p>Flowers grow on the stem tips, and are small, white and 4mm across with five distinct corners.</p> <p>Each flower produces four or five seeds.</p>	<p>Seeds are black and wedge-shaped, 2mm long, with thin white scales. Up to 100,000 seeds produced per plant.</p> <p>Seeds spread easily by vehicles, machinery, stock, grain and fodder.</p>

Parthenium weed is declared a Class A (to be eradicated) and Class C (not to be introduced) weed in the Northern Territory and is a Weed of National Significance in Australia.

Parthenium weed is a declared weed in accordance with the *Weeds Management Act*.

Parthenium weed is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread and economic, health and environmental impacts. Landholders are required under section 9 of the *Weeds Management Act* to notify the Weed Management Branch of the presence of a declared weed, not previously been, or known to have been present on land under their control.

The problem

Parthenium weed is a native of Central and South America. It was first recorded in Australia in 1955. It has since spread through central Queensland and New South Wales where it is now well established. Parthenium weed is a major problem in rangelands and cropping areas of Queensland costing farmers and graziers more than \$22 million a year in reduced production and increased management costs.

All parts of the parthenium plant at any stage of growth are toxic to humans and animals. It has been shown to be related to health problems for some people living and working in close proximity to it, resulting in an allergy-type response. An absence of allergic symptoms should not be assumed to indicate a lack of sensitivity, since it may take up to 20 years for symptoms to show. It is toxic to cattle, and meat from livestock that eat the weed, can be tainted.

Habitat and distribution

Parthenium weed grows best on alkaline, clay-loam to heavy soils in areas where rainfall is greater than 500mm per year and falls predominantly in summer.

In 1977 parthenium was discovered in the NT along Elsey Creek in the Mataranka district. The infestation had spread 8km downstream from the Roper Highway. This infestation was the subject of an intensive eradication program, involving aerial and ground spraying as well as manual removal and the plant was successfully eradicated from this area. Smaller infestations have been reported and controlled in the Katherine and Borroloola areas.

In 2010 an outbreak of parthenium weed was found at the Tennant Creek stockyards. This infestation is now under active containment with the aim of eradication.

Parthenium is a fast maturing annual (or, under certain conditions, a short-lived perennial) with a deep tap root and an erect stem that becomes woody with age. It may eventually reach a height of 2m.

Its leaves are pale green, branched and covered in soft fine hairs. Flowers are small (4mm across) with 5 distinct corners and grow on the stem tips. Each flower produces 4 or 5 black wedge-shaped seeds that are 2mm long with thin white scales.

- Parthenium weed can germinate, grow, mature and set seed in 4 weeks
- Parthenium weed is toxic to stock and contact with parthenium weed can cause severe allergic reactions in people
- Weed seeds are spread easily by vehicles, machinery stock, grain and fodder
- Report this plant to the Weed Management Branch immediately if found.

Preventing spread of Parthenium weed (Class C)

Preventing the spread of parthenium weed is the most cost-effective management strategy. The seed is easily spread by vehicles, machinery and animals, and in pasture seed, stock feed and water. Most long distance spread is in produce, vehicles and farm machinery. It can also be spread by flooding and by animals. By implementing the following recommendations potential seed spread can be significantly reduced:

- map infestations to enable the development of a coordinated and planned management approach
- design and implement a seed spread prevention program
- follow strict hygiene regimes to prevent spread into clean areas
- where possible integrate weed management into a broader natural resource management program. Weeds often thrive in degraded areas, such as roadsides and overgrazed pastures. Drought and subsequent reduced pasture cover creates the ideal opportunity for parthenium weed distribution and flooded pastures may need to be spelled.

Eradication and Containment (Class A)

All control methods should be undertaken prior to seeding events to minimise the risk of spread and regeneration.

There are a number of chemical and non-chemical control options recommended for the control of parthenium weed. Contact the Weed Management Branch immediately to report parthenium weed and for advice on 08 8999 4567.

Further information

Weed Management Officers from the Weed Management Branch can provide advice on all aspects of weed management including control techniques, biological control, legislative responsibilities, policy advice, monitoring and reporting and regional planning.

For further information on weed management planning, integrated control, herbicide application techniques and monitoring please refer to the [NT Weed Management Handbook](#).