

Weeds

Principle:

The spread of weeds is the greatest current threatening process in the region to both economic and natural resource values. In order to produce effective outcomes, weed management must be carried out within a strategic context.

Large areas of the Tiwi Islands are remote, unpopulated, difficult to access and under-resourced in terms of land management. Limited human and financial resources combined with low intensity land use has led to a serious threat of weeds proliferating and becoming out of control on a large scale.

Weeds have been a feature of the Tiwi landscape for many years. As with other Aboriginal owned areas, the Tiwi Islands were selected by government for pasture and plantation forestry research trials, particularly during the 1960's and 1970's. In more recent times, the increase of traffic from the mainland has resulted in an increased risk of the introduction of weeds and weed seed from mainland areas.

Until recently, weed occurrence on the Tiwi Islands was largely confined to communities, outstations and agricultural trial areas. Outbreaks are now, however, occurring in areas progressively further away from historical disturbance. This is not only posing a threat to the natural resources of the region, but is a very real danger to emerging enterprise developments.

The identification of gamba grass *Andropogon gayanus*, mission grass *Pennisetum polystachion* and guinea grass *Panicum maximum* syn. *Urochloa maxima* outbreaks poses concerns for the alteration of fire regimes still practiced on the Islands, and threats to the *Acacia mangium* plantations currently being assessed. An outbreak of the declared noxious weed *Mimosa pigra* was recently discovered on the south coast of Melville Island, and government plantings of *A. mangium* have produced wildlings that may have the potential to become weedy. Although other weeds occur in the region, the above have been identified as priority threats.

Weed control activities have, and continue to be carried out on the Islands. However, with human and financial resources directed to community areas, it is difficult to address the issue on a regional scale. Under the current scenario, the best possible outcomes are local weed reduction

and eradication. These outcomes will be temporary as communities are re-infested from surrounding areas.

The Tiwi Land Council previously developed a five-year weed control and monitoring plan, which encompassed comprehensive surveys to determine the full extent of infestation; training in weed identification; mapping and control techniques; systematic weed control activities; ongoing monitoring and recording of results; and development of a Regional Weed Management Plan under current legislation. The anticipated core outcome was the development of a culture of weed awareness and control in all Tiwi communities, and also within industry organisations that carry out projects in the region. Lack of funding support has prevented implementation of the plan to date.

Unlike many other areas in the Top End, there is a real possibility of eradicating many of the invasive weed species from the Tiwi Islands. The sea barrier from the mainland combined with improved quarantine infrastructure and procedures means that it is also possible to maintain a relatively weed free status. The development of a Weed Management Plan for the Tiwi Islands under the *Weeds Management Act 2001* should provide legislative support for weed management activities on both the Islands and mainland.

Outcome:

Protection of the region's economic and natural resource values from the impacts of weeds.

Objective:

- 13 Develop and implement long term weed management strategies.

Recommended Actions:

- 13.1 Develop and enforce policies and by-laws specific for regional weed issues, including complimentary education and awareness programmes.
- 13.2 Develop and implement a Weed Management Plan for the Tiwi Islands under the *Weeds Management Act 2001*.
- 13.3 Support and encourage local weed management activities within a regional context.