

Fire

Principle:

Burning is an important land management tool, however community and economic assets need to be protected from uncontrolled fires.

Woinarski *et al.* (2000) analysed seven years of fire data for the region from 1993 to 1999. They concluded that large areas of Melville Island and central Bathurst Island were burnt almost every year, with less accessible areas burnt less often. Burning was concentrated along roads and in more frequently visited areas, and there was no aerial burning. A preferred fire regime for retention of biodiversity values was suggested as *'fine-scale burning in the early to mid dry season, with probably around one-third of every clan estate burnt each year, but with the locations burnt varying substantially from year to year.'*

Burning is an important land management tool for Tiwi residents for both historical and contemporary reasons, and existing regimes have not raised significant natural resource management issues. Recent developments, however, have elevated the importance of fire management within the region.

The majority of the Tiwi population now overwhelmingly resides in communities and permanent outstations with significant built infrastructure, and the protection of life and property from fire is an important consideration. The population centres in the region are also areas that have the most concentrated infestations of exotic tussock grasses such as mission grass, gamba grass and guinea grass. These grasses dry off late in the dry season, and carry high fuel loads. Late season fires in these areas tend to burn very hot, and can pose a severe hazard to life and property.

To date the spread of exotic tussock grasses has been limited to main population centres. Outbreaks of mission grass in particular are now occurring in areas progressively further away from historical disturbance, especially along road alignments. These grasses out compete the native vegetation, and their proliferation will result in increasingly hot late season fires throughout the region, thereby contributing to soil erosion

and native vegetation and habitat decline. Implementation of a weed management strategy is fundamental to reducing the risk of destructive late season fires.

Acacia mangium is fire sensitive when young, and protection of plantation areas from fire is crucial to the success of the plantation forestry project. Fire management principles have been developed in consultation with Bushfires Council NT, whose advice is that hazard reduction burning is currently the only effective method of providing adequate insurance against destructive late season fires. Hazard reduction burning is currently carried out early in the dry season within plantation lease areas, and where fuel loads are likely to create a significant risk. If required, fuel management will be refined on results from the biodiversity monitoring programme, and areas identified as requiring fire protection for biodiversity conservation have been identified as fire exclusion zones.

Outcome:

The protection of life, natural resources and assets through minimising the risk and intensity of wildfire.

Objective:

18. Develop and implement processes and procedures that minimise the risk of wildfire within communities and plantation lease areas.

Recommended Actions:

- 18.1 Support and maintain existing community and forestry fire management training.
- 18.2 Carry out an annual awareness and education campaign for the protection of plantation forestry lease areas from wildfire.

