

### Project Synopsis

Project commencement:	July 2007
Project completion:	December 2008
Total project investment:	\$470,358

## 'Eradicating and controlling mesquite across the rangelands'

### Project Aim

To control and eradicate infestations of Mesquite (a weed of national significance) in the Western Australian rangelands

Originally planted as a hardy ornamental and stock feed plant in the 1920s, Mesquite is now considered among the top 20 noxious weeds in Australia. Dense thickets of this invasive weed are killing native plants and grasses, blocking stock and tourist access to water, making mustering more difficult and costly and acting as protection for feral predators.

"Mesquite has the capacity to cause significant damage in the rangelands. If actions to contain and control this weed were postponed, the costs associated with its management down the track would be significantly higher. Thankfully, Rangelands NRM WA recognised this and were the first to commit to the on-ground fight against Mesquite," said Project Manager Ms Linda Anderson.

The Management of Invasive Species - Mesquite program is contracted to the Pilbara Mesquite Management Committee by Rangelands NRM to help control strategic isolated infestations and prevent further spread of Mesquite in the state.

### Key Outcomes:

- Increased awareness of the threat of Mesquite to the Western Australian rangelands;
- Containment of dense monocultures on Mardie Station;
- Mapping and control of Mesquite infestations within the Western Australian rangelands.

### The Challenge

"Because of its thorns Mesquite can cause injury to animals and puncture vehicle tyres. We are trying to control the infestations in the Pilbara and Gascoyne by working from the outliers towards our dense infestations and from headwaters of watercourses to their end. The Kimberley only has small pockets of Mesquite and our project is assisting with controlling these strategic Mesquite populations," Linda said.

As Australia's single biggest infestation of Mesquite and a hub for hybrid species development, Mardie Station is the focus area for study of Mesquite control techniques.

Through funding provided by Rangelands NRM WA, techniques including controlled burning, mechanical and biological control and herbicide spraying have been tested.

"We have found that the best combination for controlling moderate to dense hybrid Mesquite is by using a combination of machinery, fire and the Evippe moth. This moth was introduced by CSIRO and attacks the leaves of Mesquite, causing extensive defoliation and preventing plants from setting seed," Linda said.



## Our Successes

Since the commencement of the project the following outcomes have been achieved:

- Containment of dense monocultures on Mardie Station by using the Evippe moth, strategic fencing and stock management protocols;
- Strategic control of outlying infestations of Mesquite in Western Australia;
- Completion of an aerial survey and mapping program of Mesquite in the Gascoyne;
- Public awareness programs and partnership development has increased awareness of the threat of Mesquite in the Western Australian rangelands;
- Flood plain and major river system protection against invasion of Mesquite through the use of the Mesquite control toolbox: fire, chemical control, blade ploughing and biological control.

## Benefits to the Pilbara Community

- Greater protection of culturally significant sites from Mesquite;
- Native habitats are less likely to become infested with Mesquite;
- Pastoral lands are more productive when not infested with Mesquite;
- Protection of pastoral, conservation and cultural lands situated within major water catchments from Mesquite;
- Reduced protection for predators and feral animals in Mesquite bushes.

This project was made possible through assistance from:

- Rangelands NRM WA
- Australian Government
- CSIRO
- Department of Agriculture and Food Western Australia

For further information see the Rangelands NRM WA website  
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