

finalreport

NATURAL RESOURCE MANAGEMENT

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Customising the EDGE*network* Grazing Land Management education workshop to the Kimberley region of Western Australia

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Abstract

This project supported the customisation of the Grazing Land Management Education Package in the Kimberley region, the first customisation in Western Australia. The project detailed best-bet local options for grazing management, use of fire, weed management across the Kimberley. The GLM package allows producers to obtain a greater understanding of the economic and environmental importance of good land condition. The main industry benefits will be an improvement in land management and economic viability of Kimberley cattle stations.

Executive Summary

The development of regional versions of the Grazing Land Management Education Package across northern Australia has enabled, for the first time, a compilation of a range of information on land management issues on a regional basis. The development of the region-based courses allows local land managers to easily and readily indentify the effects of land type, land condition, climate variability and other management issues which impact on their businesses. These courses also allow the industry to develop common themes of dealing with and discussing issues both within and between regional boundaries.

The development of the Kimberley Grazing Land Management (GLM) package is the latest in a series of 14 GLM packages written to address grazing land management issues in northern Australia. The package is developed under the MLA EDGEnetwork umbrella and is registered as a national training module.

The package has been written to cover a number of standard modules including; understanding the grazing ecosystem; managing grazing; managing with fire; pasture development; managing treegrass balance; and managing weeds. These modules use generic principles and Kimberley specific pasture growth, climate, land systems and herd modelling information to demonstrate the economic impacts of land in different condition. The information presented in the workshops allows pastoralists to better manage climate variation and grazing pressure, identify possible grazing issues, and assist with infrastructure development and placement. The material also allows participants to establish weed management and grazing management plans for their stations.

The package was written using Kimberley and Western Australian Rangeland management information before being presented as a pilot workshop to a group of local pastoralists and land management scientists. A tool kit containing relevant materials, including plant identification booklets, aids to assist calculating carrying capacity, cattle units, grazing pressure and pasture budgets etc was also developed. The pilot workshop allowed a review of the regional relevance, accuracy and flow of the material presented. Following the Pilot workshop, the material was revised before being desk topped, printed and presented to MLA as the final document.

Industry will benefit from the development of this package immediately. The package has detailed the degree of seasonal variation found within the Kimberley and the impact this can have on pasture production. The economic evaluation of land condition will clearly demonstrate to pastoralists the need to match grazing pressure with pasture production in both the long and short terms. The extension of the information in the Kimberley GLM package and implementation of the practices outlined will provide an on-going basis for good land management across the Kimberley region.

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1 Background – Development of the Kimberley GLM Package

The development of regionally-specific Grazing Land Management packages across much of Queensland and Northern Territory has significantly increased the awareness and understanding by pastoralists of the economic, environmental and production benefits of good land management. The packages have also provided a vehicle to allow the compilation of general land management theory and apply them in a practical method at property management level. With much of northern Australia embracing the concept of the GLM procedures, there was both a need and opportunity to extend the GLM concept to northern Australia.

Funding was provided by Meat and Livestock Australia to DAFWA for the development, writing, desk-topping and publishing of a GLM package for the Kimberley region of Western Australia.

2 **Project Objectives**

The objective of this project was to develop a Grazing Land Management package containing theory, technical information and management practices regionally relevant for the Kimberley region of Western Australia.

3 Methodology

This project was conducted in a number of phases. Including;

- 1. Determining land systems, practice property layout, climate information and pasture species for inclusion,
- 2. Modifying existing packages and modules within these packages with Kimberley data, reference material and examples
- 3. analysing climate and seasonal impacts on pasture growth,
- 4. analysing impacts of different land condition and seasons on animal production and herd economics
- 5. Developing a set of overheads, maps, and other workshop materials to be used when delivering the workshop
- 6. Developing a Facilitators Guide for running the workshop.

Following development of the material, the workshop was tested as a Pilot workshop using an experienced Qld presenter with local producers and DAFWA technical staff. The workshop was assessed for its local relevance, language, technical accuracy and delivery flow. Material was then edited to address comments from this pilot workshop before being delivered to Melissa Driscoll for final desk-topping and editing prior to printing.

Following final editing, all material, including the workshop manual including module information, facilitators manual, overheads, photos, worksheets and maps were presented to MLA.

An outline of a Toolbox for workshop participants is also included in the facilitators' manual. This toolbox provides a CD of all worksheets used in the workshop, maps, references, plant identification books and tools for pasture sampling.

All climate analysis was conducted using the Rainman package. Economic modelling was done using Breedcow/Dynama and pasture growth was modelled through the Grasp program.

The delivery of the material to MLA met the requirements of the final milestone and concluded this project.

4 Results and Discussion

All material has been submitted to MLA and is now available for use in presentation to industry.

5 Success in Achieving Objectives

All objectives of this project have been successfully met. A very high quality Kimberley Grazing Land Management package, including work manual, overheads, facilitators manual and toolkit has been produced.

This project was however initially planned to be completed within 12 months of obtaining funding. Issues with staff commitments and skills, collating local material, pasture growth and economic modelling and understanding the development process delayed the completion of the project for a further 18 months.

Despite the overrun in time, this project was completed within the MLA operating budget.

6 Impact on Meat and Livestock Industry – now & in five years time

The development and availability of the Kimberley Grazing Land Management Package will provide a valuable educational and reference resource to both the grazing and extension sections of the Kimberley beef industry for at least the next five years. The use of the grazing land management principles described in this manual will give producers the tools to successfully manage land condition and grazing pressure, assess the impacts of land condition on economic viability and develop their properties to meet seasonal variation.

7 Conclusions and Recommendations

Conclusion - The opportunity provided by this funding to develop a Grazing Land Management Package for the Kimberley has been extremely valuable for both the industry and DAFWA. The collation of material outlining best land management practices and the economic evaluation of different management options provide good, local evidence for ensuring land remains in good condition. Recommendations – It is impossible to cover all climatic, land type and pasture system variation in one GLM package for the Kimberley. In order to ensure local relevance of GLM packages delivered across the Kimberley, further funding which will allow the development of local packages, such as West Kimberley, north Kimberley etc to be inserted into the main package should be considered.

Consideration should also be given to using the skills of Qld staff who have been involved in developing other packages during the development of other GLM packages within WA, such as the Pilbara region. This will streamline the process of package development.