



final report

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More Beef from Pastures in the Granite Borders Region

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Final Report

A Final Report (maximum length up to 4 pages per Grant) should be submitted to MLA through the State Coordinator. Sections to be covered in the Report include:

- Project Title. (from Grant Application)
More Beef from Pastures in the Granite Borders Region
- MLA Southern Beef Program Objectives addressed by the Grant. Please nominate one or more of:
 - Reduce cost of production per kg for individual farm businesses. (Yes)
 - Producers know how to meet their customer's specifications. (No)
 - Increase the number of producers adopting industry best practices. (Yes)
 - Increase the number of farm businesses adopting sustainable practices. (Yes)
- Brief outline of the Project design and key management practices the group trialed and / or learned to implement. (100 word maximum)

This project had two components aimed at producing more beef from pastures in the area; firstly it investigated / demonstrated techniques for improving the utilisation and nutritive value of African Lovegrass. This relied on the introduction of appropriate legumes and summer growing grasses to compete with the total dominance that African Lovegrass presents to pastures in the Tenterfield region as well as increasing pasture quality; protein, metabolisable energy and digestibility

The second component aimed to increase the skills and knowledge of local beef producers in managing other important aspects of beef production; soil fertility, new pasture species and pasture establishment techniques. Group activities such as workshops, field tours and bus trips were organised to link these objectives with on farm trials and demonstrations.

- Brief description of the productivity and economic gains / benefits to participants. Include an outline of the (1) baseline measurement before the trial, and (2) measurement of the benefits in terms of:

- Increase in number of producers in the group adopting recommended best practice.

While before the project there were a number of producers experimenting with a variety of techniques to control or manage the dominance of African Lovegrass, probably 5% of producers in the Tenterfield district, through the promotion of this project including the use of sub-lethal rates of glyphosate it is estimated that up to 25% of producers are using one or more of the practices demonstrated by this project. Some producers are doing their own on farm demonstration by treating only small areas, possibly limited by cost, but they are still adopting new practices.

On going interest in the use of summer active pasture species to compete with African Lovegrass, and other perennial grass weeds, is demonstrated by the attendance of more than 70 producers at a 2 day "Hot New Pastures for Hotter Drier Climates" forum held near Tenterfield in April 2008. The results of this forum have led to the establishment of species trials across the Granite Borders region.

- Brief description of activities / benefits provided to non-participant producers.

The majority of Granite Borders members are beef cattle producers, mostly on granite soils with a mixture of native, improved or semi-improved pastures. The perennial grass weed, African Lovegrass (*Eragrostis curvula*), has invaded thousands of hectares of pasture across the area, having a significant impact on animal production and pasture management.

Interest was shown by a group of beef producers in investigating the merit of introducing legumes and grasses to compete with and add value to African Lovegrass dominated pastures. Two demonstration sites were observed.

One site south east of Tenterfield was in a paddock dominated by African Lovegrass, until it was sprayed out with Glyphosate and cultivated. This area was sown to a mixture of tropical grass species and temperate legumes, as listed;

Premier Digit Grass	White Clover
Rhodes Grass	Lucerne
Creeping Blue Grass	

The majority of the sown species established well and provided a large bulk of feed for livestock. In some seasons the bulk was such that the area was cut and baled for hay. The grass species, over time, dominated the legumes which reduced the quality of pasture species.

This initial work with tropical pastures as competition for African Lovegrass has benefitted producers across a wide area, generating much interest in pursuing this concept. Granite Borders Landcare Committee, and member groups, are now working with NSW and QLD Departments of Primary Industries to further research the role of tropical pastures in our temperate climate and as a control for summer growing perennial grass weeds.

To the east of Tenterfield a second area of Lovegrass had been slashed/grazed over a number of months to reduce summer bulk, then it was sprayed with a sub-lethal rate of Glyphosate and a number of smaller areas seeded with a variety of legumes and grasses, as listed below:

Biserrula	Serradella
Arrowleaf Clover	Vetch
Sub Clover	Premier Digit Grass

Using a sub-lethal dose of glyphosate certainly had an impact on African Lovegrass and the amount of seed it produced. It did seem to allow an opportunity for the species listed above to establish, so that young seedlings were not shaded and out competed by African Lovegrass. Due to the massive seedbank of African Lovegrass seed in the soil it was quick to re-establish in the sown areas and vigorously competed with the introduced species.

The project had a second part which focussed on building skills and knowledge in pasture & grazing management in order to produce more beef from pastures. These activities which included bus trips and Field Days to a variety of locations looking at a diversity of subjects. These events included Field Days looking at the results of a soil acidity trial at Liston, pasture walk focussing on the establishment of Goldie Lotus

(Birdsfoot Trefoil), pasture monitoring and identification at Liston and Timabarra and a bus trip building on a supplementary feeding field day which took the group to Rangers Valley feedlot near Glen Innes and heard about the outlook for the beef industry from Bob Dent of the Angus Society of Australia.

- Key Messages and/or Overall Recommendations for producing more beef from pastures. (in Dot point format)
 - Management of African Lovegrass needs to be multi-faceted, no one approach seems to be the answer
 - Establishing competitive pasture species in a sward of African Lovegrass requires careful timing
 - Summer active pasture species have a role in the temperate climate of the Northern Tablelands
- Co-operator(s) (Name, Address, Contact Phone No).
Jim Koch, "Dunmore Park" Tenterfield NSW 2372, Phone 02 67361982
- Sponsoring group and any relevant affiliations.
Granite Borders Landcare Committee Incorporated
National Fertilisers
NSW Department of Primary Industries
Agricultural Information & Monitoring Services (AIMS)
- Grant duration (**either** Actual date OR Month/year commenced / completed).
August 2005 – June 2008
- Summary of total funding provided by:
 - Meat & Livestock Australia Grant allocation.
 - Other sources (i.e. cash, labour, equipment & in-kind donations etc).

11. Optional: - any additional information from the project.

See attached copies of flyers for project activities and photographs from the project.



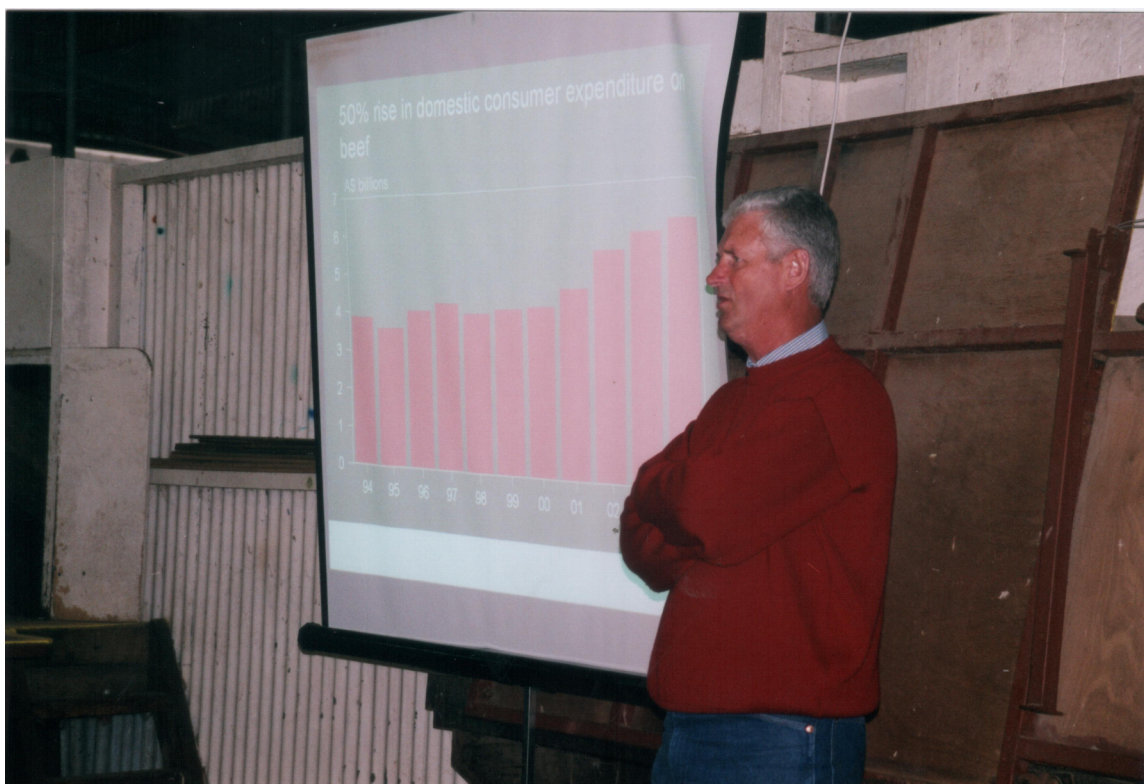
Field Day at Liston Bauxsol Trial site December 2005



Dr John Ayres, NSW Agriculture Glen Innes, talking at pasture Field Day December 2005



Plot marker in Liston Bauxsol Trial Site



Bob Dent, Angus Society of Australia, talking about Beef Industry outlook April 2005



Participants in Field Day and bus trip April 2005



Bob Dent talking about making more beef from pastures at Field Day April 2005



*Dr Judi Earl talking about pasture monitoring at
Pasture & Grazing Management Field Day at Liston 2006*



Producers at a Pasture Field Day at Liston 2006



Dr Judi Earl describing identification of mature broadleaf weeds at Liston 2006



Producers at pasture monitoring Field Day April 2007



Dr Lewis Kahn presenting at Pasture Monitoring and Supplementary Feeding Day



Producers in a small group implementing their pasture monitoring skills April 2007