



finalreport

Northern Beef

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Abstract

The Leucaena Network was established in 2000 in order to represent all Leucaena growers and adopted the Statement "Promoting the responsible development of Leucaena in profitable and sustainable grazing and agroforestry systems to build stronger rural communities"

The three main activities in this process are to promote and, when necessary, review the Code of Practice, to ensure that there is an ongoing research process into what is a very young industry with many unanswered questions and also to provide advice and training for growers, consultants and financial advisers and providers in a fast changing fodder and timber system.

The purpose of NBP 226 was to ensure that there was some financial support for the Executive Officer, (Keith McLaughlin during this funding period) who has spearheaded all of the above projects.

The investment by MLA of \$30,000 has returned enormous benefit to the Beef Industry. Each hectare planted has doubled the production on that area, and probably also halved the environmental footprint.

A rough estimate is that there has been an increase from 50,000ha to 150,000ha planted to Leucaena. We projected in January 2006 that there will be a total of 350,000ha planted by 2013. This estimate has been surprisingly paralalled (without any mention of the projection above) by a Steering Committee formed by QDPI&F last year called "Accelerating the Adoption Of Leucaena in Queensland". Their projection/goal is to see 350,000ha planted in Queensland in five years.

Executive Summary

The Leucaena Network was established in 2000 in order to represent all Leucaena growers and adopted the Statement "Promoting the responsible development of Leucaena in profitable and sustainable grazing and agroforestry systems to build stronger rural communities"

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The Code of Practice

The Code was modified in May 2006 and is acknowledged by all relevant Government Agencies as well as being adopted as the core document for many Shire Councils in preparing their policies on Leucaena.

The "Accelerating the Adoption of Leucaena" Committee has noted that there are small discrepancies between the Code and the (subsequent) Government document, "Policy to Reduce the Weed Threat of Leucaena"

The Leucaena Network, as a major stakeholder in this programme has nominated that it will be prepared to review the Code in the future, should this become necessary, but that it wishes that process to remain entirely in the hands of its members, maintaining it as a voluntary Code.

The presence of the Code and adherence to its guidelines is critical to the Industry.

Increased Acreage

As reported above there has been a dramatic increase in acreage in Queensland. The total area under production at present in Australia is unknown, but there has been significant interest and plantings in the Northern Territory and Western Australia, with some smaller plantings in NSW.

The adoption of the Leucaena and Grass Pasture System across Australia means that the Code needs to be recognised outside Queensland urgently!

The increase in interest in irrigated stands will complicate our projections. To date growers are reporting good margins from irrigation systems ranging from drip to flood to overhead systems. An interest in irrigated Leucaena being a possible emergency supply of protein for feedlotting operations creates another interesting possible use.

Training and Information

This role has been carried out very successfully. During the three year funding period, TLN has held a number of seminars and three Conferences. There have been many facets of the Industry covered. Environmental issues and benefits, both plant and animal nutrition, chemical questions and marketing are some of the themes that have been presented.

In addition, in conjunction with the University of Queensland there have been a large number of two-day Courses held called "Leucaena for Profit and Sustainability" (LPS). In fact there have been nineteen Courses with almost 400 clients attending since April 2004.

TLN has held stalls at Field days and Beef 2006 as well as addressing a large number of Landcare Groups and Environment Lobby Groups.

Benefits to Industry

- Approximately 500 growers (many of whom are family enterprises) have benefited from the efforts of TLN
- Without the Code, it is likely that the restrictions on growing Leucaena could have become serious.
- The benefits to the Beef Industry probably amount to over \$250M thus far..
- The environmental benefits, whilst yet to be measured accurately, include a reduction in chemical and fuel usage, a reduction in runoff and therefore erosion, amelioration of saline outbreaks and the establishment of a very significant carbon “sink” and also reduced methane emissions from cattle grazing on the system.

Thus, MLA's support for The Leucaena Network, as a very conservative claimant of 60% of these results, has been an extraordinary investment.

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1 Background

1.1 The Leucaena Network

The Leucaena Network (TLN) was established in 2000 in order to represent all Leucaena growers and adopted the Statement “Promoting the responsible development of Leucaena in profitable and sustainable grazing and agroforestry systems to build stronger rural communities”

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The three main activities in this process are to promote and, when necessary, review the Code of Practice, to ensure that there is an ongoing research process into what is a very young industry with many unanswered questions and also to provide advice and training for growers, consultants and financial advisers and providers in a fast changing fodder and timber system.

The litmus test of the effectiveness of our operation (and MLA’s investment) is in assessing the increase in viability of landholders who are using the Leucaena and Grass Pasture System.

There have been dozens of cases that validate that we have been successful. The 2006 RNA Red Meat Innovators Award went to Chinchilla growers who attribute their success to the fact that they established Leucaena after consultation with this office and their subsequent attendance at a Leucaena for Profit and Sustainability Course. Similar success stories range from the Northern Territory to Home Hill and to Goondiwindi and even in the Emerald Irrigation Area.

TLN have also advised growers in Argentina, Paraguay, Honduras, Texas, the Philippines, New Guinea, Vietnam and New Caledonia, to name some.

TLN is a major stakeholder in the QDPI&F programme “Accelerating the Adoption of Leucaena in Queensland”. QDPI&F are investing a considerable amount into this programme, and our involvement will be critical to the success of this innovation, which plans to see 350,000ha in Queensland in five years.

Research is a major component of our activities, and we have been integral players in research into grazing trials, rumen health, management principles, soil health and the development of new varieties. We have also actively instigated or supported chemical trials and irrigation projects.

2 Project Objectives

2.1 Project Objectives

1. Updated the Leucaena Code of Practice so that it addresses all current issues concerning Leucaena use and management.
2. Produced information materials on responsible and productive use and management of Leucaena.
3. Developed training materials and sponsored training opportunities to assist producers increase their skills and knowledge.
4. Assisted in increasing the area of Leucaena grown responsibly and productively by 30%

3 Methodology

TLN is recognised as a no-nonsense, practical organisation that can be trusted.

Whilst we are not yet satisfied with our membership numbers, there are 140 people who agree and who invest in TLN.

4 Results and Discussion

The project objectives have been met and exceeded. The three main activities in this process are to promote and, when necessary, review the Code of Practice, to ensure that there is an ongoing research process into what is a very young industry with many unanswered questions and also to provide advice and training for growers, consultants and financial advisers and providers in a fast changing fodder and timber system. TLN has also contributed significantly to the production and publication of a book for producers on responsible and productive establishment and management of Leucaena.

The Code is relevant and a process for change (if needed) has been established. Area planted is exceeding our projections in Queensland alone, without consideration to the large plantings established and also anticipated in other States/ Territories. Our training programme has exceeded all expectations and is recognised as being of a very high order, receiving FarmBis accreditation.

The Code of Practice

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In addition, in conjunction with the University of Queensland there have been a large number of two-day Courses held called "Leucaena for Profit and Sustainability" (LPS). In fact there have been nineteen Courses with almost 400 clients attending since April 2004.

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

In 2000 there were approximately 50,000ha of Leucaena some in a very poor state because of a lack of information and a decline in extension services. Ignoring this fact and assuming that every hectare was reasonably productive, the annual increase in production from native pastures or even run down brigalow to Leucaena would have been 100%

In 2008 with the benefit of advanced technology, a rich extension system and a high level of communication as an additional resource, the average Leucaena plantation is far more profitable. However, assuming the lower estimate, in five year's time there will be 350,000 ha in Queensland alone.

Let us assume the minimum increase in stocking rate to move from one beast to two hectares to one beast to one hectare and that minimum weight gain is 1kg per beast per day over 280 days, instead of 0.7 kg.

A very conservative estimate leaves us with an **increased annual production of \$78,000,000** in 2013 from 350,000 ha using \$1.80 L/W for all calculations TLN has played an important role in realising some of these benefits to the northern beef industry.

6 Conclusions and Recommendations

With a clear case for the work of The Leucaena Network and with a clear understanding that a volunteer Executive invested over \$80,000 last year alone in time and travel, the role of Executive Officer is a critical one.

A Membership of 140 paying \$100 per annum will not pay for even a minimum salary after office expenses, insurances, some travel and publicity costs are borne.

The Leucaena Network is in the process of engaging a very prominent and highly qualified person to replace Keith McLaughlin, who has offered many of his services as a gift to the Industry.

We can justly claim that MLA's investment of \$30,000 for the guaranteed operation of The Leucaena Network through the period of this NBP 226 has proven to be a remarkably successful one.

A key person in the immediate future of The Leucaena Network and the Beef Industry in Australia. will soon replace Keith McLaughlin, who is retiring.

There will be improved publicity and communication as this person uses an experienced presence within Catchment Groups as well as our grower base right across Queensland and the Northern Territory.

The objectives that could be achieved over that period will impact the Australian Beef Industry at a significant level:

1. Extension of the Code of Practice to all relevant Queensland Local Authorities, as well as the relevant Australian States and Territories
2. Facilitate discussion and research into issues relating to rumen function of cattle grazing Leucaena
3. Facilitate research issues relating to irrigation with regard to principles used and water use efficiency
4. Facilitate recording and labelling of chemicals used in Leucaena management with regard to insecticides, fungicides and herbicides
5. Set in motion a process to establish sterile lines for both grazing and timber production.
6. Continuation and expansion of extension and training processes
7. Work to maximise planting and management successes and efficiency and work to ensure that these factors are a mark of the QDPI&F objective of 350,00ha planted in Queensland in five years.

This report therefore strongly recommends that support to the extent of an annual amount of \$20,000 over the next three years (\$60,000) be provided to The Leucaena Network in order for it to achieve these goals.