

Pastures for production, soil health and carbon sequestration Proceedings of the 8th Australian Tropical Pastures Conference held at Goondiwindi, Queensland in March 2009

A welcome from the President

Ladies and gentlemen, my name is Andrew Ferguson and I am the president of the Tropical Grassland Society of Australia Inc. I warmly welcome you to the 8th Australian Tropical Pastures Conference, and hope your time here over the next two days is both informative and stimulating. We have presenters with a diverse range of backgrounds and differing fields of expertise and I encourage you to interact with them and ask questions. There are also people in the audience with many combined years of experience with tropical pastures so make sure you network with everyone here to learn as much as you can. It is rare to have so much tropical pasture knowledge gathered in the one place these days.

We chose Goondiwindi as the location for this year's conference because the southern region has been focusing on pasture development in recent years. There has been work done locally on permanent pastures as well as the role of pastures in cropping systems or ley pastures. The southern region faces the same challenges as most other mixed farming regions in Australia. Erosion, salinity hazards, land degradation, fertility loss, declining productivity (from cropping and pastures) and rising costs are among the main issues we face.

We have changed the focus of this conference to suit this southern region. Pastures based on tropical species are of increasing importance in cropping districts, and some of the tropical grasses and legumes are of increasing interest well into New South Wales. *Leucaena* is one such legume in which there is great interest, whereas once it was considered suitable only for central and northern Queensland. Much of the interest in pastures has been generated by concern over loss of fertility in good cropping lands and in degradation of some marginal cropping country.

Our last conference had the theme *Pastures for protection and production on marginal cropping lands* and reflected that we no longer looked

at pastures, native or sown, merely as a resource to use for increasing production. Long-term community needs and standards required that we all have a responsibility to see that the land and water resource is used in a sustainable way for the benefit of all and for future generations.

This Conference has the theme *Pastures for production, soil health and carbon sequestration*; it reflects that production is still of prime importance to all who generate their living off the land, but also that soil health—the ability of the soil to give good and sustainable yields of crops—looks towards the use of phase and permanent pastures. Much of this soil health relies on soil organic matter and a healthy biota; however, soil organic matter is not necessarily synonymous with soil carbon. We will be hearing about the different forms of soil carbon and how grasses are involved. We will hear about greenhouse gas emissions from the livestock industry and understand better what we may be able to do to reduce the natural emissions of methane from ruminants.

We are also exceedingly fortunate to have the presence of Dr Myles Fisher under the auspices of the Harry Stobbs Memorial Fund. Dr Myles Fisher worked with CSIRO in the old Division of Tropical Pastures before moving to South America to join CIAT (the Centre for International Agricultural Research) in Colombia. He has been heavily involved with the International Committee on Climate Change in the field of carbon sequestration in grazing lands.

The Tropical Grassland Society of Australia was formed in 1962 with the aim of promoting the science of grassland farming. At this time vast resources were devoted to pasture research and promotion. Government agencies such as CSIRO and the Department of Primary Industries employed large numbers of research and extension staff to facilitate the rapid expansion of the industry. The information gathered during this 'golden era' is still available and still very relevant in many situations today. The last 20 years or so has seen a decline in public expenditure on

pasture research and development and the invaluable human resources are leaving the industry progressively. If we are not careful, the practical knowledge and experience of these people will be lost. The future of the society at this point in time is very uncertain; in fact it will probably cease to exist if we maintain our current course. While membership numbers remain relatively stable, they are nothing like they should be, considering the number of individuals, at all levels, involved in the tropical and subtropical pasture industry. The executive committee is looking at ways for the society to exist in different forms but feedback from others is needed on the future direction. However, at the end of the day, what the society needs is more members having more involvement to maintain some relevance.

I would like to thank our sponsors for their generous support: Condamine Alliance, Progressive Seeds, David Illing Pastures, Selected Seeds, Southedge Seeds, Auswest seeds, Pasture Australia and Dow Agrosiences—with the Queensland Department of Primary Industries and Fisheries contributing staff time and organisation.

My thanks go to the speakers who have given their time and knowledge; without them, there could be no conference. My final thanks go to the team that has worked tirelessly to organise this program, the speakers and the field tours for this conference in Goondiwindi.

Please enjoy the conference.

Andrew Ferguson
President

Tropical Grassland Society of Australia Inc.
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