

Evaluation of 'Paddock Plants' field days

Lori McWhirter¹, Helena Warren¹ and Ashley Senn²

¹NSW DPI, Goulburn, NSW 2580 Email: lori.mcwhirter@dpi.nsw.gov.au

²NSW DPI, Richmond, NSW 2753

Abstract

This paper describes Paddock Plants field days, a new format to assist landholders identify and effectively manage plants on their properties. Due to the potential for climate change, increasing emphasis is being given at field days to understanding the characteristics of these plants to better cope with drought and other problems. As well as a description of the field day concept, information is presented on feedback from previous attendees. Generally, Paddock Plants field days have been well received and responses have been very positive.

Key words

Plant identification, field days, evaluation, climate variability.

Introduction

Edwards *et al.* (2006) described Paddock Plants (PP) as a time and resource efficient field day concept for plant identification and management. Its aim is to train landholders to identify, understand and suitably manage the plants on their properties. This paper summarises evaluations from a number of workshops and demonstrates its value as an extension tool.

Organisations such as NSW Department of Primary Industries (DPI) and the Hawkesbury Nepean Catchment Management Authority (HNCMA) are assisting landholders to develop their pasture management skills. PP is provided free of charge to participants, with funds to help run the days provided by several sources, including the National Landcare Programme and NSW Department of Education and Training. Issues relating to the management and selection of pastures able to cope with climate variability are discussed at PP.

The physiological traits of plants that are important to cope with climate variability include heat tolerance, C3 vs C4 metabolism, fertiliser requirements for maximum production (Johnston 1996), water use efficiency (Neal *et al.* 2006), mechanisms to cope with extreme climatic events (White *et al.* 2001) and dormancy mechanisms (Norton *et al.* 2006a; Norton *et al.* 2006b).

Methods

The format for PP is a two to three hour on-farm paddock walk. Beforehand, the most important 12-17 plants are identified. Single-page fact sheets are prepared for each of the plants, which provide information on identification, desirability and management. Discussion topics on the day include the suitability of species and varieties for different growing conditions, including maturity patterns, heat tolerance and summer dormancy.

Paddock Plants can be general in nature or aligned along a specific theme, for example extension of current research, native species or pastures for specific livestock industries. Topics covered at recent PP in the HNCMA district include water-use efficiency, plant metabolism, heat tolerance, nutritional requirements, variety differences and the importance of maintaining ground cover – all issues that are important if pastures are to survive in a variable climate.

Paddock Plants invites interaction and discussion with landholders. At the end of the workshop, participants can undertake a competency test and are asked to complete an evaluation form and return it immediately.

Results and Discussion

Table 1 summarises the responses from 198 evaluations at 13 field days. Evaluations have been very positive, with the vast majority of attendees agreeing that the workshop met their expectations.

Table 1. Responses from participants at 13 Paddock Plants field days (Figures are expressed as percentages).

	1 (Disagree)	2	3	4 (Agree)	NR ^A
Course met aims and expectations	0	1	20	77	2
High standard of instruction	0	1	9	88	2
Presented at a level participant could understand	0	1	6	92	1
Topics covered were useful	0	1	16	82	1
Training materials clear and helpful	0	1	13	85	1
Pace of course?	Too slow 4	About right 92	Too fast 0		NR 4
Would you recommend course?	Yes 99	No 0			NR 1

^ANR = No response

Of those that responded, 77% agreed that the course very much met their expectations and 20% partially agreed. Ninety-nine percent of those who have attended the workshops would recommend them to others.

Participants praised the hands-on nature of the field day and the benefits of viewing plants *in situ*. They appreciated the opportunity to share their own experiences in the management of particular species. The focus on the most common and important plants as well as similar looking species was also a highlight

Demand for further field days has been high, with several people already attending multiple sessions. One of the strengths of PP is that participants can attend a number of days with little repetition. An additional benefit of PP is that it complements the training for other grazing management courses provided by DPI (e.g. PROGRAZE™ and LANDSCAN™). Participants of these courses often request a PP day to be run in their area.

Conclusion

The PP format is a successful vehicle for delivering information on plant identification and management information. The flexible nature of the format allows for constant updating and inclusion of recent research results, especially those pertaining to climate variability.

References:

Edwards C, Clements B, Rose C, McWhirter L (2006) Paddock Plants Field Days – helping landholders to recognise and manage common pasture species. Proceedings of the 21st Annual Conference of the Grasslands Society of NSW, Wagga Wagga, NSW. (Eds. B Hackney, K Bailes, J Piltz and H Burns). Pp.108-109. (Grassland Society of NSW: Orange, NSW)

Johnston WH (1996) The place of C4 grasses in temperate pastures in Australia. *New Zealand Journal of Agricultural Research* **39**, 527-540.

Neal J, Fulkerson WJ, Lawrie R, Nandra K, Beale P, Looby P (2006) Development of a more suitable forage base for the dairy industry. NSW DPI Field day Notes, 26 October 2006.

Norton MR, Volaire F, Lelièvre F (2006a) Summer dormancy in *Dactylis glomerata* L.: the influence of season of sowing and a simulated mid-summer storm on two contrasting cultivars. *Australian Journal of Agricultural Research* **57**, 565-575.

Norton MR, Volaire F, Lelièvre F (2006b) Summer dormancy of *Festuca arundinacea* Schreb.: the influence of season of sowing and a simulated mid-summer storm of two contrasting cultivars. *Australian Journal of Agricultural Research* **57**, 1267-1277.

White TA, Campbell BD, Kemp PD, Hunt CL (2001) Impacts of extreme climatic events on competition during grasslands invasions. *Global Change Biology* **7**, 1-13.