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Targeted industry engagement was 'spot-on' for pasture dieback

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Pasture Dieback (PD) is a condition that has been sporadically affecting sown pasture production in high rainfall zones of eastern Queensland for about 100 years. In recent years, there has been a large increase in the pasture species and area affected by PD. Affected pastures display progressive symptoms of stress which results in otherwise unexplained death, during what should be high growth periods. Currently, pathogenic organisms are the focus of multiple diagnostic research projects (Buck *et. al* 2021). Our objective was to increase graziers' capability to accurately identify PD and implement appropriate management practices by conducting an industry engagement program.

A multi-faceted extension strategy was delivered by the Department of Agriculture and Fisheries (DAF) across eastern Queensland from August 2020 to November 2021 and included developing an industry network, fact sheet series, face-to-face extension, management plan templates and online information services. The Pasture Dieback Industry Network (PDIN) was established (August 2021) to enable those interested in PD to receive updates about the latest outcomes of research trials and upcoming events via email newsletters. Recipients were also directed to PD information on FutureBeef website pages. Project staff presented at a variety of industry events including seminars, meetings, webinars, TV interviews, and newspaper print and e-articles. Additionally, a targeted series of extension events were held including forums, paddock walks and workshops. In total, project staff participated in 33 industry engagement activities. The most recent extension events, Pasture Dieback Management (PDM) workshops, assisted graziers to work through management options for PD on their property through an interactive process using planning templates. Nine workshops were conducted in 8 locations in the PD-affected areas of eastern Queensland. These workshops included: peer to peer group learning activities, brief scientific research updates, practical recommendations to encourage practice change, and follow up information and services to enable adoption. Workshop content included four best-practice management options for areas affected by PD; manage for recovery, improve the pasture, plant a break crop and treat a pathogen. Participants discussed their planned management strategy as a group activity. Feedback sheets were collected at the conclusion of each workshop.

As a result of the extension program, 297 stakeholders voluntarily become members of the PDIN. For the six PDIN newsletters delivered there was, on average, a 69.6% open rate and a 20.2% click rate, which is 46.3% and 17.3% higher than the industry average, respectively (Mail Chimp 2019). Since the development of the PDIN, PD information page views on the FutureBeef website (www.futurebeef.com.au) increased from 4,011 to 9,706. Fourteen DAF-lead face-to-face extension events were attended by a total of 317 graziers who collectively manage 1.57 million ha of land. Feedback from the PDM workshops indicated a high average overall usefulness of the day (6.4 out of 7). Three quarters (75%) of respondents said they intended to make a change due to the workshop and the likelihood to do so was an average of 6 out of 7. There was an improvement in the understanding of 5 key workshop concepts that addressed the aims of the project (Table 1). The greatest improvement was for understanding 'successful management solutions.' The PDM workshop group activity indicated that most producers intended to either manage for recovery or improve the pasture.

Table 1. Average score of knowledge and understanding of concepts before and after Pasture Dieback Management workshops for 115 respondents[A]

Concept	Average score for knowledge and understanding		
	Before	After	Change
How dieback is affecting pastures in the local area	3.7	5.7	+ 2.0
How to identify pasture dieback	3.7	6.0	+ 2.3
Potential casual factors of pasture dieback	3.3	5.7	+ 2.4
Whether pastures can recover from dieback	3.4	5.8	+ 2.4
Successful management solutions	3.0	5.7	+ 2.7

[A]Rating scale: 1 = very poor knowledge and understanding; 7 = very good knowledge and understanding.

Industry engagement activities conducted under this project have demonstrated an improvement in graziers' ability to accurately identify PD and develop a management plan for affected areas. It is recommended that future work be conducted to support producers to enact their management plans for PD.

References
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