

ANIMAL SCIENCE IN AUSTRALIA



Proceedings of the Australian Association of Animal Sciences

Volume 34

Anchoring knowledge – exploring the animal science ecosystem

34th Biennial Conference



Pullman Cairns International Hotel, Cairns, Queensland
5–7 July 2022

The Grazing Resilience and Sustainable Solutions project provides extension support for improved land management in the Fitzroy region of Queensland

M. J. Richardson^{A,B} and M. A. Brown^A

^ADepartment of Agriculture and Fisheries, Qld 4701, Australia.

^BCorresponding author. Email: matthew.richardson@daf.qld.gov.au

The Grazing Resilience and Sustainable Solutions (GRASS) project was developed to assist graziers across the Burdekin, Fitzroy and Burnett Mary River catchments of Australia to comply with Reef Protection Regulations which are a part of the Queensland Reef Water Quality Program (QRWQP). To be compliant, the regulations state that landholders must maintain land with over 50% ground cover at the end of the dry season (30 September) every year. Land in condition 'C' or 'D' is to be documented and have a plan made to halt the degradation, or improve the land condition (DES 2021). The GRASS project is delivered by the Department of Agriculture and Fisheries, Queensland (DAF) in partnership with Natural Resource Management (NRM) groups NQ Dry Tropics, Fitzroy Basin Association (FBA) and the Burnett Mary Regional Group (BMRG). The overall objective of the GRASS program is to work with individual graziers to develop an Action Plan for Land Management (APLM) documenting the intended management of land in C or D condition to halt or repair degradation, or the continued good management of land in A or B condition. The aim of this paper is to report the key achievements of the DAF grazing extension support activities in the GRASS project including the number of completed APLMs.

The GRASS project was delivered October 2019 to June 2022. DAF extension teams worked with graziers to support the improvement of land management through one-on-one extension, development of APLMs and funding support for on-property incentives such as small-to-medium scale gully remediation, riparian and hillslope fencing. DAF's extension targets included 15 APLMs in both the Burdekin and Fitzroy catchments and 16 APLMs in the Burnett-Mary catchment, each financial year. Actions from APLMs have been used to calculate sediment saved from run-off using the Paddock to Reef (P2R) projector tool (Paddock 2 Reef 2020). Upon completion of APLMs, landholders were issued with a letter acknowledging participation in the GRASS program and the prescribed land management actions.

From October 2019 to June 2021, the DAF extension officers worked with landholders to complete 138 APLMs, exceeding the target by 71%. Actions detailed in the APLMs have contributed to a decrease in 1600 tonnes of sediment run-off into the Great Barrier Reef lagoon. Actions include fencing and water infrastructure to manage grazing of fragile land types, riparian fencing to reduce degradation of streambank areas and remediation of gullies. As a result of APLMs, 124 GRASS program participation acknowledgement letters were sent to graziers. From July 2020 to June 2021, 124 one-on-one activities and six workshops were conducted. From these activities, DAF staff had interactions with 180 producers from 128 businesses who run 77 322 head of cattle over 498 597 ha of land. Furthermore, 22 properties with a total APLM area of 149 575 ha have had their incentive-funded projects funded.

Exceeding APLM target numbers is consistent with successful delivery by DAF extension staff in other reported QRWQP projects, such as the Grazing Best Management Practices program, where delivery targets were exceeded by 59–96% (Brown 2016). Completion of 138 APLMs resulted in participating producers being considered compliant with the Reef Protection Regulations. Furthermore, the large-scale industry engagement DAF has delivered, has not only increased awareness of the regulations, but the land management practices detailed in the APLMs will lead to more sustainable grazing practices. Landholders that received GRASS program participation acknowledgement letters report that such documentation had been used for a range of purposes including support for applications to financial lenders (D. Connor, pers. comm., 2020). It is recommended that the GRASS program continues delivery in the Great Barrier Reef river catchments of Queensland.

References

- Department of Environment and Science (DES) (2021) Available at <https://www.qld.gov.au/environment/agriculture/sustainable-farming/reef/reef-regulations/about/overview>
- Brown M (2016) Grazing BMP – data endorses relevance. Proceedings of the Norther Beef Research Update conference 2016. p. 147.
- Paddock to Reef (2020) Available at <https://www.reefplan.qld.gov.au/tracking-progress/paddock-to-reef>

This project is funded by the Queensland Government's Reef Water Quality Program.