



South West NRM

On-Ground Project Fact Sheet

ROTATIONAL GRAZING AT GOOMBIE IN THE UPPER BULLOO CATCHMENT

Landholder Name: Greg Windsor

Property Location & Lot on Plan: The Durella (Lot on plan 3MCY38) block is located 80km north of Quilpie in the Bulloo River Catchment
(Property & project location maps attached at the end of the document)

Property Outline:
(E.g. Property description, size in hectares, enterprise, annual rainfall, and current management practice)

Durella is one block consisting of 8940 ha and is part of a larger aggregation, "Goombi" which joins Durella to the south. Durella consists of Open Alluvial Plains, Soft Mulga Lands and Hard Mulga Lands. The Open Alluvial Plains are located in the area of Durella Creek which runs from the north – western corner to the south – eastern corner through the paddock. There are no permanent waterholes in this water course. Regional Ecosystems encompassed in the area include 7.3.9, 6.3.3, 6.5.16, 6.7.9. There is 694 ha of non rem vegetation occurring on Durella in addition to these REs. Cattle are run on Goombi and Durella in a rotational grazing system with rest being the most important factor. This system has been hindered in the past by lack of infrastructure and rainfall. Therefore, the graze and spell system is maintained within these parameters. The fences around the perimeter of Durella are in reasonable condition. Water consists of 2 dams and 1 flowing bore with a good supply of quality water. It is intended that another watering point in the form of an earth tank/dam will be constructed for the purposes of both the project implementation and the development of the property itself. The current owner has owned the property for 6 years. The aim of the owners and managers is to improve infrastructure and effective rainfall to largely increase carrying capacity. This will be achieved through increased groundcover and desirable species throughout the area.



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Project Description

This is an NRM Learning Demonstration Site project. A rotational grazing trial will be set up on Durella in collaboration with the owners and managers. To implement a rotational time controlled grazing system, the original paddock will be reduced to four paddocks of approximately 2200 Ha. Fencing will be constructed to landtype and natural features. Stocking rates will be adjusted in the interest of ground cover and rest periods to stimulate growth and germination of desirable grasses. Rotational grazing will be implemented by erecting cost effective fencing to dissect the original Durella paddock, this fencing will consist of three plain barbed wires and steel pickets. There will be approximately 18km of subdivisional fencing constructed for the project. Fence line clearing and construction, stock movements and business analysis will be provided in kind by the owner Greg Windsor. Planning is critical to the success of this trial, from the physical layout and water capability to the movement of the stock. Property mapping and planning will be central tools used regularly to assist in decision making.

Funding Budget: \$25,000.00

Project Aim

The project aims to trial a cost effective time managed rotational grazing system. This will maximize plant and animal production while improving ecosystem sustainability and optimizing grazing enterprise profit. It will compare a rotational system with the previous traditional continuous grazing system and document economic, environmental and animal performance, with return on investment being the integral indicator. Stock will be mobbed together to allow 3/4 of the block to rest at one time. Calculations of rest and graze periods for pastures in the new paddocks will differ from the growing period to the non-growing period of the year. The principle is that plants require a recovery period: during the growing season (spring summer) this means the time it takes to regrow from the bottom of phase II to the top of Phase II and this is determined by rate of growth. Stocking rate will be adjusted to suit carrying capacity for each paddock, with maximum stock density used for minimum time. Ideally no more than 40% of available pasture will be grazed with each move. Moves will be based on the growth rate of the pasture and its physiological requirement for rest.

Project Outcomes

The major outcome of this project is to link a grazing business and its' profitability to environmental sustainability which will achieve landscape scale conservation across South West Queensland. This project will facilitate an individual landholders' adoption and involvement in driving change in modern natural resource use, attitudes and practices which will be widely communicated throughout the local and regional networks. It is anticipated that an increase in ground cover and effective rainfall through improved soil structure will be a major on ground outcome, therefore increasing perennial pasture species, carrying capacity of the project area and profit for the grazing business.

Outputs

P 3.2 Property reserve management plan, 1 plan.
P5.1 Biophysical, economic or social plan, 3 plans.
P1.1 BMP codes/guidelines. 1 BMP.
CB1.1 Events – 3 field day, approximately 30 persons attending.
OG14.5 Groundcover management; 50000ha project area, 10 land managers.
CB1.4 Media Opportunities, 2.
CB1.2 Publications, 3 publication and 50 Recipients. OG3.4 Enhanced terrestrial vegetation, 9000 ha.

Project Monitoring:

Objectives:

The monitoring objective of the project is to collate data regarding rotational grazing in the Bulloo Catchment with the landtypes on this property. The project will validate the outcomes of rotational grazing, including environmental and production benefits and sustainability. Data collected from monitoring this site will be used in promotion of the project through field days for educational purposes.

Methodology cont.

Actual rest periods for each paddock, actual yield of each paddock and stocking rate will be the production indicators which are monitored to assess success throughout the project.

Methodology & Indicators:

Project success will be measured by the increase in plant diversity, ground cover, biodiversity and land condition assessments. In addition, the reduction in any erosion will be taken as a measure of success for the project. Biophysical monitoring will include

- Plant diversity - Transects out in each of the new paddocks. Photo monitoring points will be attached with these. Desirable, intermediate, undesirable and herbs/forbs will be monitored and compared over time. Sites outside the project area will also be monitored for comparison reasons. Exclusion cages installed.
- Ground Cover - The method for ground cover monitoring will be from South West NRMs' monitoring manual. This will also be made available to the owners/managers.
- Erosion - this will be a component of the land condition

Monitoring Schedule:

Baseline data sets will be established prior to the commencement of the project. To assist project collaboration and holistic data analysis under the project, the initial collection and onforwarding to South West NRM, of rainfall and production monitoring data will be the responsibility of the landholder. Monitoring will occur monthly by the Quilpie District Project Coordinator with the assistance of the mangagers and owners. Collection of rainfall data will be recorded for every one of the four newly established paddocks. This will help quantify bulk feed that occurs throughout the site. Production monitoring such as carrying capacity, daily weight gain and calving percentages will be conducted by the owners/managers and made available to South West NRM.