

Minimising soil erosion

Plan to locate and construct roads, tracks, fences, firebreaks and water points to minimise soil erosion (e.g. tracks and fences located on the contour, construct whoa boys)

Please note that photo monitoring ([video link](#)) is recommended for all practices.

Farm systems

We recommended you assess your specific farming circumstances before changing any management practices. You can find a list of extension providers at the end of this information.

[FutureBeef](#) is an excellent resource for beef growers, providing information on all aspects of the cattle enterprise. It is a collaborative program for northern Australian beef growers with partners DAFF, Northern Territory Department of Resources - Primary Industry, Department of Agriculture and Food Western Australia and Meat & Livestock Australia.

Costs and benefits

In the long term, maintenance costs will be reduced if you plan infrastructure to minimise soil erosion. That is the construction of erosion control works will be cheaper than repairing damage from erosion later.

The Northern Territory government has undertaken extensive work in developing the best management practices for infrastructure and station development. Best management practices guidelines state that the costs of not undertaking erosion control works include:

- significantly higher maintenance costs
- increased travelling time
- increased vehicle maintenance costs
- reduced firebreak effectiveness
- reduced life and effectiveness of fences
- siltation of waterholes
- occupational health and safety hazards

When planning roads you should consider the likely amount of runoff, soil erodibility, slope and discharge of water. Road drainage needs to consider surface, side and cross drainage. Effective drainage management is critical to erosion control (5G).

Regional studies

A typical Mackay-Whitsunday grazing business assessment

In the Mackay-Whitsunday area an assessment was made of the costs and benefits associated with adoption of improved management practices to determine the effect on profitability and

economic sustainability of grazing enterprises, and the economic viability of capital investment to achieve improved management. The improved practice changes included but were not limited to:

- annually adjusted stocking rates
- pasture monitoring
- fencing
- off-stream watering points
- pasture spelling

Changes to the management practices led to four main benefits:

- higher conception rates and higher weaning percentages
- better quality animals when turned off; providing a higher price
- greater volume of pasture available per head reducing the frequency of emergency feeding and allowing lower input costs
- greater environmental outcomes in maintaining land condition and reducing sediment runoff

In the Mackay-Whitsunday region the grazing operations are predominantly small intensive systems that heavily utilise soil, nutrient and chemical management practices. For these enterprises the economic costs of improved management practices are high and it is recommended to assess their specific farm circumstances before investing in capital. This is to ensure it is an economically worthwhile and viable option to implement any of the above-mentioned improved practices. For larger grazing businesses of more than 1000ha, there are additional economic benefits of improving management practices. A positive return is predicted but the overall benefit is low because the capital costs are high (6G).

Grazing economic tools

Breedcow and Dynama software

The Breedcow and Dynama package has been the industry standard tool for evaluating beef cattle businesses and management options since 1988. Its uses include herd growth projection, cash flow budgeting (including projections on property purchase), financial counselling, research evaluation, analysis and improvement of herd productivity, and a demonstration of the impact of changed husbandry practices on herd structure, turnoff and financial outcome. It has also been used to 'test' drought destocking and restocking strategies, and work through the consequences of disease eradication campaigns for individual producers.

Website: http://www.daff.qld.gov.au/16_6886.htm

Phone: 13 25 23 (DAFF for the cost of a local call in Queensland)

Better decisions in the business of beef

This two-day workshop is based on using Breedcow and Dynama software to evaluate beef businesses and identify opportunities for improved performance. Key components are:

- comparing profitability of different turnoff options, husbandry and grazing practices
- estimating future profit, cash flow, indebtedness and net worth based on herd projections under various scenarios

- comparing cattle purchase options for fattening or backgrounding
- comparing sales options for drought or cash relief
- evaluating investment opportunities using discounted cash flow analysis

BusinessEDGE

This two-day workshop, delivered by MLA EDGENetwork provides finance and business management training to beef producers.

Website: www.mla.com.au

Phone: 3620 5200

Email: businessedge@jkconnections.com.au

Rural profit system

This is a four-step program for graziers or mixed farmers, delivered by RCS. The first step of the program is focussed on holistic integrated management with goals of increased sustainability and profits. Participants control the extent of their learning by determining how many of the programs steps they complete.

Website: www.rcs.au.com

Phone: 1800 356 004

Email: info@rcs.au.com

Extension services

BreedingEDGE

This workshop, delivered by the Department of Agriculture, Fisheries and Forestry for MLA EDGENetwork. Its focus is on helping landholders to develop or improve a breeding program and looks at six key areas:

- examining a properties current situation
- reproduction
- genetics
- setting breeding objectives
- livestock selection
- managing the herd to capture benefits

Website: www.mla.com.au

Phone: 3620 5200 (MLA) 13 23 25 (DAFF)

Email: beef@daff.qld.gov.au

Commercial operators accreditation

Under Agricultural Chemicals Distribution Control Act 1966, operators may require a license in before the ground-application of herbicides. This legislation is enforced by Biosecurity Queensland. Phone: 13 25 23 (for the cost of a local call within Queensland)

Grazing BMP

The Grazing BMP was developed by the Department of Agriculture, Fisheries and Forestry, the Fitzroy Basin Association and AgForce Queensland. The program is a voluntary, industry led process which assists graziers to identify improved practices which can improve the profitability of their business.

Website: www.bmpgrazing.com.au

Phone: 4999 3800 (Fitzroy Basin Association) 3236 3100 (Agforce).

Grazing land management EDGE

This is a three-day workshop, delivered by the Department of Agriculture, Fisheries and Forestry for MLA EDGENetwork. The workshops are regionally targeted, providing landholders with a practical and planned approach for improving the productivity and sustainability of their land. It looks in particular at:

- long-term stocking rate calculations
- forage budgeting
- land condition assessment
- sown pastures
- fire
- weeds

Website: www.mla.com.au

Phone: 3620 5200 (MLA) 13 23 25 (DAFF)

Grazing land management (land condition assessment)

This 3 day workshop, delivered by the Department of Agriculture, Fisheries and Forestry, for MLA teaches:

- how to assess paddock condition
- understanding grazing ecosystems
- how to meet target markets and sustainably

The workshops have been customised to 13 Queensland regions, providing location specific information.

Website: www.mla.com.au

Phone: 3620 5200 (MLA) 13 25 23 (DAFF)

Healthy grass, cattle and soils program

The program is a series of workshops offered by Grazing BestPrac. Grazing Bestprac also offer private consultancy for producers who wish to have one-on-one support on their property/farm. This includes:

- whole of property planning
- mapping and computerized mapping

- GPS training and vegetation mapping
- business facilitation
- business planning (Centrelink)
- grass budgeting and pasture programs

Website: www.grazingbestprac.com.au

Phone: 07 4938 3919

MLA livestock production assurance

This is a simple on-farm food safety program which focuses on 5 key elements:

- property risk assessment
- safe and responsible animal treatments
- stock foods, fodder crops, grain and pasture treatments
- preparation for dispatch of livestock
- livestock transactions and movements

This program is accredited by Ausmeat.

Website: www.mla.com.au

Phone: 3620 5200

Email: lpa@mla.com.au

NutritionEDGE

This 3 day workshop, delivered for MLA by the Department of Agriculture, Fisheries and Forestry, teaches:

- minerals and managing deficiencies
- pasture growth and quality
- grazing management

Website: www.mla.com.au

Phone: 3620 5200 (MLA) 13 25 23 (DAFF)

Email: beef@daff.qld.gov.au

Property computer mapping

These workshops, delivered by AgForce Projects provide landholders with the latest satellite imagery of their property and train them to use these images and mapping software, to build effective property maps. This gives landholders greater ability to plan infrastructure, monitor land condition and improve productivity.

Website: www.agforceprojects.org.au

Phone: 3238 6048

SMARTtrain

This national program is provided through a combination of correspondence education and workshops and aims to train users of agricultural and veterinary chemicals.

Website: www.smartrain-publications.com

Phone: 1800 138 351

Stocktake

This is a one-day workshop developed and delivered by the Department of Agriculture, Fisheries and Forestry. Focuses on land condition and monitoring and also demonstrates field assessment techniques using a database.

Website: www.daff.qld.gov.au

Phone: 13 23 25 (DAFF)

Email: beef@daff.qld.gov.au

Supplementary resources

FutureBeef

Is a collaborative program, aimed at north Australian graziers, with the Department of Agriculture, Fisheries and Forestry (Qld), Northern Territory Department of Resources – Primary Industry, Department of Agriculture and Food Western Australia and Meat and Livestock Australia. The website covers topics related to all aspects of beef production, with regional information where appropriate. It also links to external papers and resources.

Website: www.futurebeef.com.au

Phone: 13 25 23 (DAFF) 1800 023 100 (MLA)

Email: info@futurebeef.com.au

Managing grazing lands in Queensland

Developed by the Department of Environment and Resource Management, this guide looks at pasture management, soil conservation, biodiversity, pests, salinity, riparian vegetation and water resources.

Website: www.dnrm.qld.gov.au/data/assets/pdf_file/0019/110476/managing-grazing-lands-qld.pdf

Phone: 13 74 68 (Queensland Government).

Reef and rainforest research centre

This facility is undertaking development, trial and validation of land management practices that improve water quality outcomes in the sugar and grazing sectors. Reports regarding the scientific outcomes of these management practices are available on the website.

Website: <http://www.rrrc.org.au/>

Phone: 4781 5513

Wetlands management handbook

Farm Management Systems (FMS) guidelines for managing wetlands in intensive agriculture. Developed by the Australian and Queensland governments, as part of the Queensland Wetlands Program. The guide provides information to landholders and extension officers on:

- identifying wetlands
- wetland management
- artificial wetland creation

The guide was designed to complement other industry FMS programs, for holistic farm management.

Website <http://wetlandinfo.ehp.qld.gov.au/wetlands/resources/publications/reports.html>

Phone: 13 74 68 (Queensland Government)

Regional supplementary resources

ABCD management practices framework for dry rangelands

Developed for Terrain NRM by the Department of Agriculture, Fisheries and Forestry, this framework is used as part of the Reef Rescue Program to priorities practices for dry land been properties.

Website: www.terrain.org.au

Phone: 4043 8000

Email: info@terrain.org.au

Reef protection legislative requirements - ERMP guide to the great Barrier Reef protection legislation

Developed by the Department of Environment and Resource Management to help landholders determine whether their property is affected by the legislation as well as explain the legislation and what is required of property owners. It also provides sources of information, support and advice.

Website: <http://www.reefwise farming.qld.gov.au/pdf/guide-gbrpl.pdf>

Phone: 1300 130 372 and press option 8 (DERM)

Farm systems message

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More information

If you would like to contact DAFF about the information presented in this factsheet, contact us on: 13 25 23, for the cost of a local call within Queensland, or 07 3404 6999, or email us at;

ReefPlan@daff.qld.gov.au



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