

GRAZING MANAGEMENT AND SOIL EROSION

WENDY FOWLER, ASSIGNMENT 3, MARCH 2010

1 BACKGROUND PURPOSE FOCUS

1.1 Background

Agricultural productivity and natural biodiversity are dependent for their viability on soil health. In the Northern and Yorke region of South Australia, both are seriously compromised by soil erosion.

More than 630,000 ha or 29 percent of the region is prone to water erosion, while about 225,000 ha or 10 percent of the region is at moderate or higher risk of wind erosion.

Erosion costs about \$75 per hectare for every millimetre of lost top soil to replace lost nutrients and in lost production. It can also incur hundreds of thousands of dollars in public funds for councils to remove soil which drifts onto roads, fences, culverts, railway lines and other property after erosion events.

Erosion can be triggered by unsustainable farming practices such as over-tilling and over-grazing. These practices lead to loss of soil cover which leaves soils susceptible to erosion.

The Northern and Yorke Natural Resources Management Board, (NYNRMB) formed in part from the merger of previous regional soil boards, has been charged under the SA NRM Act (2004) to develop and now implement a regional NRM Plan which addresses natural resources management issues. Sustainable grazing management has been identified within the NRM Plan under a management action target aimed at achieving healthy soils

1.2 Purpose

This project aims to improve the health and productivity of soils by increasing surface cover levels on grazing properties to a sustainable level.

1.4 Campaign focus

The campaign will focus on the regional grazing practices of livestock farmers on Yorke Peninsula.

While landholder education programs have seen an 80 percent uptake of no till or direct drill sowing methods in the past two decades, over-grazing has not been yet been systematically tackled and remains a significant problem.

Targeting a particular region will be more cost effective in the first instance, and may serve as a test case for potential future behaviour change campaigns.

2.0 OBJECTIVES AND GOALS

2.1 Behaviour objective

Specific new behaviours will include the development of livestock management strategies that reduce trampling and retain cover by:

- assessing cover levels (recognising erosion risk);
- balancing stock numbers and available feed;
- hand feeding in confined areas during droughts;
- merging and regularly trafficking flocks;
- moving water troughs to prevent preferential grazing;
- planting perennial pastures to ensure year-round feed;
- fencing sensitive areas to keep stock out
- spelling paddocks for soil recovery

2.2 Knowledge objective

The new behaviours will be based on the following knowledge and/or skills:

- Recognise cover levels and erosion risk;
- Balance stock numbers and available feed;
- hand feeding in confined areas during droughts;
- merge and regularly traffic flocks;
- move water troughs to prevent preferential grazing;
- plant perennial pastures to ensure year-round feed;
- fence sensitive areas to keep stock out
- spell paddocks for soil recovery

2.3 Belief objective

Livestock farmers in the Northern and Yorke region perceive maintenance of target levels of soil cover (above 40 percent) as more important and beneficial than off target levels of soil cover (below 40 percent).

3.0 INITIAL ASSESSMENT

3.1 Objective

The initial assessment will identify key perceptions and attitudes of regional livestock farmers towards adopting behaviours aimed at achieving target soil cover on their properties. The assessment will form the basis of a behavior change campaign that takes into account the target group, current behaviours, barriers and enablers to behavior change, preferred information sources and potential partners. The campaign will encourage farmers to maintain appropriate levels of surface cover to improve the long-term productive capacity of the land.

3.2 Approach

The initial assessment will involve two processes: a literature search and focus groups. These combined research methodologies will ensure that the design of the assessment is informed and focused from the outset, and provides quantitative outcomes as a basis for the campaign.

3.3.1 *Literature review:* A range of documents and media will be investigated as part of the literature review to develop an understanding of the character and properties of the target audience. These will include local newspapers, regional agricultural organizations newsletters (Ag Ex Alliance, YP Sandy Soils Group, Mid North Grasslands Working Group); relevant government websites (such as the Department of Water, Land and Biodiversity Conservation and Primary Industries and Research of SA), existing relevant research findings into regional erosion, grazing, capacity and landholder perceptions - and journals such as *Australian Journal of Environmental Management*.

3.3.2 *Focus groups:* A total of three focus groups will be held in the Board's Upper North, Lower North and Yorke Peninsula Regions to gauge landholder perspectives of grazing and soil erosion issues in their given regions. A market research company will be engaged to facilitate the focus groups and engage participants in group discussions. Conversations will focus on the knowledge, beliefs and practices of the target group.

3.3 Research

The assessment will profile the aspirations of farmers – (social, environmental and economic – including their relationship with the land, stewardship, and property goals), their capacity to adopt the new behavior (knowledge, financial and human resources), external influences (such as incentives, regulations, government, neighbours and media) and their current farm practices.

An important element of the research will be to identify the sources of farming information most commonly used and trusted by the target group. Sources might include agribusiness agents, agricultural consultants, regional and statewide media, family, other farmers, Landcare and environment groups, books, magazines, accountants, market trends, local agricultural events, publications, government, internet, courses and industry groups.

3.4 Target audience

3.4.1 Primary target audience:

The target audience for both the focus groups and subsequent marketing campaign will be mid range adopters who are already considering change among 200 grazing farmers on Yorke Peninsula. This will provide the best returns on effort and investment.

The list of attendees for the initial assessment will be developed in consultation with the Board's Farming Systems Facilitator who has the local knowledge and networks to target farmers who fall into the above category. This list may be supplemented by demographic surveys and databases of the regional Rural Press.

The initial assessment will include a spread of producers and hobby farmers, demographics (sex, age, income, length of time in district and community participation) and erosion incidences and variables.

3.4.2 Other audiences

The initial assessment and subsequent marketing campaign will both focus on the Board's internal audience of Board members, Groups, staff and Technical Advisory Panel who are potential ambassadors for the program and need to be informed and engaged. This audience will be engaged through Board reports, bus tours of demonstration sites, intranet information, articles in Board publications and meeting updates.

3.5 Project team

A project team will be set up to help develop the initial assessment and subsequent marketing strategy. Participants will include Board's Communications Officer, General Manager, Farming Systems Coordinator and Yorke Peninsula NRM Officer; Rural Solutions SA soil consultant; YP Alkaline Soils Group member; Partners in Grain member (women); Mid North Young Guns member (youth); Ag Bureau member; and Adelaide university marketing student.

4 SITUATION ANALYSIS

The following 'findings' are based on the hypothetical initial assessment (see above) and will form the basis of the next stages of this assignment.

4.1 Internal strengths

The campaign will maximize a number of internal strengths.

Resources: The NYNRMB has access to modest financial resources which will be sourced from the Communications and Program Management units. The Board's access to government and regional farming research and network databases will help underpin campaign processes.

Expertise: Board personnel and contractors have critical expertise in areas relevant to the campaign. These positions include the farming systems facilitator, monitoring and evaluation officer, three regional NRM officers, and a botanist.

Management support: The General Manager and key senior team members are supportive of progressing targeted behavior change programs within the region.

Internal publics: Board and NRM Group members, some of whom are former regional Soil Board members, have substantial NRM knowledge and farming skills and are concerned about issues outlined in this paper.

Alliances and partnerships: The Board developing alliances and partnerships with a regional network of farming organizations and agri-consultants. These important relationships will support the campaign through knowledge and skills transfer.

Distribution channels: The distribution channels available to the Board include its own communication vehicles (publications, web, media networks, advertising etc) and the approximately 50 staff and members who will effectively become ambassadors for this campaign and contribute knowledge and in some cases, clout, in farming and political circles. It also has strong links into local farming events (trial sites and field days), and with farming groups and consultants.

4.2 Internal weaknesses

Internal weaknesses which have potential to impact on the campaign include:

Resources: The NYNRMB's financial resources may not be adequate to implement a wide-ranging and comprehensive behavior change project. This will limit potential outcomes.

Expertise: Existing work commitments may limit availability of the Board's expert personnel for the purposes of this project.

Management support: There may be opposition, resistance and/or competition from other senior team members towards this project.

Internal publics: Board and NRM Group members may adopt a conservative and resistant stance towards this relatively new approach to behavior change communications and resist committing support and resources towards it.

Alliances and partnerships: There may be resistance and wariness towards behavior change communications as an approach by the Board's regional network of farming bodies and agri-consultants.

Distribution channels: Unless there is 'buy-in' to the behavior change project, potential Board ambassadors and farming networks may not be willing to help distribute messages as part of the campaign.

4.3 External opportunities

The campaign may capitalize on the following external opportunities:

External publics: External publics may support campaign efforts through information delivery and technical support to farmers. These include regional volunteer groups; Farming groups; Central Region of Local Government; state government (Department of Environment and Heritage, Primary Industries and Research of SA, Rural Solutions SA); and the regional media.

Cultural: The strong cultural ties of the Northern and Yorke community present opportunities to draw on local champions and venues within religious and sporting bodies. These personalities and forums may provide channels for sustainability messages associated with this campaign.

Technological: The region is served by local ABC radio and a television station which can be used for talkback and news stories. Group texting will be used to notify farmers of upcoming events during the campaign. .

Demographic: There is trend towards young people moving away from family farming enterprises to seek employment outside the region.

Natural: The recent breaking drought and above average rains across Yorke Peninsula may facilitate a more positive attitude among the farming community towards toward investment of time in new grazing management behaviours.

Economic: The NYNRM Board may subsidise costs of training workshops. Opportunities exist for farmer-to-farmer mentoring to keep costs down.

Political/legal: Agriculture one of main sources of revenue and employment in Yorke Peninsula. Bill passed in 2010 to protect agriculturalists 'right to farm' in midst of region opening up to sea changers and tourism, creating a more favorable political environment for agricultural pursuits.

4.4 External threats

External publics: Adelaide public and media may be reactive if erosion-driven soil drift affects city residents during windy periods.

Cultural: Social and family pressures may limit perceived time availability for adoption of new behaviours and practices.

Technological: Access to technological communications such as Broadband is slow to be implemented in rural areas, and will impact on the nature of the campaign. Regional farming communities are less likely to use digital and new media.

Demographic: The target audience has an aged demographic profile, with unemployment significantly higher than the state average. This indicates more young people are leaving farms in search of work in urban areas. Older and more conservative farmers are traditionally more resistant to new methodologies.

Natural: Climate change and seasonal variability could produce a poor season in terms of rainfall and productivity during the campaign period. This may inhibit adoption of new behaviours.

Economic: Cost of implementing new behaviours may outweigh perceived benefits of new practices. There is currently a trend towards over-capitalisation on farm equipment by some farmers. The general cost of doing business in rural areas is comparatively high due to additional costs of transportation.

Political/legal: There is a tendency among rural communities to be cautious, circumspect and pessimistic about the motives of government agencies which seek to impose programs on them.

5.0 ANALYSIS OF TARGET AUDIENCES

5.1 Overview target audience

The hypothetical initial assessment 'found' that the target audience for this campaign is predominately third generation male farmers above 50 years of age. Recognition of sustainable farming issues is relatively high and some farmers are already implementing sustainable farming practices in areas of their businesses.

The assessment found farmers tend to lack of knowledge and skills to recognize or manage grazing for appropriate levels of soil cover, and are not aware of links between investment and outcomes. Farmers tend to have strong affiliations with their local farming and community networks, and are distrusting of government 'experts'.

They have strong sense of belonging to their properties, and many wish to retain and improve for their farms to leave to their children. Increasing numbers of young people are leaving farms due to concerns about seasonal variation and long term profitability.

5.1 Barriers

The following key barriers to adoption of new grazing management behaviours were identified;

- Lower priority
- Expenditure (capital and operation)
- Lack of information about existing and new practices
- Inadequate skills base
- Limited support and reward for adoption of improved practices
- Lack of influence of farm enterprise decisions
- Seasonal conditions
- Infrastructure problems/unsuitability

5.2 Benefits

The following key benefits to adoption of new grazing management behaviours were identified;

- Pride and peer group recognition
- Profit
- Availability of materials for work (fencing, water)
- More effective use of time
- Investment for children
- Environmentally sustainable
- Innovative

5.3 Competition

The following key competitors to adoption of new grazing management behaviours were identified;

- Existing farm practices (over grazing)
 - Graze cover to below 40 percent
 - More stock than available feed
 - Stock roam and trample paddocks
 - Existing farm design facilitates trampling
 - Stock trample sensitive areas
 - Exhaust soils, no recovery periods
 - Plant only annual crops
- Existing farm expenditures

5.3.1 Alternative behaviours

Specific alternative behaviours will include the development of livestock management strategies that reduce trampling and retain cover by:

- Existing farm practices:
 - Assessing cover levels (recognising erosion risk);
 - Balancing stock numbers and available feed;
 - Hand feeding in confined areas during droughts;
 - Merging and regularly trafficking flocks;
 - Moving water troughs to prevent preferential grazing;
 - Planting perennial pastures for more sustainable, year-round feed;
 - Fencing sensitive areas to keep stock out
 - Spelling paddocks for soil recovery (rotational grazing)
- Existing farm expenditure:
 - Capital and operational expenditure diverted into soil cover maintenance

5.3.2 Benefits alternative behaviours

Key benefits perceived by farmers towards adoption of new grazing management behaviours include:

- Long term farm enterprise profitability
- Peer recognition
- Better informed and equipped
- More environmentally sustainable farming
- Improved seasonal preparedness

5.3.3 Costs

The main costs associated with new behaviours related to training workshops.

6.0. MARKETING STRATEGY

6.1 Positioning statement

Livestock farmers in the Northern and Yorke region perceive maintenance of target levels of soil cover (above 40 percent) as more important and beneficial than off target levels of soil cover (below 40 percent).

6.2 Product

Farmers will gain improved long term farm productivity as a result of this campaign and recognition by peers.

6.2.1 Major perceived benefits

Farmers will perceive themselves as more successful farmers, financially secure and accepted by their peers as a result of this campaign.

6.2.2 Actual product

The actual product which farmers will receive is a more financially and environmentally sustainable agricultural business.

6.2.3 New services in campaign efforts

Several new services will be provided through this campaign :

- Mentor and mentee brokering service
- Reputable advisors to work in partnership with the North and Yorke Natural Resources Management Board
- Collaborative learning groups with independent leaders
- Landholder to landholder promotion of soil condition improvement management practices
- Demonstration case studies

6.2.4 Improvement to existing services

In addition, existing services will be improved in the following ways:

- Additional grazing management workshops will be provided
- Soil testing will be made more available through on site consultants.

6.2.5 Price

Farmers will buy-in through the costs of training and additional time required to up skill and implement new behaviours.

6.3.1 What will target audience pay for tangible object

Not applicable

6.3.2 Monetary incentives for target markets

The Northern and Yorke NRM Board will subsidized 50 percent of the cost of initial workshops. Community grants will be made available to farming and community groups for promoting sustainable grazing practices.

6.3.3 Monetary disincentives

Not applicable

6.3.4 Nonmonetary incentives

Farmers will receive recognition from their communities and farmer peer groups through:

- Word of mouth;
- Membership to the new Profit and Productivity Group;
- The NYNRMB's Quiet Achievers Award scheme.

6.3.5 Nonmonetary disincentives

Not applicable

6.4 Place

Various (see Implementation Plan below)

6.4.1 Convenient access

All training, support, information and encouragement will be made available at convenient, easy-to-access locations such as:

- Training on farming properties
- Workshops in regional towns
- Merchandise via farming groups and Profit and Productivity Group
- Encouragement through community network opportunities
- Printed information via local pedestrian venues
- Electronic and digital information via local media, website and text messages

6.4.2 Location encouragement occurs

Encourage and training will occur through a variety of locations including:

- Individual and focus farms
- Training workshops in towns;
- Media and promotion;
- Field days and community events;
- Church and sporting club events;

6.4.5 Timing

This 12 month campaign will begin in March 2010 in the quiet farming period, lead up to rainy season and wind up during summer with a monitoring and reporting period in early 2011.

6.5 Support groups and individuals

Farming Groups	Advisors	Banks	Educationalist
<ul style="list-style-type: none"> Northern Sustainable Soils YP Alkaline Soils Group Ag Bureaus (x 5) Agricultural Excellence Alliance SA No Till Farmers' Association Southern Precision Agricultural Association Mid North Young Guns 	<p><u>Private</u></p> <ul style="list-style-type: none"> Agrilink Ag Consulting Chris Davey Agri-advisors Landmark YP Ag Elders Wardles Vaders <p><u>Government</u> NYNRMB</p> <ul style="list-style-type: none"> NRM Officer Farm Systems Facilitator <p><u>Rural Solutions</u> Soils and Livestock</p> <ul style="list-style-type: none"> Harding M. Young B. Midge 	Rabobank	<p><u>Technical and Further Education</u></p> <ul style="list-style-type: none"> Rural Skills Training <p><u>Partners in Grain</u></p>

6.6 Promotion

A wide range of promotional materials will be utilized during this campaign including signage, advertising, bumper stickers, publications, badges (see Implementation Plan below).

6.7 Key messages

Below are the key messages which will be used in all communications throughout the campaign:

- Retain 40 percent soil cover
- Match grazing pressure to feed supply, pasture growth and soil cover
- Sustainable grazing management = profit and protection
- Retaining soil cover is proven to increase productivity

6.8 Messengers and sponsors

Advisors	Educationalists	Community groups	Champions
<p><u>Private</u></p> <p>Agrilink Ag Consulting Chris Davey Agri-advisors Landmark YP Ag Elders Wardles Vaders</p> <p><u>Government</u> NYNRMB</p> <p>NRM Officer Farm System Facilitator</p> <p><u>Rural Solutions</u> Soils and Livestock</p> <p>Harding M. Young B. Mudge</p>	<p><u>Technical and Further Education</u></p> <p>Rural Skills Training course</p> <p><u>Partners in Grain</u></p>	<p><u>Churches</u></p> <p>Leaders Spokespeople</p> <p><u>Sporting clubs</u></p> <p>Coaches Captions</p>	<p><u>NYNRMB</u> Presiding Member</p> <p>Merv Lewis</p> <p><u>ABC Rural Talkback host</u></p> <p>Kieran Weir</p> <p><u>Local/SA sport identity</u></p> <p>Mick Redden</p> <p><u>Government</u> NYNRMB</p> <p>Farm System Facilitator</p> <p><u>Rural Solutions</u> Soils and Livestock</p> <p>M. Young M. Young</p>

6.9 Creative strategy summary

The campaign theme line is a play on the implicit and explicit value of soil. It focuses on key elements of sustainable grazing management: soils, sustainability and profit. It is represented by the logo below which can be read as the value of both soils and their productive potential.



The campaign will build on the existing farming community of Yorke Peninsula with the establishment of a new group called the Profit and Productivity Group which will focus on soil erosion management issues.

It will focus on the opportunities and rewards associated with sustainable grazing management through access to the above group, peer group support, recognition, mentoring and an award scheme for promoting target behaviours.

Advertising will focus on behavior endorsements by community champions – church spokespeople, farming experts, sports heroes and community activists.

Each endorsement will end with the words: Soil, our future.

The target audience is a group of people who are contributing to a regional mission, who will be recognized and supported by their community for 'doing the right thing' by themselves, their own upcoming generation of young farmers and their regional community by protecting their soils.

Promotions will be supplemented with fact sheets, website information, text messages at key intervals during the campaign, media articles, talk back radio segments, fencing signage, badges and merchandising.

The campaign will be underpinned by comprehensive group and individualized training, mentoring and support opportunities for farmers.

6.9.1 Communication channels

Communication channels will focus on the outlets and personalities most trusted and commonly utilized by farmers in the region including:

- Farming groups
- Champions
- Agriconsultants and agribanks
- Training workshops
- Regional media
- Board and associated farming group websites
- Field days
- Church and sports clubs

7.0 MONITORING AND EVALUATION

7.1 Purpose of evaluation

An evaluation will be undertaken of the campaign to:

- Determine success of campaign
- Satisfy reporting requirements of campaign
- Build credibility of campaign techniques and viability
- Engender stakeholder support for environmental behavior change
- Review strengths and weaknesses for continuous improvement of future campaigns.

7.2 Evaluation recipients

Key recipients of evaluation results will be NYNRMB members and Group members who will determine future funding for behavior change programs. Other recipients will include supporting groups and individuals such as farm groups, agriconsultants and church and sporting groups.

7.3 Behaviour change goals measured

A range of behavior change goals will be measured including:

- Awareness sustainable grazing management practices
- Intentions to behavior change for sustainable grazing management
- Implementation sustainable grazing management
- Attendees at workshops and training
- Membership to Profit and Productivity Group
- Number of days that erosion prone soils are protected

7.4 Techniques and methodologies

Behaviour change will be measured through techniques and methodologies including:

- *Postal survey:* About 2000 livestock farmers across the region will provide an insight to the frequency of, and motivations behind, positive and negative behaviours. This will also help set a benchmark for regional landholder profiles, and for future evaluation of the success of the behavior change campaign.
- Website hits (Proof Creative)
- Media monitoring (Media Monitors Service)
- Uptake training (register, NRM Officer and Farming Systems Facilitator)

7.5 Timing of measurements

Timing of evaluations will run through the campaign as follows:

- April Baseline survey
- May – November Collection training information
- Mar 2010 – Mar 2011 Media monitoring
- February 2011 Comparative survey

8. BUDGET AND FUNDING SOURCES (Year one)

8.1 NYNRM budget

8.1.1 Initial assessment costs

Market research facilitator \$1000 Board

8.1.2 Product costs

Not applicable

8.1.3 Service costs

Workshops
(Facilitator 3 workshops 3 locations 15 farmers each) \$10,000 Board
On farm support and advice 50%

Three visits to small groups of 3 farmers \$40,000

8.1.4 Place costs

Workshop venues \$1000 Board

8.1.5 Promotion costs

Farm gate signage x 500 (design and print) \$2000 Board

Advertising campaign (TV classifieds) \$ 500 Board

Advertising campaign (Design, print x 6 papers x 3 runs) \$3000 Board

Bumper stickers x 1000 (design and produce) \$500 Board

Publication and media articles (absorbed in-house) Nil

Badges x 500 (design and produce) \$1000 Board

Fact sheets 2 @ 2 pages (write, design and print) \$3000 Board

Talkback radio Nil

8.1.6 Evaluation costs

2 x postal surveys (produced in-house)

Postage surveys x 400 \$300 Board

Media monitoring (absorbed in house)

Website monitoring (absorbed in house)

8.1.7 Total \$62,300 Board

8.2 Individual farmer's budget

8.2.1 Farmer's time, training

3 days per year @ \$30 / hr & travel \$ 700

8.2.2 Farmer's time, modifying infrastructure

2 weeks work \$2,800

8.2.3 Materials

\$5000

8.2.4 Workshops (each)

\$ 40

8.2.5 Total

\$8540 Farmer

NOTE: Cost of 'New products' to funded under Australian Government's Caring for our Country.

9.0

IMPLEMENTATION

9.1 Key campaign phases

Months	Stage	Strategy	Farming phase
March 2010	Initial assessment stage one	Preparations, survey	
March	Initial assessment stage two	Focus groups	Down time, harvesting finished, planning for coming year
April – May	Campaign stage one.	Planning and development	Sowing crops
June	Campaign stage two	Training Peer acceptance	
July – Aug	Campaign stage three	Promotion Support Incentives	Graze pastures to achieve appropriate covers leading into Spring/Summer
October - December	Campaign stage four	Promotion Support Incentives	End of pasture growth. Determine quantity of feed consumed weekly by stock, eg livestock to feed reserve analysis; Decide whether to agist, sell, hand feed; Determine feed reserve.
January – March 2011	Stage four	Evaluation and reporting	

9.2 Product, price, place and promotion

PERCEIVED BARRIERS AND COMPETITION	OVERCOME BARRIERS AND INCREASING BENEFITS			
	PRODUCT	PRICE	PLACE	PROMOTION
Cost of adoption (expenditure and operation)	Board training subsidy	Reduced cost of workshops	Media, banks, advertising, Board publications, farming networks, workshops, advisors, website	Content promotes Board subsidies for initial training workshops
	NYNRMB Community Grants scheme	Financial support for farm groups	Media, banks, advertising, Board publications, farming networks, workshops, advisors, website	Grants for farming and community groups to promote sustainable farming
	Early adopters work with midterm adopters	Reduced cost of on farm support	Individual farmers' properties	Farmers provide low cost support to each other
	Supporters armed with 'Proof' of long term financial benefits	Demonstrate profitability through desired soil condition improvement practices.	Training sessions, field days, church and sporting clubs	Supporters and champions provide examples of profitability of improved grazing management practices
Community norms /rewards	Productivity and Profit Group	No joining fee	Farming networks	Membership to new group confers grazing acceptance and support of grazing management behaviours
	Promote names of adopters among peer communities	Not applicable	Media, advertising, Board publications, farming networks, website	Content promotes growing list of good grazing managers
	Quiet Achiever Awards	Not applicable	Farming groups	Acknowledges efforts of farming groups to support good grazing management of farmers
	Merchandise: 'Proud member of Profit and Productivity' Bumper stickers; Badges; Hats; Stubby holders.	Give-away merchandise for Profit and Productivity members	Field days, trial sites, workshop, farm group meetings, churches, Board offices, sporting club venues	Membership to group and acknowledgement of good grazing practices promotes community norms and confers rewards

	Farm gate signs			
Risk of failure	Establish demonstration case studies		Yorke Peninsula focus farm sites	Neighbouring farmers have successfully and profitably introduced more sustainable grazing practices
Seasonal variability	Provide ready information about benefits of grazing management in preparing for seasonal variability	Free messaging and publications	Fact sheets, farmers' kits, text messages	Messages espouse benefits of long sustainable grazing practices vis a vis climate change
	Increase soils testing availability		On farm soil testing by agriconsultants	Technical support is available to help understand soil requirements under different climatic conditions
Skills gap	Establish collaborative learning groups with independent leaders	Farmers provide in-kind services to each other	Local collective under 'Profit and productivity' umbrella group	Training is available at low cost and by credible peer group to address skills gap
	Additional grazing management workshop		On farm training by support groups	Additional training opportunities are provided to support farmers up skill in grazing management areas
Lower priority	More effective use of time		Farming networks, church and sporting groups	Community supports more sustainable farming practices and encourages investment in long term outcomes
	Demonstrate benefits	Cost of demonstration built into training workshops	Training sessions and agriconsultants	Trusted experts espouse benefits of sustainable grazing behaviours