



Department of
Agriculture and Food



final report

Project code: B.NBP.0658
Prepared by: PE Novelly K Ryan and AM Huey
Department of Agriculture and Food, Western Australia
Date published: March 2014
ISBN: 9781740361835

PUBLISHED BY
Meat & Livestock Australia Limited
Locked Bag 991
NORTH SYDNEY NSW 2059

Development of a Grazing Land Management Package for the Pilbara Western Australia

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

This publication is published by Meat & Livestock Australia Limited ABN 39 081 678 364 (MLA). Care is taken to ensure the accuracy of the information contained in this publication. However MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication. You should make your own enquiries before making decisions concerning your interests. Reproduction in whole or in part of this publication is prohibited without prior written consent of MLA.

Abstract

The Department of Agriculture and Food, Western Australia (DAFWA) has customised the Grazing Land Management (GLM) education workshop package to the Pilbara region with the assistance of the Steering Committee. The work was undertaken in response to an identified need to develop a GLM package to provide regionally relevant information to managers and assist them in making informed decisions on the management of natural resources to improve the efficiency, sustainability and cost-effectiveness of their enterprises.

The pilot workshop for the GLM training package development for the Pilbara region was held on 21-22 November 2012. Steering Committee members participated in an intensive day and a half of presentation and review of a condensed version of the full workshop. The feedback from discussions and comments from pilot workshop participants were incorporated into the final version and submitted to MLA.

The revised Workbook, PowerPoint slides and Facilitation Manual were delivered to MLA in June 2013 as PDF and desk-top files ready for printing and use in workshops.

Executive summary

The objective of this project was to have Pilbara beef producers develop, through participative learning and demonstration, an improved understanding of issues relating to natural resource management and production potential of their leases and their management. This would be achieved by application of the appropriate principles and concepts outlined in a regionally-specific Grazing Land Management (GLM) package. This, in turn, would support more sustainable cattle production, particularly with regard to issues such as working within climatic constraints (particularly significant inter-annual rainfall variation), dealing with appropriate property development scenarios and generally optimizing financial return within the constraints set by the Pilbara environment.

That a package specific to the Pilbara is of benefit to Pilbara producers comes from the requirement that the package must be relevant to the local land systems and climatic areas of the Pilbara, as many of the management decisions taken on individual properties are done so because of the nature of the resources specific to that property. While the fundamental principles of land management are similar through each of the regions for which GLM packages have been developed, the GLM package for each region is stand-alone and tailored to the management of specific land and pasture systems within each region.

Table of Contents

1. Background	5
2. Project Objectives	5
3. Pilbara region description	5
4. Method	5
5. Results and discussion	6
6. Appendices	7
6.1 Appendix 1 – Rangelands Memo articles: December 2011, April 2012, August 2012, December 2012	
6.2 Appendix 2 – Pilot workshop agenda and summarised feedback ratings provided by workshop attendees on each module and overall pilot workshop	

1. Background

Producers in the Pilbara of Western Australia have significantly increased the efficiency of cattle production for the live export market, but production and financial indices as defined by benchmarking and other studies are often below those of their counterparts elsewhere in Western Australia and in Queensland and the Northern Territory (Smith pers. comm., Stockdale pers. comm.). An aspect of this difference is the access to information and training available to other producers, particularly in the area of grazing land management. A GLM package was developed for various land systems across the Kimberley, and delivery of this information through GLM workshops in both the East and West Kimberley has been well received. GLM packages have also been developed elsewhere in northern and central Australia, and these packages have been adopted by the grazing industry as a management benchmark for many grazing properties.

Therefore, the need was identified to develop a similar package for the Pilbara region to provide relevant information to managers and assist them in making informed decisions on the management of natural resources to improve the efficiency, sustainability and cost-effectiveness of their enterprises.

2. Project Objectives

The objectives of this project were:

By the completion of the project on 1 July 2013, the research organisation will have:

1. Customised the GLM education workshop package to the Pilbara region.
2. Delivered the revised Workbook, PowerPoint slides and Facilitation Manual. The Workbook and Facilitation Manual will be delivered to MLA as PDF and desk-top files ready for printing and use in workshops.

3. Pilbara region description

The Pilbara is the second most northern region of Western Australia and covers over 505,000 km² or approximately 20 per cent of Western Australia. The pastoral area of the Pilbara extends from Pardoo Station in the north to Yanrey Station in the south-west and the town of Newman in the south-east.

Significant inter-annual rainfall variation is normal across the region, with averages between 310 and 320 mm. Rainfall occurs mainly between November and April, often in association with cyclonic influences, with some falls occurring up to June. High temperatures and associated high evaporation rates limit rainfall efficiency and pasture growth.

There are a total of 51 businesses in the Pilbara of these seven are indigenous owned, nine are owned by mining companies and operated as commercial cattle businesses, and 35 are privately owned and operated.

4. Method

The Pilbara pastoral area was surveyed from 1995 to 1999 (Van Vreeswyk et al, 2004). The survey report described the climate, geology/geomorphology, soils and vegetation of the region.

Land type sheets were developed for the Pilbara following the structure and content of those developed for other regional versions of GLM and were provided to pilot workshop participants. The regional framework of twelve common land types used in the Pilbara GLM package and the supporting information was provided to an external consultant (Dr Ken Day, Brisbane, QLD) in November 2011 as the basis for GRASP modeling and pasture growth outputs required for carrying capacity estimates. The final version of pasture growth outputs were provided to DAFWA in October 2012.

The case study property was mapped by local Pilbara DAFWA officer, Ms Rebecca Dray, and GIS analysis was applied to scenarios to provide data for examples used in the workshop materials to illustrate key principles, practices and tools.

Breedcow Dynama software was applied to build an example herd model in 2012 for the Pilbara GLM training package. The herd modelling software was used to test scenarios for the effects of management change options to the bottom line for the hypothetical owners. The parameters used for modelling were provided from information collected from real businesses, including that provided by steering committee members. This involved consultation with industry and liaison with DAFWA experts and the prominent economist Bill Holmes to ensure that the model was functional and reflected current prices and business structures as accurately as possible. The modelled data provide a sound basis for demonstrating the link between improved land condition outcomes and increased gross margins, allowing GLM workshop attendees to evaluate best practice management extension messages in terms of dollar values.

The draft workshop materials were finalised by DAFWA's project team in mid-October 2012. The PowerPoint slides and workbook were edited remotely in Hughenden by MLA's supplier, Mel Driscoll, to ensure compliance with current MLA EDGENetwork style guidelines. Print materials were ready in time for the pilot workshop on the 21st of November 2012. The high standard of the draft materials produced for and delivered to the steering committee allowed for the most efficient use of their time and provided the opportunity for feedback which has since been vetted, summarised, disseminated within the committee and incorporated into the workbook and PowerPoint, where possible. The revised materials were reviewed by the editor and desk topped for printing for the second time before submission to MLA.

5. Results and discussion

DAFWA has provided technical information on Pilbara land types developed for this project to FutureBeef collaborators for use in the development and delivery of a Stocktake™ smart phone application. The use of DAFWA data in this project resourced primarily by Queensland DAFF and MLA will provide Pilbara producers the opportunity to try a new extension tool that would otherwise have been unavailable or of only limited use.

Industry support for delivery of the full workshop has been indicated through various forums, including the Pilbara District Consultative Meeting of November 2012.

DAFWA has laid the groundwork for the in-principle agreement with Rangelands NRM that the financial support provided by Rangelands NRM for the February 2013 Kimberley GLM workshop at Liveringa will be matched for a GLM workshop in the Pilbara in late 2013 or early 2014.

6. Appendices

6.1 Appendix 1 – Rangelands Memo articles: December 2011, April 2012, August 2012, December 2012

Rangelands MEMO

Copyright © Western Australian Agriculture Authority, 2011



December 2011

ISSN 1033-5757

Vol. 1, No. 3

EDITOR: Matthew Fletcher
PO Box 19, Kununurra WA 6743

Phone: (08) 9166 4019
Email: matthew.fletcher@agric.wa.gov.au

CONTENTS

Letter from the editor	2
Chance of exceeding median rainfall – December 2011 to February 2012	3
Learn your plants: Bluebushes	4
Controlling coccidiosis	6
Determination of normal testicular development in tropically adapted beef bulls in northern Australia	8
Grazing Land Management package – Pilbara	9
NLIS help guide	11
DAFWA contacts following Range Condition Monitoring workshops in the Southern Rangelands	12
Rangeland plant species identification using survey reports as an aid	13
Range Condition Monitoring – site selection	16
Perennial, short lived and annual plants	17
Desirables and undesirables	18
‘A field guide to the Eremophilas of Western Australia’	19-20
Range Condition Monitoring – managing range condition trend	21
Gascoyne spurge	22
WoNS management in the Pilbara	23
Fitzroy River Catchment Erosion Control Workshops	24
Australian Rangeland Society Conference – Kununurra, 23–27 September 2012	25
Developing a standard operating procedure for the field immobilisation of large feral herbivores in Judas control programs	26
Plan, prepare and prosper with Farm Planning	27
Update: Wild dog DNA study	27
Risks of feeding mouldy hay to livestock	28
Larrawa station Producer Demonstration Site – update	29
Cattle Market Update – 2 December 2011	30

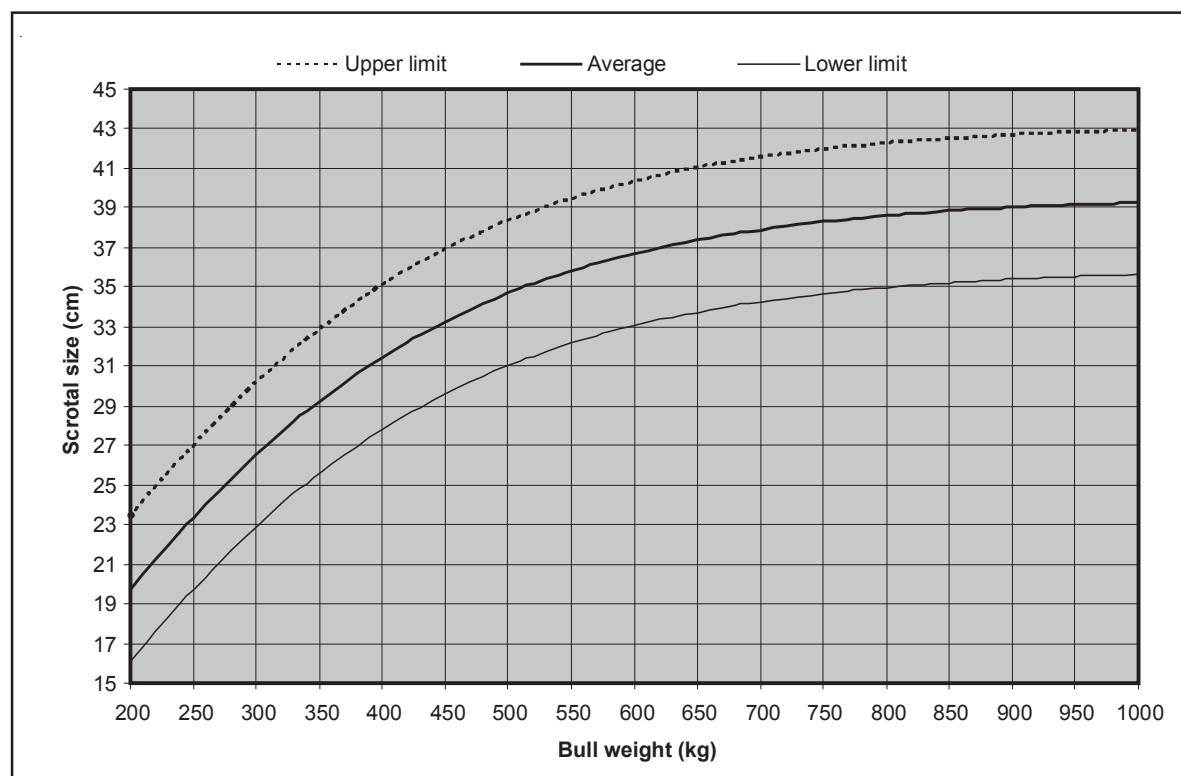


Figure 1 Predicted scrotal circumference measurement for tropically adapted bulls according to their body weight.

GRAZING LAND MANAGEMENT PACKAGE – PILBARA

Kath Ryan, Kununurra

There is a great opportunity for local input into the development of a Grazing Land Management (GLM) package that is relevant to Pilbara land managers. This package is part of MLA's EDGENetwork®. The development of the Pilbara GLM package provides an opportunity to get locally relevant and up-to-date pasture growth tables to calculate the long-term carrying capacity for a defined management area. The package will incorporate local knowledge on fire, weeds and grazing management in the Pilbara.

An opportunity like this doesn't come along every day of the week, so here's a brief overview of the course:

The GLM workshop

This three-day workshop for land managers will assist you to:

- assess the condition of your paddocks and improve their carrying capacity
- understand the relationships between pasture, water, soils, woodlands, biodiversity, fire and weeds, and
- determine the financial impact of a range of grazing management options.

The workshop consists of seven modules, which are: understanding the grazing ecosystem; managing grazing; managing with fire; managing the tree-grass balance; pasture improvement and restoration; managing weeds; and developing a grazing management plan.

A locally-relevant case study property is used to explore different management options. You will help the owners of the case study property solve their management issues and develop a GLM plan. At the end of each session you will work on your own issues and begin developing your own GLM plans.

Where we are at in December 2011

The recent pastoral industry survey of Kimberley and Pilbara businesses indicated that around 30% of those surveyed were interested in attending training in grazing land management. Partial financial support for DAFWA to develop the Pilbara GLM package has been approved by Meat and Livestock Australia.

Information was provided to the Pilbara District Consultative Committee meeting in early November, and DAFWA has since been contacting businesses and managers who may be interested in providing their input as part of the steering committee. The steering committee will ensure that the content of the course remains relevant to local issues and businesses.

A representative of the committee may be sponsored to attend a GLM workshop in another region during development of the Pilbara package and asked to provide feedback. The steering committee as a whole will be asked to appraise the Pilbara package at a trial run before it is finalised and signed off by MLA. Development officer Kath Ryan and the Northern Beef Development team will be putting it all together.

Comments from Kimberley GLM workshop attendees

Former Kimberley steering committee chair, Keith Anderson from Jubilee Downs, said that the time commitment required for the Kimberley GLM package was manageable along with all of his other commitments, and that having the opportunity to attend the Katherine GLM course during the development phase was very valuable as he tries to take every opportunity available to exchange ideas with other people in the cattle industry and technical experts from other areas.

Kevin Brockhurst of Larrawa station attended the Kimberley GLM course in 2009 and said that the most beneficial outcome for his business has been the ongoing consultation with deliverers, resulting in the implementation of ideas generated as part of the grazing management planning process demonstrated through the course.

If you are interested in more information about the Pilbara GLM package development, please contact:

Kath Ryan on 0467 738 906 or at the Kununurra office 9166 4015; or

Rebecca Dray at the DAFWA Karratha office 9143 7000.



Rangelands MEMO

Copyright © Western Australian Agriculture Authority, 2012



April 2012

ISSN 1033-5757

Vol. 2, No. 1

EDITOR: Matthew Fletcher
PO Box 19, Kununurra WA 6743

Phone: (08) 9166 4019
Email: matthew.fletcher@agric.wa.gov.au

CONTENTS

Welcome from the editor	2
Rainfall maps	3
Population genetics of wild dogs in Western Australia	4
Pain management in castrated beef cattle	6
Turning off 'fat' cattle	8
Use the right ear	10
Devolved grants available to Kimberley producers	10
Rangeland Condition Monitoring workshops	11
Range Condition Monitoring – plants of the southern shrublands	12
Examples of different rangeland condition states in an acacia sandplain pasture community	15
Fencing facts and figures	17
Jumping cholla cactus 'solarisation' as a control option	19
Rangeland pastures after bushfire	20
Kimberley early dry season aerial burning program	22
Larrawa station producer demonstration site – paddock walk	23
Kimberley and Nullarbor rangeland surveys launched	25
Update: Grazing Land Management package – Pilbara	26
1080 Impregnated Oats for wild dogs	27
Cattle Market Update – 30 March 2012	28

UPDATE: GRAZING LAND MANAGEMENT PACKAGE – PILBARA

Preparation for the extension of Grazing Land Management (GLM) training to the Pilbara region is underway in 2012. The steering committee has representation from five geographically and operationally diverse pastoral businesses spread across the Pilbara. The committee's task is to ensure that the content of the course remains relevant to local issues and businesses.

The draft training package will be appraised by the steering committee during a trial run, once the package has been developed by DAFWA's Northern Beef Development team. We plan to have the draft package completed well before the end of 2012. Delivery of the draft training package to the steering committee will occur as soon as is practical when the draft is ready.

A major challenge in delivering the draft training package is the lack of specific pasture growth measurements for the Pilbara. This challenge will be met using a process to match pasture production information collected from around northern Australia with pastures and land types of the Pilbara.

Pasture growth and quality varies considerably from one land type to another. On any one land type, pasture growth varies considerably between seasons and from one year to the next. In order to gain a better understanding of pasture growth and livestock carrying capacity in northern Australian rangelands, Queensland rangelands scientists commenced a program of data collection in the mid-1980s. The aim of the program was to collect the necessary pasture, soil and climate measurements to calibrate and validate a pasture growth model called GRASP (Henry et al. 2004). GRASP calculations, in turn, now underpin the carrying capacity planning tables incorporated in the GLM training packages (Quirk & McIvor 2006).

Rangeland scientists have collected pasture growth measurements across all major native pasture types in Queensland and the Northern Territory. Relevant growth measurements will be matched to Pilbara soils and pasture types described in rangelands surveys (Van Vreeswyk et al. 2004) and the *Pasture condition guides for the Pilbara* (Payne & Mitchell 2002).

The matching and modelling work is being undertaken by Mr Ken Day from the Queensland Department of Environment and Resource Management (DERM) under contract to DAFWA. Ken plans to develop pasture growth tables for the Pilbara by June this year. Having analysed most of the pasture growth data from around northern Australia, Ken is well placed to bring this information together to assist in the development of information for the GLM training workshop in the Pilbara.

If you are interested in more information about the Pilbara GLM package, please contact:

Kath Ryan on 0467 738 906 or at the Kununurra office 9166 4015; or
Rebecca Dray at the Karratha office 9143 7000.

References

Henry, B, Carter, J, Day, K, McKeon, G & Bruget, D 2004, *Management of climate variability in extensive grazing systems*, ABARE Outlook conference, Canberra 2004.

Quirk, M & McIvor, J 2006, *Grazing Land Management Technical Manual*, Meat & Livestock Australia Limited.

Van Vreeswyk, AME, Payne, AL, Leighton, KA & Hennig, P 2004, *An inventory and condition survey of the Pilbara region, Western Australia*, Technical Bulletin No. 92, Department of Agriculture, WA.

Payne, AL & Mitchell, AA 2002, *Pasture condition guides for the Pilbara*, Miscellaneous Publication 19/2002, Department of Agriculture, WA.

Rangelands MEMO

Copyright © Western Australian Agriculture Authority, 2012



August 2012

ISSN 1033-5757

Vol. 2, No. 2

EDITOR: Matthew Fletcher
PO Box 19, Kununurra WA 6743

Phone: (08) 9166 4019
Email: matthew.fletcher@agric.wa.gov.au

CONTENTS

Letter from the editor	2
Rainfall maps	3
The distribution of pure dingoes and dingo-dog hybrids in Australia	4
Best prac for dried meat baits – get the most out of your baiting program	6
Weebo goat/Maremma trial	8
Guard dog experiences of Queensland pastoralists Jim and Rod Allpass from Barcaldine.....	10
Roland Nicholls – 30 years of service	12
Producer tour – Katherine, NT	13
Breeding for fertility – EBVs	15
Who's ya Daddy?	16
Selecting more productive replacement females	17
Wet season phosphorus – start doing the numbers now	20
FutureBeef	22
Service fees & charges for livestock inspections 2012/13	23
Bovine Johne's disease (BJD) – why we need to keep looking	25
Lambo station, new yards – new era	26
Big in-roads for prickly acacia control – on track for eradication in Western Australia	27
Mesquite – Tackling a prickly problem in Carnarvon	29
Biosecurity Industry Funding Schemes for 2012–13.....	30
Nutritional energy production and landscape function in the Southern Rangelands.....	31
Common 'Indicator' shrubland species	33
Range Condition Monitoring (RCM) – a site peg alternative	34
DAFWA contacts following Range Condition Monitoring workshops in the Northern Rangelands.....	35
Update: Grazing Land Management package – Pilbara	36
Soil carbon modelling for the rangelands	36
Great opportunities for sustainable agriculture	38
A Norwegian aid to weather prediction	39
Notice to all cattle producers	39
Cattle Market Update – 3 August 2012	40

UPDATE: GRAZING LAND MANAGEMENT PACKAGE — PILBARA

The Grazing Land Management (GLM) training package development for the Pilbara region is now well underway, with preparation of the draft materials beginning last month.

The survey data collected by the Department of Agriculture and Food (DAFWA) staff across the Pilbara in 2010 will be used to develop the scenario for a 'typical' Pilbara pastoral business that is used as an example throughout the workshop. A range of regionally relevant issues and options will be included in the training package, thanks to the efforts of the steering committee.

Mr Ken Day has almost completed the process of matching pasture production information collected from around northern Australia with pastures and land types of the Pilbara. This will underpin the carrying capacity planning tables incorporated in the training package.

The presentation of the materials to the steering committee as a pilot workshop is likely to be sometime in late 2012.

For more information, please contact:

Kath Ryan on 0467 738 906 or at the Kununurra Office 9166 4015; or
Rebecca Dray at the Karratha Office 9143 7000.

SOIL CARBON MODELLING FOR THE RANGELANDS

Dr Peter Russell, Research Officer, Perth

The Department of Agriculture and Food WA (DAFWA) is turning to the latest advances in soil carbon modelling to improve our understanding of carbon storage potential across the rangelands of Western Australia.

Dr William Parton, Emeritus Professor and Senior Research Scientist at Colorado State University, was recently invited to DAFWA to train staff in the Century™ and DayCent™ ecosystem models, which are being used around the world to simulate the impact of climate change and management practices on ecosystem health, including carbon sequestration.

Rangeland Scientist Dr Peter Russell said modelling was an essential tool for predicting changes in sequestered carbon stocks.

“Modelling involves the input of various parameters, such as climate, different range management practices, animal stocking rates, grazing rotations, fire management, soil and vegetation types (e.g. savannah, shrublands) to create modelled outputs (impacts). Such impacts include effects on plant production, soil carbon, nutrient dynamics, and net greenhouse gas budgets.

“Dr Parton’s visit has improved the research skills of DAFWA staff involved in carbon modelling, which in the future will be an integral part of land management, allowing DAFWA to provide science-based advice to land managers

“The training has enhanced our ability to model organic carbon stocks through time, under different environmental and management scenarios, and will assist DAFWA meet the rapidly increasing demand for scientific advice from pastoralists and other land managers in the WA rangelands.”

Rangelands MEMO

Copyright © Western Australian Agriculture Authority, 2012



December 2012

ISSN 1033-5757

Vol. 2, No. 3

EDITOR: Matthew Fletcher
PO Box 19, Kununurra WA 6743

Phone: (08) 9166 4019
Email: matthew.fletcher@agric.wa.gov.au

CONTENTS

Letter from the editor	2
Rainfall maps	3
Poisonous plants in the Kimberley	4
Where do aerially-delivered dog baits end up?	6
Phosphorus management of beef cattle in northern Australia.....	8
Phosphorus supplementation demonstration in the Pilbara	10
Battling the thorny menaces.....	11
Range Condition Monitoring – site selection and installation	12
New partnership initiative to tackle a weedy problem	14
Assessing feed supply.....	15
Update: Grazing Land Management packages – Pilbara and Kimberley	16
Plan Prepare Prosper (PPP) – a business planning opportunity for pastoralists in the Southern Rangelands	17
BEHAVE concepts take a hold in the Southern Rangelands	18
Water ponding on Larrawa station, November 2011	20
Mining activity on pastoral leases in Western Australia.....	22
Keystart loans	23
The good oil – BEEF LINK.....	24
Cattle Market Update – 30 November 2012.....	25

UPDATE: GRAZING LAND MANAGEMENT PACKAGES — PILBARA AND KIMBERLEY

The pilot workshop for the Grazing Land Management (GLM) training package for the Pilbara region was held on 21 and 22 November at Karratha. Steering committee members knuckled down to an intensive day-and-a-half of presentation and review of a condensed version of the full workshop.



Col Paton and Anne Marie Huey presented the draft materials prepared by the team and the steering committee appraised the workshop presentation and content, discussing issues and providing comment which will be used to improve the final version.

Rebecca Dray has mapped 'Acacia Downs' – a hypothetical, 'typical' Pilbara pastoral business that is used as an example throughout the workshop. The Breedcow Dynama herd modelling software was used to test scenarios for the effects of management change options to the bottom line for the hypothetical owners. The parameters used for modelling were provided by information collected from real businesses, including those of the steering committee members.

Issues on Acacia Downs station and options for their management were tested by the steering committee during the pilot workshop. Participants worked through calculations for converting number of animals to cattle units, estimating pasture type carrying capacity, estimating paddock carrying capacity and forage budgeting examples.

The feedback from discussions and comments from pilot workshop participants will be incorporated into the final version over the next three months, and it is anticipated that the final version will be ready for delivery by the middle of 2013.

A quote from one steering committee member is included below.

“Great course... the time dedicated to individual property planning in the final module is a really good idea. I would attend the full workshop if I got the chance.”

The package has already been developed for the Kimberley, and workshops were last run in 2009. Feedback at the time was overwhelmingly positive so another workshop is being run in February 2013 at Liveringa station. Thanks to funding by Rangelands NRM the course is free for returning businesses and heavily discounted to \$200 for new businesses. The regular cost of this course is \$1650 per person.

The three-day workshop is a combination of classroom-based presentations, mixed in with practical, hands-on sessions that allow participants to put the information into practice.



L-R: Robyn Richardson (Mt Florance), Bill Cotching (Rangelands NRM), Annabelle Coppin (Yarrie), Geoff Mills (Warrawagine), Michael Clinch (Peedamulla/Nallan) calculating carrying capacity for one of the paddocks on Acacia Downs.

At the end of the three days, pastoralists will have an understanding of the key principles that underpin effective grazing management and how the different strategies can impact on their bottom line.

According to the 2010 Pastoral Industry survey, nine of the ten managers who attended the 2009 workshops made changes to their businesses as a direct result of attending the course.

Places are still available for the Liveringa workshops, so to reserve your place or for more information please contact:

Anne Marie Huey in Broome – 9194 1428 or 0417 993 142

Kath Ryan in Kununurra – 9166 4015 or 0467 738 906

Rebecca Dray in Karratha – 9143 7000

PLAN PREPARE PROSPER (PPP)

– a business planning opportunity for pastoralists in the Southern Rangelands

Pastoral businesses in the Southern Rangelands have an opportunity to participate in a free program to develop a strategic business plan for the future. Experienced professionals facilitate the five-day program so that participants walk away with a five-year strategic business plan and the associated budgets.

Bank personnel encourage pastoralists to participate in these PPP workshops. A five-year business plan with the associated budgets provides a bank manager with a clear picture of the business. It will improve a pastoralist's ability to negotiate a financial package that works for both parties and it will inspire confidence in the capacity of the business manager.

Reimbursements of 'out of pocket' expenses for attending the five-day program are available to a maximum of \$1000.

Pastoralists who have completed previous PPP programs are invited to attend a one-day Planning for Profit 'refresher' program.

Dates and venues for each program will be negotiated to best suit the applicants.

For further details and to complete an application form, please see the department's website at: <http://www.agric.wa.gov.au/> and click on Workshops.

For additional information, please call Greg Brennan on 9956 8554 or 0418 222 406.



*Salmon gum (Eucalyptus salmonophloia), Western Nullarbor.
Photo supplied by Wayne Fletcher.*

6.2 Appendix 2 – Pilot workshop agenda and summarised feedback ratings provided by workshop attendees on each module and overall pilot workshop

AGENDA Grazing Land Management EDGEnetwork® Pilbara pilot workshop

Wednesday <i>Start time 9am</i>	workshop section	duration (min)
Module 1 introduction	in full	45
<i>Smoko 9.45-10.15am</i>		
Module 2 understanding the grazing ecosystem	selected slides	50
Module 3 managing grazing part 1	majority	55
<i>Lunch midday-12.30pm</i>		
Module 3 managing grazing part 2	majority	75
Module 4 managing fire	selected slides	55
<i>Smoko 2.45-3.15pm</i>		
Module 5 managing the tree-grass balance	selected slides	40
Module 6 pasture development	selected slides	30
Feedback and wrap-up <i>Wednesday 4.25-4.45pm</i>		20

Thursday <i>Start time 8.30am</i>	workshop section	duration (min)
Module 7 managing weeds	selected slides	35
Module 8 planning for grazing management part 1	in full using Acacia Downs example issues	25
<i>Smoko 9.30-10am</i>		
Module 8 planning for grazing management part 2	in full using Acacia Downs example issues	90
<i>short break 11.30-11.35am</i>		
	topic	duration (min)
Feedback in conference room (<i>projector available</i>) 11.35am-12 midday	<i>Choose major issues for further discussion after lunch</i>	25
<i>Lunch midday-1pm with RBG folk</i>		
Discussion (no overheads) 1-2pm	<i>How to resolve issues if identified/use synergies if identified</i>	60
Task allocation 2-2.20pm	<i>for actions required</i>	20
Wrap-up and anything else 2.30-3pm	TBA	40
<i>Smoko and farewell 3pm</i>		

Comments

We received responses on comment forms from:

5 Producers, 2 Rangelands NRM facilitators, and 2 DAFWA officers who attended the workshop. **Two** respondents had attended a Grazing Land Management workshop before, the remainder had not.

All but one respondent had attended a workshop/field day with similar themes before:

- Grazing for Profit **3**
- Stocktake **1**
- Feed on offer **2**
- Rangeland condition monitoring **6**
- Other **3** *Benchmarking, Fred Provenza, ProGraze, KLR Marketing*

Three respondents had attended other EDGEnetwork™ workshops before, the remainder had not: *Nutrition EDGE 3, Breeding EDGE 1, others... can't remember their names 1.*

Please note: not all respondents commented on all questions in each section.

Overall final comments 4 respondents

Lasting impressions	Very good	Adequate	Not very good
Content	◆ ★ ★ ★ ◆		
Workbook	◆ ★ ★ ◆		
Presentation	◆ ★ ★ ★ ★ ◆		
Presenters	◆ ★ ★ ★ ★ ◆		
Local relevance	◆ ★ ★ ★ ◆		
Discussions initiated	◆ ★ ★ ★ ◆		

Two respondents thought that the information provided in the full version of the Grazing Land Management workshop would be useful to them, and **two** respondents thought that the information provided in the full version of the Grazing Land Management workshop would be useful to someone they knew. Their responses to the question: would **you / they** attend a workshop?, were *Yes* and *I hope so.*, respectively. Another respondent said they would attend a workshop and would recommend it to others.

The responses to the question about the most suitable time of year to have the full workshop were: *Nov/Dec* and *Sept/Oct/Nov or April/May.*

Other: I think the hardest part will be getting people to come even though it would benefit many. My/our thoughts are that if the tools are offered (ie workshops etc) then we can all learn something. If the discussions initiated in our small group were anything to go on, a bigger group should provide much food for thought.

Module 1 introduction 7 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆ ★ ★ ★ ★ ◆	◆ ★ ◆	◆
Workbook	◆ ★ ★ ★ ◆	◆ ★ ★ ◆	◆
Presentation	◆ ★ ★ ★ ◆	◆ ★ ★ ◆	◆
Local relevance	◆	◆ ★ ★ ★ ◆	◆
Discussions initiated	◆ ★ ◆	◆ ★ ★ ◆	◆ ★ ◆

Module 2 understanding the grazing ecosystem 9 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆ ★ ★ ★ ★ ◆	◆ ★ ★ ★ ◆	◆
Workbook	◆ ★ ★ ★ ◆	◆ ★ ★ ★ ◆	◆
Presentation	◆ ★ ★ ★ ◆	◆ ★ ★ ◆	◆
Local relevance	◆	◆ ★ ★ ★ ★ ◆	◆
Discussions initiated	◆ ★ ★ ★ ◆	◆ ★ ★ ◆	◆

Rate grazing ecosystem understanding	Know more than enough	Getting by	Need to know more
for yourself	◆	◆ ★ ★ ★ ◆	◆ ★ ★ ◆
for the region	◆	◆ ★ ★ ★ ★ ◆	◆ ★ ★ ★ ◆
Rate plant identification skills	Know more than enough	Getting by	Need to know more
for yourself	◆	◆ ★ ★ ★ ★ ◆	◆ ★ ★ ◆
for the region	◆	◆ ★ ★ ★ ★ ◆	◆ ★ ◆

Three respondents considered currently available Pilbara plant identification resources to be adequate, another two respondents considered these to be inadequate.

- Resources currently used by respondents for plant ID were:

plant books ★★★★★	plant factsheets ★★	web resources ★★★★	pasture guides ★★★★	other (please specify)
DAFWA staff ★★★★★	DEC staff ★★	friends ★★★	personal knowledge ★★★★★	all of the listed options ★★

- Resources/information considered to be required by respondents for plant ID were:

printed book ★★★★ <i>ute guide</i>	web resources (please specify) ★ <i>not specified</i>	on-station plant ID workshop/field days ★★★★	all of the listed options
smartphone app ★★	guide to how to find what's out there ★	other (please specify) ★ <i>wish more DAFWA staff were available</i>	

Module 3 managing grazing 9 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆ ★ ★ ★ ★ ★ ★ ★ ◆		
Workbook	◆ ★ ★ ★ ★ ★ ★ ◆		
Presentation	◆ ★ ★ ★ ★ ★ ★ ◆		
Local relevance	◆ ★ ★ ★ ★ ★ ★ ◆		
Discussions initiated	◆ ★ ★ ★ ★ ★ ★ ◆		
Rate grazing management knowledge	Know more than enough	Getting by	Need to know more
for yourself	◆ ★ ★ ★ ★ ★ ★ ◆		
for the region	◆ ★ ★ ★ ★ ★ ★ ◆		

Module 4 managing fire 9 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆ ★ ★ ★ ★ ★ ★ ★ ◆		
Workbook	◆ ★ ★ ★ ★ ★ ★ ◆		
Presentation	◆ ★ ★ ★ ★ ★ ★ ◆		
Local relevance	◆ ★ ★ ★ ★ ★ ★ ◆		
Discussions initiated	◆ ★ ★ ★ ★ ★ ★ ◆		
Rate fire management issues	Very important	Somewhat important	Not very important
for yourself	◆ ★ ★ ★ ★ ★ ★ ◆		
for the region	◆ ★ ★ ★ ★ ★ ★ ◆		

Module 5 managing the tree-grass balance 8 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆ ★★ ★ ★ ★ ★ ★ ★ ◆		
Workbook	◆ ★★ ★★ ★★ ★★ ★★ ★★ ◆		
Presentation	◆ ★★ ★★ ★★ ★ ★ ★ ★ ◆		
Local relevance	◆ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ◆		
Discussions initiated	◆ ★★ ★ ★★ ★★ ★ ◆		
Rate tree-grass management issues	Very important	Somewhat important	Not very important
for yourself	◆ ★ ★ ★ ★ ★ ★ ★ ◆		
for the region	◆ ★ ★ ★ ★ ★ ★ ★ ◆		

Module 6 pasture development 8 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆ ★ ★ ★★ ★★ ★ ★ ◆		
Workbook	◆ ★ ★ ★★ ★ ★★ ★★ ◆		
Presentation	◆ ★★ ★★ ★★ ★ ★ ★ ★ ◆		
Local relevance	◆ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ◆		
Discussions initiated	★★★★ ★★ ★ ◆		
Rate pasture development issues	Very important	Somewhat important	Not very important
for yourself	◆ ★ ★ ★ ★ ★ ★ ★ ◆		
for the region	◆ ★ ★ ★ ★ ★ ★ ★ ◆		

Module 7 managing weeds 8 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆.....★☆☆★☆☆☆☆.....★◆		
Workbook	◆.....☆☆★☆☆★☆☆☆☆.....◆		
Presentation	◆.....☆☆★☆☆★☆☆☆☆.....◆		
Local relevance	◆.....★☆☆★☆☆☆☆☆☆.....◆		
Discussions initiated	◆★☆☆☆☆☆☆☆☆.....★☆☆.....★◆		
Rate weed management issues	Very important	Somewhat important	Not very important
for yourself	☆☆★☆☆☆☆☆☆☆☆.....★☆☆.....◆		
for the region	◆☆☆☆☆☆☆☆☆☆☆.....☆☆.....◆		

Module 8 planning for grazing management 5 respondents			
First impressions	Very good	Adequate	Not very good
Content	◆.....★☆☆☆☆.....★.....◆		
Workbook	◆.....☆☆☆☆★☆☆.....★.....◆		
Presentation	◆.....☆☆★☆☆★☆☆☆☆.....★.....◆		
Local relevance	◆.....☆☆☆☆☆☆.....★.....◆		
Discussions initiated	◆.....☆☆☆☆.....★.....◆		
Rate planning management knowledge	Know more than enough	Getting by	Need to know more
for yourself	◆.....★☆☆.....★.....◆		
for the region	◆.....☆☆☆☆.....★.....◆		