Evaluation Plan for Lifetime Wool Project

1. Introduction

1.1 Project Objective

To develop, demonstrate and communicate practical grazing management guidelines that will enable woolgrowers throughout Australia to increase lifetime production of wool per hectare from ewes and their progeny by 20%, without compromising wool quality or the environment, by 30th June 2007. This will be achieved at a total cost not exceeding \$7.41 M¹.

1.2 Targeted next users

a) Peers and other researchers

b) Consultants & extensionists:

- Existing wool groups (Bestwool, Bestprac, Prograze, Grasslands, WA farming interest groups)
- Govt. Agency extension staff
- Service providers brokers, agents, fertilizer & merchandise suppliers
- Consultants working with producers
- Training organisations (TAFE, RIST, universities)

c) Wool producers:

i) Innovative wool producers:

- Intimately involved in LTW about 5% of total number of producers
- See themselves as ground-breakers/leaders
- Able to deal with complex systems

ii) Early Adopter wool producers:

- 20% of total number of producers
- Perceived to be good managers
- Some will come to field days and groups

iii) Early majority wool producers

• Those producers who have over 5,000 Merino sheep

1.3 Goals related to the targeted number of producers:

- There are roughly 35,000 producers in Australia
- 8,750 are the targeted audience of LTW (top 25% aspirant/ innovative/ large scale)
- Of these 8,750, we need evidence that supports that a 20% of this segment (1,750) are 'willing' to change practice by Sept. 2008.

If the Lifetime Wool Production is successful then 1,750 of the pool of targeted producers will be:

- Implementing a feed budget
- Strategically feeding ewes to reach targets
- Manipulating ewe nutrition for progeny production
- Practicing increased monitoring of their pastures
- Practicing increased monitoring of the condition of their ewes.

¹ This proposal builds on existing projects in Victoria and Western Australia. The total project cost of \$7.41 M includes \$1.08 M already invested by project partners in the period up until 1stJanuary 2002.

2. Program logic for Lifetime Wool Production

Appendix 1 illustrates the project logic for Lifetime Wool Production that outlines the theory of action for its work.

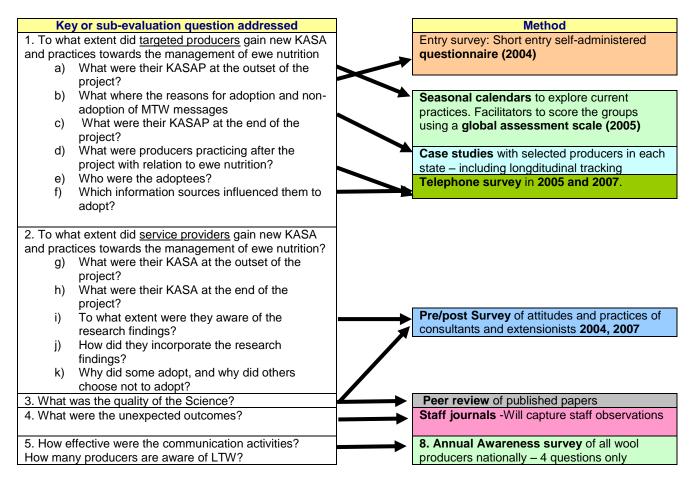
2.2 The assumptions in the logic:

- 1) That the innovators will participate at the field sites.
- 2) That the activities proposed are sufficient to achieve the adoption targets.
- That the three target producer groups (identified above) will be at different stages of the adoption process at the end of the project in 2007.

3. Key Evaluation Questions

- 1) To what extent did targeted producers gain new knowledge, attitudes, skills, aspirations (KASA) or practices towards the management of ewe nutrition?
 - What were their KASA at the outset of the project?
 - What were producers practicing before and after the project with relation to ewe nutrition?
 - What were their KASA at the end of the project?
 - Who were the adoptees?
 - Which information sources influenced them to adopt?
 - How did they use the research findings?
 - Why did some adopt, and why did others choose not to adopt?
- 2) To what extent did service providers gain new knowledge, attitudes skills, aspirations and practices towards the management of ewe nutrition?
 - What were their KASA at the outset of the project?
 - What were their KASA at the end of the project?
 - How did they incorporate the research findings into their practice?
 - · Why did some adopt, and why did others choose not to adopt?
- 3) What was the quality of the Science?
- 4) What were the unexpected outcomes?
- 5) What lessons were learned?
 - How effective were the partnerships?
 - How effective were the dissemination activities?
 - How effective were the communication activities?
 - Where milestones met in full and on time? if not why not?

4. Methods to address key evaluation questions



4.1. Entry survey 2004

A 3-page, self-administered questionnaire was completed by all those who participate significantly in the project activities in 2004. This questionnaire included:

- Appropriate attributes ie. farm size, time in industry etc.
- KASA with relation to ewe nutrition now.
- Current practice in relation to ewe nutrition.
- Identification of which segment they belong to.

4.1b Entry and exit surveys for demonstration phase (2005/2007)

For the demonstration phase a similar questionnaire will be used, with the addition of the global assessment scales (the steps are outlined below):

- I. All participating producers fill out the brief self-administered questionnaire.
- II. The score themselves on the global assessment scale according to:
 - Their management approach before LTW
 - Their management approach now
 - Their desired management approach into the future
- III. At the end of the demonstration phase the process will be repeated as part of exit interviews.

4.2 Seasonal calendars

In 2004, seasonal calendars were used to understand the different management approaches taken to managing ewe nutrition amongst participating producers. The underlying philosophy of the seasonal calendar activity was to let producers build a picture of their annual farming calendar in a visual and participatory manner, according to their own perspectives.

The seasonal calendar activity was piloted among producers who were invited from Bestwool / Grasslands and other groups, at the LTW on-farm site at Seymour. During the exercise, participants formed groups and then constructed seasonal calendars showing the main activities associated with management of ewes for each month from joining to joining.

In each case, facilitators participated in the seasonal calendar exercises by listening, taking and prompting producers to discuss and record activities of particular interest to LTW. Information from the calendars and from participants' conversations was recorded by facilitators on to summary sheets. At the end of the activity, calendars were presented to the audience, which sometimes generated some additional discussion. The purpose of the calendars was to:

- Increase LTW's knowledge about their producer audiences.
- Help LTW characterise wool enterprises in different regions.
- Help 'break the ice' and stimulate discussion among producers.
- Yield useful quantitative data.
- Assist LTW to adapt research presentations to the audience.
- Stimulate a holistic perspective of producers' ewe and pasture management systems.

This method will be superseded by the global assessment scales that were developed out of the knowledge gained from seasonal calendars.

4.2b Global assessment scales

Three global assessment scales will be developed to summarise the seasonal calendar information in terms of producers approach to i) monitoring ewes, ii) monitoring pastures iii) feeding to targets (LTW evaluation staff have named these scales 'Management Platforms'.)

The scales can be used to show changes in management, from one platform to another. It is envisaged that the platforms can also be used as a tool for fast and simple recording of farmers actual, past or anticipated practices.

4.3 Case studies with 16 key informants

These informants have paddock-scale or plot scale experimental sites on their properties. It was noted during recent contact (2004), that these producers had already been profoundly influenced by having the research sites on their farms – some said they have already begun to change their practice. Their responses are valuable as they provide an early indication of how other producers might respond to the messages of the Lifetime Wool project.

This method consists of a series of in-depth, face-to-face interviews to be held between September 2004 and March 2005. These will be followed-up with telephone calls every four months throughout the life of the project, through different seasonal conditions. This data will be written into 16 case-studies.

Steps of implementation

- 1. Collection and review of existing data about the farms it is expected that there is considerable data that already exists about research trial sites
- 2. Development of an interview guide and process
- 3. Pilot the interview guide and conduct 5 interviews in Victoria
- 4. Analyse the interviews using N-vivo, qualitative software

5. Interview the remaining producers who have paddock-scale sites (July to September) in Vic NSW. SA and WA

The idea is to capture data about what these producers have adopted on their properties and why. In order to answer the *why* component, sufficient contextual data will be needed (such as farm size, attitudes towards animal welfare, primary drivers) to understand the producers' behaviour in regards to adoption and non-adoption of the Lifetime Wool research findings.

4.4 Tailored producer survey in 2005 and 2007

In 2005 a telephone survey will be conducted with a broad, representative sample of wool producers nationally. This survey will be repeated again at the end of the project. The exact numbers need to be calculated, but an extra 20% should be interviewed in 2005 to allow for producers who have dropped out of farming, or who are not contactable in 2007

The first preference is a telephone survey, but if it is not possible to do a telephone survey with these types of questions, we would do a postal survey. It was agreed that telephone surveys are preferable as they are quicker and have a higher response rate.

In the case of this 'tailored' survey, we suggest that there is some screening of informants at the start. We only need to interview those classified as 'innovators or aspirants – or those who have over 5000 sheep. To gain the right segment to interview, we could firstly ask a series of filter questions.

Once the filter has been applied a number of questions will be asked to determine where they are on the global assessment scales with relation to:

- a) Pasture monitoring
- b) Monitoring ewe nutrition
- c) What producers consider when decide when and what to feed

Ideally they will also be asked where they want to be with regard to each statement in terms of:

- Where they are now with practices
- And which level they are working towards

50% of the sample be drawn from the Lifetime Wool data base, and another 50% be drawn randomly from the National Wool Desk data base. Some stratification may be needed to ensure that there is a representative sample from each State (perhaps representative against the \$ value of wool from each State?) and the 2 groups would need to be matched as much as possible.

4.5 Survey of attitudes and practices of consultants and extensionists 2004, 2007

Two key methods were used to survey the targeted informants:

- 1 26 Private consultants were interviewed using a semi-structured interview process that was conducted over the telephone (see Appendix I for guide questions).
- 2 25 Government extension staff completed a structured email survey, which they were asked to complete electronically.

In both cases the questionnaires were piloted with a small number of informants prior to being administered. The questionnaires consisted largely of open-ended questions. The responses were analysed using descriptive statistics and thematic coding.

4.6 Peer review of published papers

Evidence concerning the quality of science underpinning the LTW project will be assessed by way

of peer review. The perspectives of consultants and peers are captured via the survey of service providers. In addition to this, publications will be peered reviewed by discipline experts.

4.7. Staff journals to record routine data and observations

In 2005 a system of quarterly staff journals will be implemented. All staff involved in field work will fill out a standard format every 3 months. This journal would include reporting activities, observations, and staff would append any feedback sheets or questionnaires to it. The idea is that Gus Rose will collate these reports every quarter, to give a quarterly report for the whole project. These reports will be compiled into an annual summary report.

4.8. Annual awareness survey

The existing Wool Desk survey can be used to determine how many people are aware of LTW. Additional questions will be asked to determine what segment of producers are aware/not aware. These questions will be included in the Wool-Desk survey annually to track the progress in communications.

5. Management and Utilisation Strategy

5.1 Who will conduct the evaluation & how will credibility be ensured?

Routine data collection will be conducted by the monitoring and evaluation officer – Gus Rose. The overall evaluation plan will be overseen by Dr Andrew Thompson, the manager of Lifetime Wool. Some parts of the evaluation field work will be conducted by an external evaluator in order strengthen the credibility of the evaluation. An external consultant with expertise in evaluation will also act as 'coach' and mentor to Gus Rose. This will also contribute to the rigour of the monitoring and evaluation work.

5.2 What additional resources are needed? I.e. training, information system, external help

The monitoring and evaluation officer, Gus Rose, will need training in evaluation, and is currently enrolled to attend the DPI evaluation training. It is anticipated that Gus Rose may also need ongoing guidance in order to complete the evaluation task, and this will be provided by the external consultant.

5.3 What meta-evaluation will be conducted?

An evaluation working party will be established in 2005 to ensure that the evaluation plan remains relevant and is meeting information needs. This group will meet every 6 months, and will update the evaluation plan as needed.

5.4 Who needs to receive the findings of the evaluation?

The project team are a key audience of the evaluation. For this reason the plan includes a teamwide, annual reflection. This should ensure that any emerging lessons are incorporated into the project work. On a smaller scale, debriefing after any events, is designed to encourage staff to reflect on what could have been done differently, and what worked well, and to incorporate these lessons into subsequent events.

Other major audiences for Lifetime Wool are AWI and DPI. It is considered essential that the evaluation plan be signed off by these parties. LTW will also make a policy of keeping the funders up to date with regard to any emerging evaluation findings. Prior to the final report, the consultant, or a staff member will consult with the funders to check what type of report is required.

5.5 How will the results be presented/reported?

The format of the final report has yet to be determined, but will be developed in conjunction with the major funders.

5.7 How will the recommendations be developed?

A workshop to develop recommendations will be convened once the final report is in draft form. The idea of this workshop is to present the findings of the project evaluation final report, and to jointly develop recommendations for future projects with the funders and managers of LTW.

5.8 What processes are in place to ensure that the evaluation is timely and of manageable scope?

The field work for the final evaluation should be programmed to finish 6 months before the end of the project.

5.9 What processes are in place to ensure that the evaluation findings get used?

An annual reflection after compiling a results ladder, will ensure that the team incorporate findings into their work. They will also feed this information to the evaluation audience via milestone reports and on-going relationships.

Appendix 1: Program Logic

KASA= Knowledge, attitudes, skills and aspirations Consultants & **Innovative producers** Other **Peers Aspirant producers** extensionists **Producers** Social: Changes in: Improvement animal welfare and animal health Economic: Increased relative profitability, (both long &short Social. **Economic** term) of wool production through: & Environ- Improved utilisation of pasture 30%-45% mental Improved performance of progeny conditions **Environmental:** (SEEC) • Less environmentally vulnerable pastures & paddocks · Less bare ground to start and finish season -**Practice** Changes adopted by next users: Starting practice change: Contribute to practice change: change Disseminating to clients · Implementing a feed budget On-farm outcomes: • Assisting clients with their • Strategic feeding of ewes to reach targets Flexible systems understanding Manipulating ewe nutrition for progeny Optimisation production Resilient Increase monitoring of pastures and ewes KASA changes: KASA changes: KASA changes: KASA changes: **K** Understand Understanding of research **K** Estimate FOO Changes **K** Awareness of technical response curves outcomes and systems context • Optimum L/W & condition targets in: management practices relating ewe · Learn new skills as required • How to implement feed budgeting A Gives them greater control over nutrition to ewe & A Not too risky Knowledge progeny Potentially profitable Attitudes, performance • More accepting of research • Shift of focus from DSE to energy required Skills & A Recognition of outcomes Managing ewes is important **Aspirations** potential to change S Estimate FOO & condition score or access Proactive adoption (KASA) industry and their **S** implement of the new technology skills. own area of and management practices feed to maintaining C/S speciality **Asp** Improved profitability Feed budgeting **Asp** Future collaboration • To be seen as an innovators and **Asp** Lift profitability by any manager sustainable means Reactions Reactions: Reactions: Reactions: Reactions: Reactions: • Find research highly Ownership • It is a new idea! Positive, relevant By the year 2008 credible · See it as an opportunity for their Excitement Challenging but achievable users will be aware of Feel stimulated clients Has potential to increase profit Reduced fear of change project outcomes and · Give constructive Enthusiasm I want to know more Wanting more will have a positive criticism • There are things in it for me · Querying at tactical level reaction towards them. Peers and other Consultants & Extensionists: Innovative Producers: Final users: Next Aspirant producers: Users researchers • Existing wool groups (Bestwool, • 20% of total number of producers 40% of growers

Intimately involved

• about 5% of total number of producers

Able to deal with complex systems

• See themselves as ground-breakers/leaders

Bestprac, Prograze, grasslands, WA

Service providers - brokers, agents

farming interest groups)

· Govt. Agency extension staff

perceived to be good managers

Appendix 1: Program Logic

			KASA= Knowled	lge, attitudes, skills and aspirations
Dissemin-	Dissemination:	fertilizer & merchandise suppliers	Dissemination:	Dissemination: Dissemination
ation	International sheep conference	Direct contact during project Fark involvement/ support in	Cold calling known innovators	Field days, Farm walks "Beyond the bale" """ "Beyond the bale" "" "Beyond the bale" """ "Beyond the bale" "" "Beyond the bale"
	Proactive networking	 Early involvement/ ownership Involvement in local sites 	Clear messages Hands-on demonstration sites and field days	one pager – non technical Case study TV rural newspapers TV
	Papers AJAR etc	Field days	Access to researchers	Newsletter – media advertorial Through
		Package of information which can be		Electronic – web based secondary
		easily tailored for clients		Through secondary agricultural agricultural service providers service providers
		Direct training at final outcomes	<u> </u>	Service providers
New				
Knowledge	· · · · · · · · · · · · · · · · · · ·			
	 Ewe nutrition effects on ewe and progeny lifetime performance Quantifiable information on the benefits of different ewe management strategies (trade-offs) 			
	Quantiliable information on the benefits of different ewe management strategies (trade-ons) Localised pasture growth rates			
	 Unintended new knowledge such as: survival, fertility, worms, wool production, wool quality` 			
Research activities	Research Activities:			
activities	Plot scale sites (WA, VIC) Paddock scale sites (5 states)			
	Off-site activities (feed intake, grass feed, validation, modification, modelling) Student training			
Resources		0.1 0.10 40.11111	Resources:	John Marining
			• \$6 million	
			Partners (AWL, State Dept., CSIRO reducers pilot % reddesk apple callebarators % group	
		• P	roducers – pilot & paddock scale collaborators & groupSponsors(semen, fertiliser)	DS .
			Industry advisers	
			·	

Questionnaire for 2008 National Sheep Producer Survey

Final Version (April 2008)

PREAMBLE

Good [....] my name is [....] from Taverner Research in Sydney. I am calling on behalf of the Department of Primary Industries in your state. In 2005 you were surveyed to find out how you managed your ewes and you agreed to be interviewed again in 2008. Would you mind participating in another 10 minute survey on the same topic? All responses are confidential and will be stored as anonymous data.

***DART I: VOLIR WOOL ENTERPRISE	***

- 1 This part of the survey is about your wool enterprise. Do you currently have 500 or more sheep on your property?
 - 1 Yes CONTINUE
 - 2 No THANK AND TERMINATE:

 "Thanks for your time however for this survey we need to speak to producers with
 500 or more sheep on their property"
- 2 How many of each of the following classes of sheep do you currently have on your property? Please include weaners and hogget ewes, rams and wethers in the ewe, ram, and wether numbers.

Class	Number
a) Merino ewes	
b) Merino cross ewes	
c) Meat breed ewes [all other than Merinos]	
d) Rams [all breeds]	- <u>-</u>
e) Lambs [all breeds]	
f) Wethers [all breeds]	

DP INSTRUCTIONS: SUM OF Q2 MUST BE 500 OR MORE

3	How many of your merino ewes were mated to Merino rams in 2007? INTERVIEWER NOTE: DO NOT INCLUDE MERINO CROSS EWES NO ranges, whole numbers only
	Number:
4	What month do you join your Merino ewes to Merino rams? INTERVIEWER NOTE: DO NOT INCLUDE MERINO CROSS EWES
	Month:
5	What was your Merino lamb marking per cent in 2007? INTERVIEWER NOTE: LIMITS 25 TO 150% - NO ranges, whole numbers only
	1. Per cent:
	2. No Merino lambs in 2007

6

Hectares	OR
	S:
In which	n state or territory is your property located? SINGLE RESPONSE
1	NSW
2	Queensland
3	Victoria
4	South Australia
5	Western Australia
6	Tasmania
7	ACT
What is	the closest town to your property? [Locator file to be provided]
Which o	of the following sheep or wool research or producer groups do you belong to? OUT ACCEPT MULTIPLES
1	
	Local farmer group
2	Local farmer group Performance Breeders
2 3	
	Performance Breeders
3	Performance Breeders Bestwool
3 4	Performance Breeders Bestwool Stud Breeders Association
3 4 5	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management
3 4 5 6	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb
3 4 5 6 7	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb Grain and Graze
3 4 5 6 7 8	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb Grain and Graze None of the above
3 4 5 6 7 8	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb Grain and Graze None of the above
3 4 5 6 7 8	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb Grain and Graze None of the above
3 4 5 6 7 8 Please s	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb Grain and Graze None of the above State any other sheep or wool research or producer groups you belong to Groups belong to (specify) None pay for advice on managing your sheep (for example from private consultants)
3 4 5 6 7 8 Please s 1 2	Performance Breeders Bestwool Stud Breeders Association Lifetime Ewe Management Q Lamb Grain and Graze None of the above State any other sheep or wool research or producer groups you belong to Groups belong to (specify) None pay for advice on managing your sheep (for example from private consultants)

What area of pasture do you use for grazing sheep (excluding stubbles, salt land and fodder

10a Do you benchmark your sheep enterprise against other farmers'?

Yes CONTINUE
 No SKIP TO Q11

10b What program are you involved in that allows you to benchmark your enterprise against others? PROBE FULLY: What else?

PART II: PASTURE MANAGEMENT PRACTICES

ASK ALL

11a This part of the survey is related to pasture management practices. Do you assess the AMOUNT of green pasture in your paddocks?

Yes CONTINUE
 No SKIP TO Q12a

- 11b Which of the following best describes how you assess the AMOUNT of green pasture in your paddock? Do you READ OUT SINGLE RESPONSE
 - 1 make a visual assessment using broad terms such as 'not enough', 'good', 'plenty'?
 - 2 make visual assessments using photo references as a guide?
 - 3 use a pasture stick?
 - 4 use a pasture quadrat?
 - 5 cut and dry pasture samples?
 - 6 use another method (specify)

ASK ALL

12a Do you assess pasture GROWTH RATES?

Yes CONTINUE
 No SKIP TO Q13a

12b Which of the following best describes how you assess pasture *GROWTH RATES*? Do you:

READ OUT SINGLE RESPONSE

- 1. assess visually?
- 2. use a pasture cage?
- 3. use the Pastures from Space web site?
- 4. use another method (specify)?

ASK ALL

13a Do you assess pasture QUALITY?

1 Yes **CONTINUE**

2 No SKIP TO Q14a

13b Which of the following best describes how you assess pasture *QUALITY*? Do you:

READ OUT SINGLE RESPONSE

- 1. Use visual assessments?
- 2. Cut pasture samples and have them analysed?
- 3. Use another method? (specify)

ASK ALL

14a Do you feed budget the pasture?

INTERVIEWER NOTE: Many producers would do feed budgets for supplements (hay, grain etc for the dry season) but this is about managing the green pasture.

1 Yes **CONTINUE**

2 No **SKIP TO Q15**

14b Which of the following best describes how you feed budget? Do you: READ OUT

SINGLE RESPONSE

- 1. Do a quick simple 'back of the envelope' calculation to work out what your stock need?
- 2. Use feed budget tables to calculate feed requirements?
- 3. Use a computer program with pasture analysis information to do a formal feed budget?
- 4. Use another method? (specify)

ASK ALL

- 15 In a non-drought year, would you normally supplementary feed your ewes?
 - 1 Yes
 - 2 No

PART III: EWE FLOCK MANAGEMENT

IF PRODUCERS DO NOT HAVE EWES (Q2 Codes a + b + c = 0) SKIP TO Q20. ALL OTHERS ASK:

- 16 This part of the survey explores ewe flock management. Do you run ewes in groups of the same age or colour tag?
 - 1 Yes
 - 2 No

17a Do you usually weigh your ewes?

Yes CONTINUE
 No SKIP TO Q18

17b Do you use the information for: READ OUT ACCEPT MULTIPLES

- 1 Marketing purposes?
- 2 Drafting out lighter or heavier ewes so you can manage them separately?
- 3 Managing the ewe flock to predetermined targets for joining?
- 4 Managing the ewe flock to predetermined targets for lambing?
- 5 Other purposes? (specify)

17c When do you weigh your ewes? When the ewes are mustered READ OUT ACCEPT MULTIPLES

- 1 to remove rams at the end of mating?
- 2 in mid pregnancy to be scanned for the diagnosis of conception and/or litter size
- 3 to give them a pre-lambing worm drench and/or pre-lambing vaccination?
- 4 after the end of lambing to mark their lambs?
- 5 to draft off their lambs for weaning?
- 6 Other (specify)

18a Do you monitor the condition of your ewes throughout the year?

Yes CONTINUE
 No SKIP TO Q19

18b How do you monitor the condition of your ewes, do you: READ OUT

ACCEPT MULTIPLES

- 1 Use visual assessment in the paddock; e.g. eyeballing ewes?
- 2 Use your hands to assess condition score of a number of ewes within the mob?
- 3 Use your hands to assess fat score?

18c When you monitor ewe condition do you use the information for: READ OUT

ACCEPT MULTIPLES

- a) Marketing purposes?
- b) Drafting out lighter or heavier ewes so you can manage them separately?
- c) Managing the ewe flock to predetermined targets for joining?
- d) Managing the ewe flock to predetermined targets for lambing?
- e) Other purposes? (specify)

18d	When do you monitor the condition of your ewes? When the ewes are mustered READ OU ACCEPT MULTIPLES			
	1	to remove rams at the end of mating?		
	2	in mid pregnancy	to be scanned for the diagnosis of conception and/or litter size	
	3	to give them a pre	e-lambing worm drench and/or pre-lambing vaccination?	
	4	after the end of la	ambing to mark their lambs?	
	5	to draft off their la	ambs for weaning?	
	6	Other (specify)		
19a	Do you s	scan ewes for preg	gnancy?	
	1	Yes	CONTINUE	
	2	No	SKIP TO Q20	
19b	Do you i	dentify twin bearir	ng ewes?	
	1	Yes	ASK 19C1	
	2	No	ASK 19C2	
19c1	At scann	ing in 2007 what v	was the overall result in terms of READ OUT	
		aring ewes	% % %	
Twin bearing ewes% DP INSTRUCTIONS: MUST ADD UP TO 100%				
			NOW SKIP TO Q19D	
19c2	At scann	ing in 2007 what v	was the overall result in terms of READ OUT	
	Dry ewes Pregnant		% %	
DP INS	TRUCTIO	NS: MUST ADD	UP TO 100%	
			NOW SKIP TO Q20	
19d	Do you n	nanage single and	I twin bearing ewes separately?	
	1	Yes		
	2	No		

PART IV: WILLINGNESS TO TRY DIFFERENT APPROACHES TO EWE AND PASTURE MANAGEMENT PRACTICES.

The next part of the survey explores your willingness to try different approaches to ewe and pasture management practices.

Using a scale of 1 to 5, where 5 means you are VERY WILLING and 1 means you are NOT AT ALL WILLING, please rate your willingness to try the following approaches to ewe or pasture management. Alternatively, please state if you are already doing it.

READ OUT EACH STATEMENT ROTATE STATEMENTS

- a. How willing are you to try formal pasture assessment methods to determine feed on offer, pasture growth rate and pasture quality?
- b. How willing are you to try formal systems of condition scoring, fat scoring or weighing of ewes to monitor their condition?
- c. How willing are you to separate ewes into lighter and heavier mobs and manage the mobs according to their different nutritional needs?
- d. How willing are you to try formal feed budgeting to assist with getting ewes to a target body weight or condition score?
- e. How willing are you to try pregnancy scanning to separate twin bearing ewes to manage them as a separate mob?

1	Not at all willing	6	(Already doing it)
2			
3			
4			
5	Very willing		

PART V: PRACTICE CHANGES OVER THE LAST 5 YEARS.

21 The next couple of questions relate to any practice changes over the last 5 years

Have you made any changes to the way you manage your pastures or ewes over the last five

1	Yes	CONTINUE
2	No	SKIP TO Q23

- 22 Did you make any changes to how you manage your pastures or ewes because of information you have received from the Lifetime Wool Project?
 - 1 Yes
 - 2 No

vears?

PART V: MANAGING EWE CONDITION

23 This part of the survey relates to managing ewe condition.

I am going to read out a set of statements related to effects of managing ewe condition. Using a scale of 1 to 5 where 5 means you STRONGLY AGREE and 1 means you STRONGLY DISAGREE please tell me how much you agree or disagree with each statement. If you don't have an opinion one way or the other please rate as a '3'.

READ OUT EACH STATEMENT ROTATE STATEMENTS

- Lamb birth weights will increase if the body condition of a ewe increases during late pregnancy.
- b. Improving the body condition of a ewe during pregnancy and early lactation can decrease the wool fibre diameter of her offspring.
- c. Farm profit is responsive to the condition of the ewe throughout the year.
- d. Lamb birth weight is a key factor affecting lamb survival.
- e. You need to condition score ewes or weigh them to accurately assess their body condition.
- f. Lamb survival is strongly influenced by how much you feed your ewes through pregnancy.
- g. Ewes that are fed more will have an increase in ewe clean fleece weight and ewe fibre diameter compared to ewes that are fed less.
- h. Improving the condition of a ewe during pregnancy and early lactation can increase fleece weights in progeny.
- i. The effect that the condition of a ewe during pregnancy and lactation has on the clean fleece weight and fibre diameter of their progeny can increase affect farm profits.
- Poor ewe condition at lambing has more affect on twin lamb survival than single lamb survival
- k. The effects that the body condition of a ewe has on the fleece weight and fibre diameter of her progeny are permanent over the progeny's lifetime.
- I. Ewes with higher condition score at lambing will have less mortality than ewes with lower condition score
- m. Ewes higher in condition score at joining conceive more lambs

1	Strongly disagree	4	
2		5	Strongly Agree
3	No opinion		

24a That finishes the interview. Many thanks for participating. Would you like to receive a copy of the results?

1	Yes	CONTINUE
2	No	GO TO END

24b	Can I please collect some details so that the results can be posted or emailed to you?
	INTERVIEWER NOTE: ASK IF POST OR EMAIL PREFERRED AND COLLECT APPROPRIATE
	INFORMATION – PLEASE SPELL BACK ALL ADDRESSES / EMAIL ADDRESSES

1	Name:
2	Phone number:
3	Postal address:
	Or

Email address

END

Thank you for your time.

Questionnaire for National Sheep Producer Survey

PREAMBLE

Hello. I am calling for the department of Agriculture in you state who is collecting information about ewe management in wool producing enterprises. Would you please assist us by participating in a ten minute survey? Just so you know, all responses are confidential and will be stored as anonymous data.

PART I: THIS PART OF THE SURVEY IS ABOUT YOUR WOOL ENTERPRISE

- 1. How many sheep did you shear in 2004? (If less than 500 exit interview)
- 2. How many of those sheep were adult Merino ewes?
- 3. What number of lambs would you expect to wean / 100 Merino ewes joined in an average year?
- 3A. What number of lambs did you wean / 100 Merino ewes joined this year?
- 4. What area of pasture do you use for grazing sheep in winter? (specify hectares or acres)number of lambs did you wean / 100 Merino ewes joined this year?

For question 3 and 4 can we put a lower limit of 25% and an upper limit of 125%

What area of pasture do you use for grazing sheep in winter? (specify hectares or acres)

- 5. What region is your property located? (select from locality list supplied by DAWA)
- 6. Do you belong to any sheep or wool producer groups? Yes/No (tick boxes, add names of other groups mentioned)

Bestwool	Woolpro	Performance Breeders
Prograze	Pastures from Space	Q lamb
Sheep's Back	Stud Breeders association	Other (please state)

- 7. Do you get farming information and advice from private consultants? Yes/No
- 8. Which of the following three statements best describes your approach to trying out new ideas on your farm?
 - a. I'm usually one of the first farmers in my district to try new ideas.
 - b. I tend to wait and see new ideas proven by other producers before I try them.
 - c. I tend not to try new ideas.
- 9. Would you say that you are viewed as a leading producer in your district? Yes/No/Unsure
- 10. Do you act as a consultant or adviser for other wool producers? Yes/No

PART II: THIS PART OF THE SURVEY IS RELATED TO PASTURE MANAGEMENT PRACTICES.

Please answer Yes or No to the following questions

11. Do you assess the amount of green pasture in your paddocks? Yes/No

If you do assess the amount of green pasture in your paddock, do you:

- a) rely mainly on visual assessments (e.g. eyeballing paddocks)?
- b) use a pasture stick?

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- c) use a pasture quadrant?
- d) cut and dry pasture samples?
- e) use another method?

12. Do you assess pasture growth rates? Yes/No

If you do assess pasture growth rates, do you:

- a) rely on visual assessments?
- b) measure pasture growth rates using a pasture cage?
- c) estimate pasture growth rates using pastures from space?
- d) use another method?

13. Do you assess pasture quality to help feed budgeting? Yes/No

If you do assess pasture quality for feed budgeting, do you:

- a. Use visual assessments?
- b. Cut pasture samples and have them analysed?
- c. Use a computer program with pasture analysis information for formal feed budgeting?

PART III: THIS PART OF THE SURVEY OF EXPLORES EWE FLOCK MANAGEMENT

Please answer Yes or No to the following questions

14. Do you run ewes in mobs according to age status? Yes/No

15. Do you usually weigh your ewes? Yes/No

If you do weigh your ewes, do you use the information for:

- a. Marketing purposes?
- b. Drafting out lighter or heavier ewes so you can manage them separately?
- c. Managing the ewe flock to predetermined targets for joining?
- d. Managing the ewe flock to predetermined targets for lambing?
- e. Other purposes?

16. Do you monitor the condition of your ewes throughout the year? Yes/No

If you do monitor the condition of your ewes, do you:

- a. Use visual assessment (e.g. eyeballing ewes?)
- b. Use your hands to assess condition score?
- c. Use your hands to assess fat score?

When you monitor ewe condition do you use the information for:

- d. Marketing purposes?
- e. Drafting out lighter or heavier ewes so you can manage them separately?
- f. Managing the ewe flock to predetermined targets for joining?
- g. Managing the ewe flock to predetermined targets for lambing?

h. Other purposes?

17. Do you scan ewes for pregnancy?

If you do use scanning, do you:

- a. Do you identify twin bearing ewes?
- b. Do you manage single and twin bearing ewes seperately?

18. Do you supplementary feed your ewes?

If you do supplementary feed your ewes, do you:

- a. Feed ewes in order to get them up to a set condition score or weight target?
- b. Calculate feed requirements using a formal (e.g. computer) feed budget

PART IV: THE NEXT PART OF THE SURVEY EXPLORES YOUR WILLINGNESS TO TRY DIFFERENT APPROACHES TO EWE AND PASTURE MANAGEMENT PRACTICES.

19. Please rate your willingness to try the following approaches to ewe or pasture management on a scale of 1 to 5, with 1 indicating you are not at all willing and 5 indicating you are very willing.

Please indicate that the statement is not relevant if you are already using the approach.

- a. How willing are you to try formal pasture assessment systems to calculate feed on offer, pasture growth rate and pasture quality.
- b. How willing are you to try formal systems of condition scoring, fat scoring or weighing of ewes to monitor their condition.
- c. How willing are you to separate ewes into lighter and heavier mobs and manage the mobs according to their different nutritional needs?
- d. How willing are you to try a formal pasture budgeting program to assist with getting ewes to a target body weight or condition score.
- e. How willing are you try pregnancy scanning to separate twin bearing ewes to manage them as a separate mob.

PART V: THIS PART OF THE SURVEY RELATES TO MANAGING EWE CONDITION

- 20. I am going to read out a set of statements related to effects of managing ewe condition. Please rate your agreement with each of the statements from 1 to 5, with 1 indicating you strongly disagree and 5 meaning you strongly agree.
 - a. Lamb birth weights will increase if the body condition of a ewe increases during late pregnancy.
 - b. Improving the body condition of a ewe during pregnancy and early lactation can decrease progeny fibre diameter.
 - c. Farm profit is responsive to how much you allow a ewe to eat during pregnancy and lactation.
 - d. Lamb birth weight is the key to lamb survival.
 - e. You need to put your hands on ewes or weigh them to accurately assess their body condition.

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- f. Farm profit is responsive to how many lambs survive to hogget shearing.
- g. Lamb survival is strongly influenced by how much you feed your ewes through pregnancy.
- h. Ewes that are fed more will have an increase in ewe clean fleece weight and ewe fibre diameter compared to ewes that are fed less.
- i. Improving the condition of a ewe during pregnancy and early lactation can increase fleece weights in progeny.
- j. The effect that the condition of a ewe during pregnancy and lactation has on the clean fleece weight and fibre diameter of their progeny can increase farm profits.
- k. It is profitable to scan for twin bearing ewes and run them as a separate mob.
- I. Getting twin lambs to survive is best way to increase your weaning percentage.
- m. The effects that the body condition of a ewe has on the fleece weight and fibre diameter of her progeny are permanent over the progeny's lifetime.

PART VI: THE FINAL PART OF THE SURVEY IS ABOUT YOUR AWARENESS OF THE LIFETIME WOOL PROJECT

21. Have you heard of the lifetime wool project funded by Australian Wool Innovation? Yes/No (if No close out of the interview)

If you have heard of the Lifetime Wool project where did you first hear about it?

Neighbours	Workshop or seminar	Contacted by Lifetime Wool project staff	
Consultant	Rural Press	Beyond the Bale	
Other (please state)			

That finishes the interview, many thanks for participating and if you are interested in the results they will be posted on the AWI website

Would the project be ab	le to call you for a si	milar survey in 200	8 so we can track	changes you make
between now and then.	If ves:			

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Phone number:

Thank you for your time.