

## APPENDIX A3



## A3 SURVEY FORMS

### A3.1 Full Survey Form



another australian wool innovation institute

## Integrated Parasite Management in the Sheep Industry A National Survey

Dear Sheep Producer,

We are seeking your help with a national survey forming a key part of a large project on integrated parasite management in sheep (IPM-s). Many parasites have developed resistance to chemical controls and it is vital for a profitable sheep industry that we have other methods to work alongside chemicals. There is also a need to ensure low chemical residues in wool and meat in order to maintain our access to overseas markets as well as to reduce personal exposure to chemicals in our industry.

This research is supported by Australian Wool Innovation (AWI) and the research partners listed below. The Institute for Rural Futures has been contracted to carry out this survey on behalf of these organisations. The project is investigating new parasite control methods to reduce reliance on chemicals, and parasite resistance to chemicals, while maintaining or improving production. The aim of this survey is to find out what parasite control methods are currently being used for the control of internal and external parasites in sheep to make sure the research meets the needs of sheep producers such as you.

Your address is one of a small sample of AWI levy-paying wool producers selected. The number appearing at the top right-hand corner of this page is for mailing purposes only – this will ensure that you will not be sent any unnecessary reminders. Your name is not required on the survey, so your responses will be strictly confidential.

You do not have to fill out this survey; however your assistance in this important research will be very much appreciated. I know it is hard for producers to find time to fill in surveys and I have made every effort to make the questions as short and easy to answer as possible. I would be grateful if you could take the thirty minutes needed to fill in the form. A reply-paid envelope is provided for the return of your questionnaire. If you would like to know more about the project, please call me on (02) 6773 5144.

Many Thanks,

Lyndal Redman-Thompson, Institute for Rural Futures, UNE.



## PARASITE MANAGEMENT IN THE SHEEP INDUSTRY

### Survey Guidelines:

1. Do you own or manage 500 or more sheep?       YES       NO  
 If NO, please send this blank survey back in the envelope provided. If YES, please continue to fill in the survey. Thankyou for your help.
  
2. The best person to complete this survey is the person who makes the major decisions about the management of livestock on the property.
  
3. Please complete the questions for the property on which you reside or spend the most time. Please use shaded and unshaded spaces for your answers.
  
4. Most of the information requested for this survey is for 2003. However, for some districts this was a time of drought and you may have adopted practices different to your usual program. If this is the case for you, please provide information about the usual management practices on your property where asked.

### Section A: Property and Operation Details

*Please provide information from 2003, unless otherwise specified.*

**Q1. What rainfall did you receive in 2003?**

..... mm      OR      ..... inches (1 inch = 25.4 mm)

**Q2. What is the average annual rainfall for your area?**

..... mm      OR      ..... inches (1 inch = 25.4 mm)

**Q3. What was the estimated percentage of income from each enterprise?**

Income (%)

Wool sales	
Wool sales (stores, culls & cast for age, boat wethers)	
First cross ewe sales for breeding	
Meat sheep (1st or 2nd cross prime or store lambs)	
Beef cattle	
Cropping	
Other ( <i>please specify</i> )	
..... TOTAL	100%

-1-

**Q4. What areas of your property are used for the following?**

	Hectare	Area or	Acres
Area grazed			
Area cropped			
Cropping area grazed as stubble			
Cropping area grazed as green			
Other ( <i>Please specify</i> ) .....			
Total property area			
Number of paddocks			
Percentage pasture grazed improved		%	
Percentage pasture grazed unimproved		%	

**Q5. How many cattle did you have in 2003? Please indicate the number you typically run if this is different than the number for 2003, as well as the usual month of calving.**

	Number 2003	Number typically run	Month(s) of calving
Cows			
Heifers (weaning – 2 years)			
Steers (weaning – sale)			
Bulls			
Other ( <i>Please specify</i> ) .....			

**Q6. How many sheep did you have at the main weaning time in 2003, or November 2003 if you have an all wether flock? Indicate the number you typically run if different than the number you had in 2003.**

<i>Please specify breed where not already indicated</i>	Breed	Number 2003	Number typically run
Merino ewes	Merino		
Other ewes			
Wethers			
Merino weaners	Merino		
Other weaners			
Rams			

**Q7. In which month(s) do you shear and crutch?**

	Month(s) shorn	Month(s) crutched
Ewes (older than 12 months)		
Wethers (older than 12 months)		
Weaners (less than 12 months)		

**Q8. Please give details of the 2003 wool clip for your main breed of sheep:**

Breed?.....	Wool shorn from:		
	Adult breeding ewes	Adults - dry ewes & wethers	Weaners (Less than 12 months)
Number of sheep shorn			
Total quantity of wool shorn (kg) OR wool cut per head (kg)	..... (kg)	..... (kg)	..... (kg)
Fibre diameter of main line (microns)			

**Q9. If you have ewes, please provide details about their breeding program:**

	Type of ewe			
	Merino mated to Merino rams	Merino mated to Meat-breed rams	Cross-bred ewes	Other .....
Month rams put in with ewes in 2003				
Time rams left with ewes in 2003				
Marking % in 2003 (adults only)	.....(%)	.....(%)	.....(%)	.....(%)
Typical marking % (adults only)	.....(%)	.....(%)	.....(%)	.....(%)
Month lambs weaned in 2003				

**Q10. What type of grazing strategies did you use in 2003?**

*Please tick any that apply*

Set stocked	<input type="checkbox"/>
Set stocked at lambing only	<input type="checkbox"/>
Alternating between sheep & cattle	<input type="checkbox"/>
Alternating between sheep & crop stubble	<input type="checkbox"/>
Alternating between sheep & forage crop	<input type="checkbox"/>
Cell grazing (large mobs, small paddocks for periods of 1-4 days)	<input type="checkbox"/>
Rotational grazing (smaller mobs, large paddocks for 2-6 weeks)	<input type="checkbox"/>
Other ( <i>Please specify</i> ) .....	<input type="checkbox"/>

**Q11. What are your key objectives for using the type(s) of grazing strategies indicated above?**

.....  
 .....  
 .....

**Q12. Describe the supplementary feeding program for your property in a typical year:**

	Type of feed (Oats, wheat, lupins, meal, blocks or licks etc)	Amount fed Per head (kg) OR total (tonnes)	Months fed (e.g. Jan-April)
Ewes (older than 12 months)			
Weaners (less than 12 months)			

**SECTION B: WORM CONTROL**

**Q13. Show the number and type of drenches and controlled-release capsules given to each class of sheep from September 2002 to December 2003. Please tick appropriate treatment.**

	Month/s of Treatment	Treatment Method		Product used
		Drench	Capsule	
Unweaned lambs	1.	<input type="checkbox"/>	<input type="checkbox"/>	
	2.	<input type="checkbox"/>	<input type="checkbox"/>	
Weaners (less than 12 months)	1.	<input type="checkbox"/>	<input type="checkbox"/>	
	2.	<input type="checkbox"/>	<input type="checkbox"/>	
	3.	<input type="checkbox"/>	<input type="checkbox"/>	
	4.	<input type="checkbox"/>	<input type="checkbox"/>	
Maiden ewes (12 – 24 months)	1.	<input type="checkbox"/>	<input type="checkbox"/>	
	2.	<input type="checkbox"/>	<input type="checkbox"/>	
	3.	<input type="checkbox"/>	<input type="checkbox"/>	
Adult ewes (older than 24 months)	1.	<input type="checkbox"/>	<input type="checkbox"/>	
	2.	<input type="checkbox"/>	<input type="checkbox"/>	
	3.	<input type="checkbox"/>	<input type="checkbox"/>	
	4.	<input type="checkbox"/>	<input type="checkbox"/>	
Wethers (over 12 months)	1.	<input type="checkbox"/>	<input type="checkbox"/>	
	2.	<input type="checkbox"/>	<input type="checkbox"/>	
	3.	<input type="checkbox"/>	<input type="checkbox"/>	

**Q14. Do you drench newly introduced sheep on their arrival to the property?**

*Please tick one only*

YES	<input type="checkbox"/>	<i>Go to Q14A. below</i>
NO	<input type="checkbox"/>	<i>Skip to Q15.</i>
Don't buy sheep	<input type="checkbox"/>	<i>Skip to Q15.</i>

**Q14A. Please indicate what drench you typically use for newly introduced sheep.**

.....



**Q15. How many times did you monitor worm egg counts in each class of sheep?**

	Number of times monitored 2003	Number times monitored typically if different
Weaners (Less than 12 months)		
Wethers (Older than 12 months)		
Adult ewes (Older than 24 months)		

**Q16. Have you ever tested for drench resistance in your flock?**

YES	<input type="checkbox"/>	<i>Go to Q16A. below</i>
NO	<input type="checkbox"/>	<i>SKIP to Q17.</i>

**Q16A. Please indicate the year of your most recent drench resistance test and the test you used:**

Year? ..... Test? .....

**Q17. Please rank how important the following factors are when deciding whether to drench ewes. Please tick one per line.**

	Very Important	Important	Somewhat Important	Not Important
Results from faecal worm egg count	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition score of sheep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time of year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seasonal weather conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of pasture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of pasture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of daggy sheep in mob	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other ( <i>Please specify</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....				

**Q18. Please rank how important the following factors are when deciding whether to drench weaner sheep. Tick one per line.**

	Very Important	Important	Somewhat Important	Not Important
Results from faecal worm egg count	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condition score of sheep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time of year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seasonal weather conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of pasture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of pasture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presence of daggy sheep in mob	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
.....				

**Q19. Which of the following treatments or techniques do you use for sheep worm control? Please tick strategies used.**

		Description
Prepare pastures by 'Smart grazing'	<input type="checkbox"/>	
Prepare pastures by other grazing techniques	<input type="checkbox"/>	
Leave some sheep un-drenched at summer treatments	<input type="checkbox"/>	Show % left un-drenched: .....
Feeding strategy	<input type="checkbox"/>	
Use rams selected for resistance to worms	<input type="checkbox"/>	Are these EBV tested? .....
Organic methods	<input type="checkbox"/>	
Drenching	<input type="checkbox"/>	
Other (Please specify)	<input type="checkbox"/>	.....

**Q20. Who is the main advisor for worm control on your property?**

*Please tick one only*

Me or member of my staff	<input type="checkbox"/>
Local vet	<input type="checkbox"/>
Private veterinary consultant	<input type="checkbox"/>
Ag consultant	<input type="checkbox"/>
Ag Department officer	<input type="checkbox"/>
Rural Merchandise representative	<input type="checkbox"/>
Drug company representative	<input type="checkbox"/>
Other ( <i>Please specify</i> ) .....	<input type="checkbox"/>

**SECTION C: BLOWFLY CONTROL**

**Q21. If you had blowfly strike on your property during 2003, please provide details below.**

Type of Strike	Percentage Ewes affected	Percentage Wethers affected	Percentage Weaners affected
Breech Strike	%	%	%
Body Strike	%	%	%
Other ( <i>specify</i> ).....	%	%	%

**Q22. How do you typically treat for blowfly strike?**

*Please tick any that apply*

Treat routinely for prevention at about the same time each year	<input type="checkbox"/>
Treat when the weather suggests a flywave might occur	<input type="checkbox"/>
Treat the whole mob once strike starts	<input type="checkbox"/>
Treat individual sheep which become struck	<input type="checkbox"/>
Other ( <i>Please specify</i> ) .....	<input type="checkbox"/>

**Q23. What other methods do you use for fly control?**

.....

**Q24. Who performs the mules operation on your sheep?**

.....

**Q25. At what length do you dock lambs' tails?**

*Please tick one only*

Much shorter than tip of vulva in ewes ('butted tail')	<input type="checkbox"/>
Just shorter than tip of vulva ('short tail')	<input type="checkbox"/>
Equal to the tip of the vulva	<input type="checkbox"/>
Longer than the tip of the vulva	<input type="checkbox"/>
Other ( <i>Please specify</i> )	<input type="checkbox"/>
.....	

**SECTION D: LICE CONTROL**

**Q26. How often do you typically treat sheep for lice?**

.....

**Q27. Were any of your sheep lousy when they were last shorn?**

Yes       No       Not Sure

**Q28. How many years in the last five years have your sheep been infested with lice?**

..... years

**Q29. Please indicate below which of the following lice control techniques you have used in the past three (3) years (2001-2003) and show also what product(s) you used.**

	Year/s Used	Product/s Used
<b>Off</b> Mobile dipping		
<b>-shears</b> contractor		
Plunge dip		
Shower dip		
Pour-on 'backliner'		
Other ( <i>Please specify</i> ) .....		
<b>Long</b> Hand jetting		
<b>wool</b> Pour-on 'backliner'		
Other ( <i>Please specify</i> ) .....		
<i>No lice treatments used</i> <input type="checkbox"/>		

**Q30. Have you ever suspected resistance to a lice product on your property?**

*Please tick one only*

YES	<input type="checkbox"/>	<i>Go to 30A. below.</i>
NO	<input type="checkbox"/>	SKIP to last section about you.

**Q30A. Please indicate to which product you think the resistance might have occurred.**

.....

*Finally, we just need a little information about yourself*

**Q31. What is the postcode for the area in which your property is located?**

.....

**Q32. Are you** Male?  Female?

**Q33. In what year were you born?** 19.....

*Please feel free to add comments in the space below or on a separate piece of paper if you require more room.*

### **THANKYOU FOR YOUR PARTICIPATION**

*If you would like to be contacted about further developments in IPM-s, including workshops or field days, please indicate your preferences above and send this survey form back or e-mail [iredman@pobox.une.edu.au](mailto:iredman@pobox.une.edu.au). If you lose the return envelope, please send the survey to U.N.E., Institute for Rural Futures, Reply Paid 61883, NSW, 2351.*

This project has been approved by the Human Research Ethics Committee of the University of New England (App. No. HE04/015, valid to 31/12/06). Should you have any complaints concerning the manner in which this research is conducted, please contact the research Ethics Officer at the following address: Research Services, University of New England, Armidale, NSW, 2351. Phone: (02) 6773 5144; Fax (02) 6773 3543; Email: [Ethics@metz.une.edu.au](mailto:Ethics@metz.une.edu.au).





## Integrated Parasite Management in the Sheep Industry

Dear Sheep Producer,

A few weeks ago we sent you a survey about what parasite control methods you are using. If you have already returned this survey, please ignore this letter and take this as our sincere thanks for your help.

The survey is part of a project investigating new parasite control methods to reduce parasite resistance problems and reliance on chemicals, while maintaining or improving production.

We have had a good response which has been invaluable in providing information about how some sheep producers are controlling parasites in their flocks.

So that we can make sure that this project is of maximum benefit to sheep producers, we need at least a small amount of information from producers such as yourself.

We appreciate that it can be hard to find the time to respond to the many surveys that primary producers receive. The few questions below will take only two minutes of your time to answer.

Your cooperation in this important project for the sheep industry is greatly appreciated.

Yours sincerely,

Lyndal Redman-Thompson  
Institute for Rural Futures,  
University of New England

Two minutes of your time ....		Helps us develop new and better ways to control parasites that will benefit you and other sheep producers																																														
<b>1 How many cattle and sheep do you run in a typical year?</b>	<input type="text"/> cattle <input type="text"/> sheep	<b>4 What type of grazing strategies did you use in 2003?</b>	<i>Please tick any that apply</i>																																													
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