final report

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Winning against seeds: Resources review and update

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Abstract

In 2012, a national survey of Australian sheep and lamb processors found that, for many, grass seed contamination is one of the major issues facing their business. Seedy carcases are costing processors up to $30 per head with suppliers being penalised between 10 cents and $1.00/kg CW.

Producer awareness and education is an essential strategy for addressing the problem.

Existing MLA 'Winning Against Seeds' publications have been reviewed, updated and republished. These include a 36 page booklet, a Tip 'n' Tool and an A4 size poster. Draft session plans for producer awareness workshops have been prepared and piloted, and a PowerPoint presentation for use at these workshops developed.

Based on key industry sectors' desire to collaborate and develop a national focus and communications, a National Grass Seed Action Plan (2013-2015) discussion paper has been developed.

Executive summary

The run of drier seasons during the 2000's across many parts of Australia saw the grass seed problem decline and slip off many producers' radars. However the return to better seasons in 2010/11 resulted in an increased incidence of grass seed contamination of lambs. As a result some processors have been calling for a pro-active industry wide approach to a solution. As it was eight years since the original suite of MLA publications addressing the seed problem were compiled and some were out of print, it was timely to revisit this issue and update the resources available to industry.

An Industry Reference Group was formed including processors from several states, a livestock agent representative from the Australian Livestock and Property Agents Association (ALPA) and an MLA representative. This group was used to provide advice and oversight to the review of resources and industry survey.

Survey
A national survey of sheep and lamb processors was undertaken with the purpose of collecting firsthand information from sheep and lamb processors and supermarkets as to the extent of seed contamination issues impacting on the meat industry.

A full report on the results of this survey is contained in Appendix 1. The survey was able to confirm that grass seed contamination was indeed a major concern for processors. The majority of survey respondents rated it a major problem for their business with some indicating that, at certain times of the year, it was the number one problem facing their business.

Estimates of the cost of seeds to the business generally varied between $10 to $20 per carcase but up to $30 for heavily affected carcases. Cost factors taken into account (in order of importance as reported by processors) include: extra labour costs of trimming; slower chain speed; loss of meat value; potential loss of export licence; decreased skin value; potential damage to relationships with suppliers and customers; low staff morale.

The most common penalty system applied by processors is a sliding scale of penalties ranging from 10c/kg CW to $1.00/kg CW, with the penalty applied on a case by case basis. The amount of penalty applied is influenced by the amount of seed present, the location of the seed, the percentage of a line that is affected and whether the vendor is a repeat offender.

The most often cited regions that are the sources of the worst problems were (in order) Upper South East SA; Central West NSW; North Central & Mallee/Wimmera region, Victoria and Far Western NSW. The plants that were repeatedly mentioned as problems were Silver grass; Spear grass; Barley grass and Geranium (*Erodium* spp).

Resources
The following MLA resources were reviewed:

- Booklet – Winning Against Seeds – Management tools for your sheep enterprise (44pg)
- Tip 'n' Tool – Winning Against Seeds (4pg)
- Poster - Winning Against Seeds – Seed Awareness (A4)
- MLA Seeds Identification Poster (large format)
- PowerPoint – Winning Against Seeds (38 slides)

As a result of discussions with processors during the course of the survey, it was concluded that the large poster, suitable for use on the slaughter floor, was no longer required by industry and so it has not been reproduced.

The Tip 'n' Tool has been updated and reproduced as a four page fact sheet. The A4 size poster has been updated. The Winning Against Seeds booklet has undergone extensive revision and has been updated and produced as a 36 page booklet.

The PowerPoint presentation has also been updated.

Workshops
Session plans for different formats of producer awareness workshops have been developed. These cover different possible scenarios such as:

- Half day workshop all in one location, with or without contributions from processor, skin buyer, agronomist and livestock agent
- Two hour workshop designed to be delivered alongside another topic
- Half day workshop incorporating an abattoir tour.

The Making More from Sheep State co-ordinators have been briefed and encouraged to include seeds workshops in their State programs in the next 12 months where appropriate.

Two pilot 'Winning Against Seeds' workshops are planned for South-East South Australia in the third week of April 2013. JBS Australia will co-host these.

National Grass Seeds Action Plan (2013-2015)
A discussion paper has been developed for a National Grass Seed Action Plan for launch in July 2013 and incorporating elements such as:

- National Grass Seed Reference Group
- National Communication Strategy
- Cost of Seed Calculator
- Producer feedback systems
- Winning Against Seeds Producer workshops
- MLA Producer Demonstration Sites.

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1. Background

In 2004, Meat & Livestock Australia commissioned Rural Solutions SA to prepare the following resources which were released to industry:

Booklet – Winning Against Seeds – Management tools for your sheep enterprise (44pg)
Tip 'n' Tool – Winning Against Seeds (4pg)
Poster - Winning Against Seeds – Seed Awareness (A4)
MLA Seeds Identification Poster (large format)
Guidelines for a Grass Seed Report (2pg)
PowerPoint – Winning Against Seeds (38 slides)

The grass seed resources proved very topical and valuable for many MLA events such as: Primetime, It's Ewe Time, regional forums, Making More from Sheep events, MLA Producer Demonstration Site field days. As a result these publications have been re-printed on a number of occasions. The run of drier seasons during the 2000's across many parts of Australia saw the grass seed problem decline, but the return to better seasons in 2010/11 resulted in an increased incidence of grass seed contamination of lambs and some processors were calling for a pro-active rather than re-active solution. As it was eight years since the original publications were compiled and some were out of print, it was timely to revisit this issue and update the resources available to industry.

2. Project Objectives

- To undertake a survey of Australian sheep and lamb processors to examine the impact that seed contamination has on this industry sector.
- To review and update the existing 'Winning Against Seeds' resource materials.
- To develop a workshop, for delivery through existing channels such as Making More from Sheep and processor supply chains.

3. Methodology

Industry Reference Group

An Industry Reference Group was formed to provide advice and oversight to the review of resources and industry survey. The group included processors from several states, a livestock agent representative from ALPA and an MLA representative. The individuals involved were:

Dale Cameron, JBS Australia
Andrew Hay, Coles (later replaced by Dale Pemberton, Coles)
Rob Davidson, WAMMCO
Phil Nagel, Elders (a representative of ALPA)
Richard Apps, MLA

Survey

A national survey of sheep and lamb processors was undertaken. The purpose of this survey was to collect firsthand information from sheep and lamb processors and supermarkets as to the extent of seed contamination issues impacting the meat industry. The survey was conducted in the lead up to the review of the existing MLA resources relating to seed contamination and was valuable in reinforcing the value of investment in this review.

The survey sought to collect information on:

- The extent of the problem
- The cost of seed contamination
- When and where it is particularly a problem
- What individual processors are doing to try and combat the problem
- What feedback processors are providing to producers
- What, if any, industry action processors think needs to happen.

The survey, a six page document was initially emailed to potential participants and this was then followed up with a phone call to organise a time for a phone interview.

Seventeen businesses including processors and supermarkets were initially identified and approached to be involved in the survey. These businesses were based in New South Wales, Victoria, South Australia and Western Australia and ranged in size from those killing a little over 100 000 lambs annually to businesses slaughtering more than this number each week. (Discussions were subsequently held with a Tasmanian based processor, but they were not respondents to the survey).

Unfortunately only nine businesses provided either complete or partial responses to the survey. This was despite multiple approaches via email and telephone. A small number of businesses declined to be involved but many simply did not respond to approaches at all.

The combined number of lambs slaughtered annually for those surveyed was in excess of 15 million. This provides a good representation, with approximately 18 million lambs slaughtered annually in Australia. Businesses responding to the survey included export, domestic and service processors and supermarkets.

Resources

Selected stakeholders from the whole supply chain were consulted and their need for the existing resources explored. Feedback on how the resources could be improved was also sought. The resources that were assessed as being still required were reviewed, edited and updated. Previous contributing authors were contacted and eight of these were able to review and update their earlier contributions. A total of ten new contributing authors were engaged.

The previously developed PowerPoint for use in 'Winning Against Seeds' workshops was reviewed and updated.

A "Winning Against Seeds" workshop was developed and will soon be piloted in South Australia. State co-ordinators from the Making More from Sheep network were addressed in February 2012 and encouraged to take up the opportunities to deliver Winning Against Seeds as part of their programs.

4. Results

The results of the survey are provided in Appendix 1.

As a result of the resources review, the following publications have been updated:

Booklet – Winning Against Seeds – Management tools for your sheep enterprise (36pg)
Tip 'n' Tool – Winning Against Seeds (4pg)
Poster - Winning Against Seeds – Seed Awareness (A4)

As a result of discussions with processors during the course of the survey, it was concluded that the large poster, suitable for use on the slaughter floor, was no longer required by industry and so it has not been reproduced.

A revised PowerPoint presentation is available for use in delivering Winning Against seeds workshops. A Winning Against Seeds workshop will be piloted at two locations in South Australia in mid-April 2013.

Based on key industry sectors desire to collaborate and develop a national focus and communications, a National Grass Seed Action Plan (2013-2015) discussion paper has been developed and incorporates:

- a National Grass Seed Reference Group
- a National Communication Strategy
- Cost of Seed Calculator
- Producer feedback systems
- Winning Against Seeds Producer workshops
- MLA Producer Demonstration Sites

5. Discussion/Conclusion

This consultancy has re-affirmed that grass seeds are a major national problem, costing many sectors in the Supply Chain significant dollars and resulting in increased risk of consumer dissatisfaction. There is a strong desire amongst industry to collaborate under some form of National Coordination Strategy, with funding from key stakeholders, in a national program of producer awareness and empowerment to take action.

Appendix 1

Seed contamination in sheep and lambs

Results of a national survey of sheep and lamb processors August – November 2012

Survey conducted by Anne Collins, Livestock Industry Consultant, Rural Solutions SA for Meat and Livestock Australia.

Overview

- All survey respondents, with the exception of two, rated the problem of seeds a 4 or 5 out of 5, or a major problem, with the majority scoring five. Many respondents indicated they felt it was the **number one problem facing their business**.
- Estimates of the percentages of lamb carcases requiring trimming during high risk periods ranged between 10% and 60% with three processors (with total annual lamb kill of 2.6 million) estimating at least 50%.
- The most commonly reported months for seed problems were May-June-July and November–December. September and October were the least commonly reported months.
- The most often cited regions that are the sources of the worse problems were (in order): **Upper South East SA; Central West NSW; North Central & Mallee/Wimmera region, Vic; Far Western NSW**.
- The plants that were repeatedly mentioned as problems were: **Silver grass; Spear grass; Barley grass; Geranium (*Erodium* spp).**
- The majority of processors when they are providing feedback to producers are just indicating seeds were present without specifying a species.
- Estimates of the **cost of seeds to the business varied between $10 to $20 per carcase and up to $30 for heavily affected carcases**. Factors that are taken into account and costed (in order of importance as reported by processors) include: extra labour costs of trimming; slower chain speed; loss of meat value; potential loss of export licence; decreased skin value; potential damage to relationships with suppliers and customers; low staff morale.
- The most common penalty system applied by processors was a sliding scale of **penalties ranging from 10c/kg CW to $1.00/kg CW**, where the penalty applied is established on a case by case basis. The amount of penalty applied is influenced by the amount of seed present, the location of the seed, the percentage of a line that is affected and whether the vendor is a repeat offender.
- Some processors are using trial seed kills a lot, and producers in problem areas where awareness is good will often request them.
- All but two of the processors responding to the survey were happy to be involved in a campaign of producer and agent education.
- The majority of processors considered that **producer awareness and education** was an essential strategy for addressing the problem.

Contents

Introduction

The purpose of this survey was to collect first hand information from sheep and lamb processors and supermarkets as to the current extent of seed contamination and the issues it is causing in the meat industry.

The survey was conducted in the lead up to a major review of the existing MLA resources relating to seed contamination and was valuable in reinforcing the value of investment in this review.

The survey sought to collect information on:

- The size of the problem
- The cost of seed contamination
- When and where it is particularly a problem
- What individual processors are doing to try and combat the problem
- What feedback processors are providing to producers
- What, if any, industry action processors think needs to happen

An Industry Reference Group was established to provide advice and oversight to the review of resources. The survey was useful in validating the advice from this group and ensuring it reflected what was happening industry wide.

A copy of the survey questionnaire is attached.

Extent of survey

Seventeen businesses including processors and supermarkets were initially identified and approached to be involved in the survey. These businesses were based in New South Wales, Victoria, South Australia and Western Australia and ranged in size from those killing a little over 100 000 lambs annually to businesses slaughtering more than this number each week.

Unfortunately only nine businesses provided either complete or partial responses to the survey. This was despite multiple approaches via email and telephone. A small number of businesses declined to be involved but many simply did not respond to approaches at all. (Discussions and recommendations for future work are at the end of this report).

The combined number of lambs slaughtered annually for those surveyed was in excess of 15 million, which provides a good representation of the approximately 18 million lambs slaughtered annually in Australia. Businesses responding to the survey were a mix of export, domestic and service processors and supermarkets.

Extent of problem

Businesses were asked to rate (on a scale of 1–5) how big a problem grass seeds are for their business. All respondents, with the exception of two, rated the problem 4 or 5, or a major problem, with the majority scoring five. Many respondents indicated they felt it was the number one problem facing their business.

The two processors that rated the problem as being of lesser importance (score 2 or 3) had a much smaller throughput compared to others surveyed, processing less than 7000 sheep and lambs per week and therefore were quite likely able to be much more selective with the animals they purchased for slaughter.

Survey respondents were asked to estimate what percentage of lamb carcases required trimming for seeds during a high risk period and also during lower risk periods. All responses to this question were the respondent's best estimate rather than figures taken from actual production data. Not many estimates were supplied for the low risk period with the implication being that for these periods of the year 5% or less of carcases require trimming. Estimates of the percentages of lamb carcases requiring trimming during high risk periods ranged between 10% and 60% with three processors (with total annual lamb kill of 2.6 million) estimating at least 50%.

Time of year

Processors reported different times of the year when seeds are a problem for their business. This tends to be a function of what regions processors are sourcing their stock from and also the seasonal conditions at the time. The most commonly reported months for seed problems are May-June-July and November–December. September and October were the least commonly reported months.

As a generalisation, the problem occurs from November through to July. From mid-October seed starts to set and this is when the problem starts to appear and it then carries through until the lambs are eventually sold. So it is a problem for processors for nine months of the year but the problem is created in the two month period when the seed is set. Hence the low risk period is from late August to October with new season lambs available and before seed set.

Problem regions and species

Not all processors were able to identify what regions they had the most problem with sourcing seedy sheep from and clearly this varied with the location of the processor, but the most often cited regions that are the sources of the most problems were (in order):

- Upper South East SA
- Central West NSW
- North Central & Mallee/Wimmera region, Vic
- Far Western NSW
- Murray/Murrumbidgee, NSW
- NSW Tablelands

Many processors emphasised the importance that seasonal conditions play in whether there are problems or not and that one region can have huge problems one year and minimal the next.

Some survey respondents were able to confirm that there are certain saleyards that they are very reluctant to operate in at certain times of the year. Other respondents indicated this was the case but were not prepared to be drawn any further on the subject.

The most commonly mentioned selling centres were Dubbo, Naracoorte and Forbes.

Most survey respondents were not able to or were not prepared to nominate what plant species caused the most problems but of those that did, the problem plants that were repeatedly mentioned were:

- Silver grass – has a fine sharp seed that gets to the primal cuts – will often only be a few seeds, but will be distributed widely throughout the animal; often causes inflammation and infection.
- Spear grass
- Barley grass – usually only a problem where sheep actually lay in it – often confined to the belly
- Geranium (*Erodium* spp) - tends to cause skin damage rather than carcase damage

One processor noted that "Geranium always hits first and therefore tends to be a good indicator of what is to come. You know that 2-4 weeks later you will start to see the grass seeds coming through."

All of the processors that were surveyed, except one, are no longer endeavouring to identify what the seed in a carcase actually is. Many processors had been trying to do this at some stage in the past but found that it was causing more problems than it was worth, with some seeds very difficult to identify once they have been in the animal for any length of time. Disputes were arising with producers who were denying having the identified plant on their property or arguing that another processor had told them that it was something else. It was also difficult to keep enough slaughter floor staff adequately trained to be able to do the identification. One of the other issues is that some of the seeds look very similar once they have lodged (penetrate) within the carcase eg. spear grass and *Erodium* and their "tails" have broken off. Now the majority of processors when they are providing feedback to producers are just indicating seeds were present without specifying a species.

Processors gave differing responses when asked whether they observed any difference between breeds in the amount of seed contamination. The majority of respondents said they saw no differences, while others commented that Merinos are worse or that "they never buy anything out of a Merino". One respondent commented that Merinos and Dorpers are the worst and another that Dorpers can be just as bad as other breeds, while another respondent commented that Dorpers are pretty good. One factor that is likely influencing the amount of seed by breed is the fact that Merinos and Dorpers tend to be run in rougher country whereas prime lamb breeds tend to be run on highly improved pastures with less potential problems.

Data Specific to South Australia

Some detailed data on the occurrence of grass seed in slaughter sheep at one major South Australian abattoir is available through the enhanced abattoir surveillance program run by PIRSA's Biosecurity SA.

This shows the Upper South East region to have the highest prevalence of problems in SA and this is confirmed by processor responses to the survey. This is followed by the Murray Mallee region. This data also shows the marked variation in prevalence between years, with the calendar year 2010 showing a 115% increase in incidence of reports of seed in lambs statewide over 2009 reports, and in 2011 there was a 174% increase over 2009. The data

shows that statewide the incidence of seed reports is lowest from August to October. The months with the highest incidence of seed reports are April – June and November – December.

Cost of the problem

Not all survey respondents were able to supply an estimate of the costs of seeds to their business. The estimates from those that did varied between $10 to $20 per carcase and up to $30 for heavily affected carcases. A service works estimated that it costs them an extra $4-$5 per carcase. It is quite a challenging exercise to establish the costs to the processing business of grass seeds. Factors that have to be taken into account and costed (in order of importance as reported by processors) include:

- Extra labour costs of trimming
- Slower chain speed
- Loss of meat value
- Potential loss of export licence
- Decreased skin value
- Potential damage to relationships with suppliers and customers
- Low staff morale.

One processor estimated that the annual cost to their business of seed contamination is $3million. Another operator lost their export licence for three weeks due to a contamination issue, which cost the business approximately $1million. One processor commented that "You get quite low morale on the kill floor when you get seedy lambs through because of the amount of trim and wastage and how tedious trimming can be".

Strategies currently in place

Most processors responding to the survey had a penalty system in place for carcases that were assessed as seedy. The most common penalty system was a sliding scale of penalties ranging from 10c/kg CW to $1.00/kg CW, where the penalty applied is established on a case by case basis. Several processors commented that the penalty should really be $1.50 to $2.00/kg, but they are reluctant to move to penalties that high as they are concerned it will send producers elsewhere, in particular to saleyards rather than over-the-hooks sales. The application of penalties is also complicated by the fact that often the lambs may have come from a finisher who will receive the penalty, whereas the seeds were actually picked up before the finisher purchased the lambs.

The amount of penalty applied is influenced by the amount of seed present, the location of the seed, the percentage of a line that is affected and whether the vendor is a repeat offender. Some processors were prepared to just give a warning to first time offenders. Most processors applied the penalty across the whole line, however at least one processor only applied the penalty to the percentage of animals that are declared seedy eg. $1/kg penalty to 30% of a line.

One of the service works that was surveyed had a penalty system in place whereby carcases are classed as seedy or not and once a threshold of 15% seedy in a consignment is reached, a slaughter penalty is applied. In this instance a carcase is called seedy if it has

medium–heavy seed or 40-50 seeds anywhere on the carcase. The only penalty applied by one processor was the weight penalty as a result of the carcase having been trimmed, and to adjust the skin price.

Some processors use trial seed kills often and producers in problem areas where awareness is good will often request them. The lambs are processed with no penalty and a full seed report is supplied. The producer can then use this information when selling the main line either over-the-hooks or in the saleyard. The problem is however, when the trial shows that the lambs are seedy, what the producer/agent decides to do with the rest of the line. They can declare they are seedy when they are sold or they can put them in the saleyards and say nothing and it then becomes someone else's problem. At the very least the producer has got the message and may do something different next season.

One processor is changing their strategy and will in the future require any producers who have had a seed problem in the past to do a trial seed kill before a line is slaughtered.

Feedback to Producers

There is a deal of variation in the format of feedback that processors are providing producers in relation to seedy carcases.

Most processors were happy with the feedback they are currently providing to producers, although several were interested in the development of a national standard for feedback on seeds. Only two survey respondents were considering changing the feedback that they provide to producers.

Most processors provide written feedback to producers when a line is penalised for seed content. The detail included varies but usually includes information on the percentage of the line that was seedy, the amount of seed, often characterised as high, medium or low and perhaps the location of the seed on the carcase and the amount of trimming required. Definitions of high, medium and low varied between processors – in some instances it referred to the total number of seeds in the carcase, and in others it referred to the location of the seed on the carcase.

Some processors did not provide written feedback but instead opted to phone the vendor.

The majority of processors providing written feedback are also including a photo(s) of the seedy carcases. One processor was considering moving to providing before and after photos, including photos of carcases after trimming.

Most processors are not reporting all seedy lambs to vendors, with some saying that seeds were only reported and penalised if they were bad enough to slow the chain due to requiring excessive trimming. One processor who was presently not reporting light seed infestations back to producers, will be changing their format so that everyone will get feedback, even if only 10% seed.

Current Resources

Only one of the processors surveyed was currently using the large format seed identification poster developed by MLA and endeavouring to identify different seeds in carcases on the

slaughter floor. All other processors had gone away from doing this saying that it was too difficult and resulted in too many complaints from producers. The majority of processors just record either seeds present or not present.

Most processors were keen to have either a printed resource they could give to producers or a web based resource they could refer producers to.

Recommendations for Further Work

Many of the processors interviewed identified seed contamination of carcases as the number one issue facing their processing business. “Grass seeds are 10 times or even 20 times more prevalent as a problem on feedback than any other health issue”, said one processor. The majority of processors considered that producer awareness and education was an essential strategy for addressing the problem. This includes increasing the understanding of the problems seeds cause. All but two of the processors responding to the survey were happy to be involved in a campaign of producer and agent education. One of those not interested in being involved had rated the problem for their business as only a 2 out of 5.

“Education of producers is crucial. There is a need to really ramp up awareness leading into the two month period when seed is set. An alert (including media) campaign at the right time of the year, including awareness of seeds in laneways, creek lines, fence lines etc. is essential.” Some processors also expressed interest in getting producers into the abattoir so they can see what the seedy carcases look like.

Many processors expressed a desire to develop an agreed industry standard for reporting seed contamination. “Processors have let their clients down, including producers, because there is a lack of consistency with how the issue is reported. A producer’s sheep will get reported for seed at one works, but not at another. There is a need to get seed reporting consistent across works.”

Another processor commented that “Feedback to producers and what is recorded on the slaughter floor needs to be significantly simplified so it is easy for employees to complete accurately”.

A couple of processors commented that they were looking forward to the introduction of individual NLIS identification of sheep.

Actions for Industry

1. A communication program should be a priority. Producers need to be aware that this is processors’ number one problem. There is a six week window nationally to send out alerts – so this is the time to saturate the rural media with seed alert warnings. Take out full page ads in rural papers at key times of year
2. Educate producers as to how to deal with the problem placing emphasis on prevention – workshops for producers involving processors
3. Standard reporting and feedback system for producers
4. Need some way of getting message back to the breeder, rather than just the finisher
5. Accurate cost of the problem

6. Industry ownership -Agents need to realise that saleyards will not survive if don't tackle this in a more concerted way. Saleyards have become a dumping ground for inferior stock including seedy animals.

Resources Required

- Booklet required for producer awareness and planning workshops
- Tip & Tool required for concise producer information – potential for processors to include with feedback
- Awareness poster (A4 size) for general awareness raising – suitable for placement in shop window/ on notice boards
- Large format poster for slaughter floor seed identification – **no longer required** as majority of processors are not using
- Web based resources – processors happy to provide link to a web based resource as part off their feedback
- PowerPoint presentation, workshop session plans and other resources (eg. action plan proforma) for producer workshop delivery

Reflections on Survey Process

It proved very difficult to get processing businesses to be involved in this survey. This is an industry sector which generally appears to be very time poor. The first approach to targeted participants was via an email with a brief description of what we were doing and with the survey attached. This was followed up with a phone call to try and arrange a time to complete the survey one-to-one over the phone. Some participants completed the document and emailed it back before there was an opportunity for a phone interview. In such an instance, although the data was provided, there was no opportunity to engage in discussion and gather detailed responses. The majority did not respond to the email and many did not respond to the subsequent phone call.

On reflection this may not have been the ideal approach. Even though it was possible to complete the survey in half an hour on the phone, the way that it was laid out made it appear much larger and maybe more intimidating. Many of those approached to be involved simply did not respond to emails and did not return phone messages. It perhaps did not help that the approach did not come from someone who was a known name within the industry.

While some of the data obtained from this survey is quantitative in nature, much of it is qualitative. On reflection, it is possible that nearly as much information could have been gleaned from a phone call requesting a brief chat with the business about the issue of grass seeds. In other words, it was possibly an error of judgement to make the initial contact with the business via an email with a six page survey attached, and that possibly more information may have been gleaned if the first contact was a phone call requesting a brief chat.

List of those processors who indicated a willingness to be involved in an industry campaign of producer and agent education - CONFIDENTIAL

Seed contamination in sheep and lamb

A survey of meat processors and supermarket buyers, conducted by Rural Solutions SA on behalf of Meat and Livestock Australia

All responses to this survey are in strictest confidence. No information identifying individual responses will be reported or published.

Name …….. Date ……...

Company ……..…

Role in business ……..……

Location of business ……...

Contact details …….

…….

Type of business …….

- How big a problem is seed contamination of sheep carcases for your business on a scale of 1-5 (select one box per row)?

	1 (of no concern)	**2**	**3**	**4**	**5 (a major problem)**
Lambs					
Lamb skins					
Mutton					

……

……

……

- What times of the year are seeds a problem in your business?

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

……

……

We need to establish an estimate of what seed contamination of carcases and skins is costing the sheep industry.

- What volume of carcases are you processing annually?

	Number	**Tonnes**
Lamb		
Mutton		
Lamb skins		

- What percentage of carcases would be trimmed for grass seeds?

	% of lamb carcases	% of mutton carcases
High risk period		
Low risk period		

……

……

- What do you estimate the total cost per carcase to your business would be (including downgrading of cuts, extra trim time, loss in skin value) for an animal with:

  a) Heavy seed infestation……
  b) Light seed infestation……..……...?

……

……

……

- Do you have an estimate of the total annual cost for your business of seed contamination in sheep and lambs? ……

……..……..……..…….

……

- Can you rank the major contributors to this cost (select one box per row)?

	1 (of no importance)	2	3	4	5 (of major importance)
Threat of loss of export markets (eg. employing more inspectors)					
Cost of extra trim – extra labour					
Cost of extra trim – slower chain speed					
Loss in meat value					
Angst with suppliers/relationships					
Other……					

……

……

……

……

- What are the three main regions from which **problem** sheep originate (see attached maps), what are the key seed problems from those regions and when is the worst time of year?

Region	Problem seeds	Time of year
1.		
2.		
3.		

……

……

- Are there regions your business will not buy from for fear of seed?

……..

……

……

……

- Are there some species of seed that cause greater problem eg trimming on higher value cuts? ……

……

……

- What percentages of animals that you slaughter are purchased by the following methods?

	Lambs	Sheep (mutton)	% of your seed problem
Saleyards			
Over the hooks			
Feedlots			
On farm			
TOTAL	100%	100%	100%

……

……

- Have you observed any difference between different breeds of sheep in the amount of seed contamination of carcases? ……..……

……

……

……

- What strategies do you use now to reduce seed contamination in sheep and lambs? What, if any, ranges in penalty have you had in your grid for seed? What do you think the true penalty should really be? ……..…….

……

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……..…..

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- What feedback do you currently provide in relation to seed contamination to producers who sell to you over the hooks? ……..

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- Have you considered changing what feedback you provide? Are you aware of something that another processor is doing that you might incorporate in what you do?

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- What strategies need to be put in place to improve the situation? Have you got any ideas/innovative thoughts? .....

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- What resources would you find useful either within your business or with your clients?

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- Are you prepared to be involved in any industry campaign of producer and agent education?

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- Anything else you would like to add?

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- As a final checklist, the industry has implemented a number of strategies over the last eight years to address the seed problem. Please rate their worthiness/value to your business and whether they should continue.

	Awareness*	**Value (1 – 5)****	**Comment**
Winning Against Seeds Bulletin			
Winning Against Seed – Tip n Tool			
Seed Identification Posters			
Seed Awareness Posters			
Workshops for producers & L/Agents			
Web based information			
Saleyard disclosure of origin of lambs			
Trial seed kills			
Seed penalty in price grid			
State based grass seed action groups			

* Y = am aware of this initiative, N = not aware, U = unsure ** 1 = of no value, 5 = of great value