finalreport

MONITORING AND EVALUATION

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Meat & Livestock Australia Adoption and Awareness Survey

Executive Summary

The 2005 LPI Producer Awareness & Adoption survey follows a similar survey conducted for MLA in December 2003 and includes the tracking of several elements to measure changes over time in awareness of and participation in key MLA programs by different producer segments, as well as adoption of specified management practices.

A sample of *n=1,050* producers was selected at random to fill a sample frame using Axiom's FARMbase® contact list. This database contains 120,000+ producers from all industry types.

A total sample of ***n=907*** was obtained, as follows:

- 297 Northern Beef Producers
- 321 Southern Beef Producers
- 279 Southern Sheep/Lamb Producers
- 10 Goat Producers

(Sample numbers were low in the Northern Territory & Northern Queensland regions and also across goat producers where the base population was small to begin with).

This second undertaking of the Awareness & Adoption research has largely established that the MLA course and programs being promoted by LPI is having an impact on producers.

- Overall **73%** of producers surveyed indicated awareness of MLA programs (prompted), of these **23% attended** a forum or workshop.
  - **80%** of MLA Members are aware of one or more programs or courses offered by MLA, this is in contrast to **49%** of non-member awareness.

- **17%** of **producers** have **participated in, or attended an MLA program**. Of these **65%** of have made changes to their management practices as a result of attending or participating in an MLA program, course or workshop. Participation correlates to a high level of adoption.

- MLA **membership status** has been identified as a significant **barometer to awareness**, attendance and adoption, **74%** of producers surveyed believed they were MLA members, 19% were not and a further 7% were unsure.

- The future of MLA's various communications/delivery programs looks promising, - **28%** of producers who indicated an awareness of MLA forum or workshop, and who have not yet attended, would like to attend one.

- The key production principles evaluated within the survey were widely recognised by producers. In many instances the production practices being evaluated have already been adopted by as many as **60 - 80%** of some producer segments.

Other information available in the detailed data deals with animal husbandry, health and welfare issues associated with livestock production such as nutrition, joining strategies:

- marking protocols, weaning regimes, flock or herd health plans and vaccination programs, as well as transport code of practices. The survey also explored business management issues, pasture and grazing management, natural resource management such as soil salinity and acidity, erosion control and water quality. Where critical to the objectives of this project these issues are included in the Target Management Practice (TMP) evaluation.

If further change is to be achieved amongst livestock producers it is clear from the survey that MLA must continue to **encourage** producers to participate in the education and training being offered by MLA through it's workshops and forums.

- Membership must be increased and maintained at an optimal level, there is a strong correlation between membership and awareness and adoption, at least regarding management practices considered essential to productivity improvement.

- By also widening the LPI communication process to non-members, MLA can create program and course awareness outside of the traditional communication channel and possibly get the message to those producers who would ordinarily ignore MLA programs.

- Consolidate MLA's core program brands. Awareness and recall is fragmented due to the large number of courses and programs made available through MLA.

- Further understanding is required into the motivation behind course or program participation. A significant proportion of producers are lukewarm about attending, it is essential MLA identify how to convince or (at worst) push them over the line.

The level of support for the survey and the quality of the data collected across such a wide range of topics suggests that MLA has a solid platform of support within the livestock producing community. Reservations about industry dissent and lack of support appear to be isolated and can largely be overcome by providing continued education, resulting in positive profit driven outcomes, to that proportion of producer segments who are quite clearly embracing the innovations MLA is promoting.

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1. Background

Meat & Livestock Australia (MLA) is responsible for research & development (R&D) to increase the profitability and sustainability of the Australian red meat industry.
MLA's Livestock Production Innovation (LPI) unit has the task of communicating and encouraging producers to adopt and implement the R&D findings through a variety of capacity building programs.

MLA's goal is to *communicate, facilitate use of, and help deliver the tools and information resulting from MLA's R&D to its livestock producer, feedlotter and processor stakeholders.*

A comprehensive marketing research study was planned to be carried out amongst Beef, Sheep and Goat producers. It has been aimed at establishing the current level of awareness and adoption of on-farm R&D innovations communicated by LPI in the Northern & Southern Beef Programs and Lamb, Sheep Meat & Goat programs.

This evaluation concentrated on measuring the level of **awareness** and **adoption** or change in management practices across the wider producer population in an effort to evaluate the impact of the MLA LPI communication initiatives and associated programs.
MLA has specified the survey's sample base accurately represent the MLA's primary livestock producer segments, this encompasses northern and southern beef producers and sheep/lamb producers. The survey also aimed to represent the opinion and behaviour of the current membership base as well as non-member producers.

2. Project Objectives

The primary objective of this project was to determine the extent of the increase (or decrease) in producer awareness and participation of the MLA programs and courses available since the 2003/04 benchmark survey was undertaken, and adoption of related management practices.

The project was designed to:

- determine producers unaided and aided awareness of the LPI programs

- determine the level of participation and subsequent uptake and implementation (adoption) of the LPI program initiatives as a ratio of the level of awareness in % terms

The awareness and adoption (management change) issues form the basis of the questions asked for each area of interest as it relates to both livestock and whole farm management. Additional questions were included to gather appropriate ancillary data and demographics that would 'add value' to the core survey results, including:

- evaluation of the industry's acceptance of the LPI information transfer protocol and comment on future intention of producers to access the information, programs and innovations it is promoting.

The survey specifically addressed key aspects of management that MLA regard as critical to improving livestock production, these target management practices are addressed under broader related sub-headings, including:

- Pasture and grazing management
- Livestock management practices, separately amongst beef, sheep and goat producers
- Animal health and welfare
- General management practices related to farm business management
- Rumen and supplementary feeding
- Natural resource management

The quantification of issues relating to these topics will provide MLA with the data resource to make judgements on course content and effectiveness amongst target producer segments. It will recognise where programs are having an impact and where continued effort is required to achieve the targets set by MLA.

3. Methodology and Sample

A sample of *n=1,050* interviews was sought from a sample frame of producers selected at random from Axiom's FARMbase® contact list. This database of Australian producers contains over 120,000 contact records of producers from all industry types.

A total sample of ***n=907*** respondents was obtained as follows, with shortfalls occurring only in regions where population numbers were low and compliance poor, namely in the Northern Territory & Northern Queensland regions and also across goat producers.

	NSW	VIC	TAS	SA	QLD	NT	WA	Total
Producer Type	***166***	***133***	***101***	***101***	***281***	***15***	***110***	***907***
Northern Beef Producers	-	-	-	-	273	15	9	297
Southern Beef Producers	97	78	50	50	-	-	46	321
Southern Sheep Producers	68	55	51	50	-	-	55	279
Goat Producers	1	-	-	1	8	-	-	10

The survey instrument was designed using a master questionnaire and code-frame response mechanism. The actual survey was managed using a CATI (Computer Assisted Telephone Interviewing) methodology and telephone interviewing (Field-work) was undertaken by SurveyTalk. Axiom's DP partner D & M Research undertakes all data processing.

- Screeners were employed at the beginning of the survey to ensure respondents were only included if they had significant livestock enterprises based on a property area of 100 hectares and above. Where respondents had less than 100 hectares the interview was terminated.

Segmentation of the sample and the resulting data has been a key driver in the design of the sample and its distribution by:

- Producer segments – Beef or Sheep/Lambs

- Producer locations - Northern and southern industry segments, Southern rainfall zones (NRZ, Wheat/Sheep & Pastoral)

- Cattle/Sheep production
- Property size in terms of grazeable area and livestock numbers
- MLA membership

The detailed data tables generated as a result of the survey have been constructed to represent the variations in response found across each of these segments.

Respondents primarily identified as Beef, Sheep or Goat producers, completed only those sections of the survey that applied to them. This was done primarily to limit fatigue.

The 2005 sample was constructed based on obtaining a 90% confidence interval for each of the producer type and region segments, the statistical difference between findings is validated in the tables through the use of significance tests. These are represented using alpha notations in the tables. Where no statistical difference is apparent in tables, the segmentation analysis being applied has generated sample bases that are regarded as either being too small or where the variance is statistical negligible.

The 2003 survey has employed a similar technique, where the questions asked in the two surveys are the same, the results can be directly compared.

Note that in both surveys the sample design was based on the larger producer population and target industry segments, individual question analysis filters out significant numbers of producers who were either unaware of or did not attend or participate in MLA course or programs. In some cases when further analysis of these small sample segments has been undertaken the statistical difference in the findings is unclear. As a rule the tables provided show sample base and statistical difference indicators, where sample bases fall below *n=30* statistical difference is not calculated.

3.1 Sample Overview

3.1.1 Respondent Profile and Demographics

907 livestock producers participated in the 2005 LPI Survey providing a robust sample base for each of the key industry segments that LPI is focussing on.

The target sample of goat producers was difficult to obtain, highlighting the need to invest in database development of participants in this industry.

- **33%** of producers surveyed are **Northern Beef Producers** *(n=297)*
  Mostly commercial breeders: 81%
  Average no. of beef cattle: 3,391
  Average no. of breeding cows: 1,668
- **35%** are **Southern Beef Producers** *(n=321)*

Commercial breeders 73%, mixed stud 10%
Average no. of beef cattle: 579
Average no. of breeding cows: 241

- **31%** are **Southern Sheep/Lamb Producers** *(n=270)*
  Merino breeders 53%, cross breeds 36%
  Average no. of sheep: 5,008
  Average no. of lambs for slaughter: 1,039

- **1%** of the survey respondents are **Goat Producers** *(n=10)*

The regional location of survey participants aimed to provide representation from the recognised rainfall segments that make up the MLA's regions of focus.

- **34%** of producers surveyed are located across northern Australia (Qld, NT. Northern WA)

- **65%** are located in the **Southern states:-**
  44% in the **High Rainfall Zone**
  21% in the **Wheat /Sheep & pastoral zones**

- A third of survey respondents have property sizes of up to 499 Hectares and **15%** have over 10,000 Hectares.

- Overall, **13%** of the area of the properties represented contain "crop or fallow" and are involved in farming, **42%** of properties are "sown to improved pastures (annuals & perennials), **37%** or most of the balance contain "native pastures".

- **4%** of the area of properties represented contain tree lots and **4%** are non useable.

The industry types location, grazeable area as well as livestock numbers segment the data tables provided with the survey results.

3.1.2 Respondent Membership Status

74% of producers surveyed indicated they had registered to be a **member of the MLA**. This level of membership is consistent across each of the producer segments.

	Members	**Non-Members**	**Don't Know**
Total Sample	***74%***	***19%***	***7%***
Northern Beef Producers	73%	21%	6%
Southern Beef Producers	79%	17%	5%
Southern Sheep Producers	71%	18%	11%

Whilst this membership figure may be accurate it may also be an indication of members commitment to complete the survey as opposed to non-members who are more likely to refuse. Alternatively the response may reflect the measure of livestock producer's perceptions about their membership status and may not accurately reflect the reality of the membership base.

As such when viewing the data it may be useful to look at the behaviour of members versus non-members as individual segments, rather than be concerned with establishing the exact ratio of members and non-members.

4. LPI Survey Results and Discussion

4.1 MLA Program Awareness

This aspect of the LPI project follows on closely from previous industry surveys designed to determine producers unaided and aided awareness of the MLA programs as a means of evaluating the effectiveness of the overall communication strategy by LPI to achieve industry change.

- **23%** of respondents indicated an unprompted or unaided awareness of MLA Program(s).
- **62%** of all respondents when prompted recalled one or more of the MLA Program(s) mentioned.

These percentages will not add to overall awareness, as nett prompted responses will include producers recognising other programs not previously mentioned.

	Prompted Awareness	Unprompted Awareness
Total Sample	***62%***	***23%***
Northern Beef Producers	62%	19%
Southern Beef Producers	60%	26%
Southern Sheep Producers	64%	26%

The nett effect overall, is that **73%** of livestock producers surveyed are aware of one or more MLA programs, either prompted or unprompted.

Once respondents were prompted with program names recall was significantly higher. This indicates that MLA programs are not top of mind or that a level of confusion exists as to which organisation is responsible for the programs.

4.1.1 Overall Awareness by Membership Status

Program awareness appears to be greatly improved if producers are members of MLA.

	Member	Non Member
Aware of MLA Programs	***80%***	***49%***
None (No Awareness of Programs at all)	***19%***	***49%***

4.1.2 Overall Awareness by MLA Program

Overall awareness amongst livestock producers of any MLA program in July 2005 was **73%**, awareness of individual MLA programs across all respondents' shows that many of MLA's key program initiatives are widely recognised.

	Target audience	**Awareness by target audience**
Prime Time or Making More from Merinos	Sheep/Lamb producers	65%
More Beef from Pastures	Southern Beef producers	61%
EDGEnetwork or specified EDGE workshop	All livestock producers	36%
PIRDS	All livestock producers	35%
None (No Awareness of Programs at all)	All livestock producers	26%

4.1.3 MLA Program Awareness by Producer Segment

Awareness of MLA programs and their availability is critical to the process of information dissemination amongst each of the producer segments. For this reason MLA's programs are deliberately designed and marketed to these segments, where diversification is a feature of the region (i.e. southern) producers appear to be aware of the wider range of programs and courses available.

Overall, **67%** of Northern Beef producers are **aware** of MLA programs and courses, **73%** of Southern Beef producers are aware of MLA programs and as many as **80%** of Southern Sheep/Lamb producers are aware of MLA programs and courses.

Northern Beef Producers	**2003/2004 survey**	**2005 survey**
PIRDS	*35%%*	*31%*
BeefPlan	*55%*	*46%*
Nett Edge:	*na*	*49%*
Edge Network	*26%*	*21%*
Breeding Edge	*21%*	*19%*
Nutrition Edge// Northern Nutrition	*40%*	*31%*
Grazing Land Management	*50%*	*26%*
Selling Edge	*14%*	*14%*
Marketing Edge	*35%*	*26%*
None (No Awareness of Programs at all)	*na*	*31%*

Southern Sheep and Beef Producers	**2003/2004 survey**		**2005 survey**	
	Southern Sheep	**Southern Sheep & Beef**	**Southern Beef**	**Southern Sheep**
PIRDS	*na*	*33%*	*32%*	*41%*
Prime Time or Making More from Merinos	*38%*	*na*	*27%*	*65%*
More Beef from Pastures	*na*	*na*	*61%*	*39%*
Nett Edge:	*na*	*na*	*26%*	*31%*
Edge Network	*na*	*29%*	*25%*	*30%*
Prograze	*na*	*65%*	*na*	*na*
Effective Breeding	*na*	*27%*	*na*	*na*
Bizcheck for Meat	*na*	*31%*	*na*	*na*

Southern Sheep and Beef Producers	**2003/2004 survey**		**2005 survey**	
	Southern Sheep	**Southern Sheep & Beef**	**Southern Beef**	**Southern Sheep**
Enterprise Health Check	*na*	*12%*	*na*	*na*
None (No Awareness of Programs at all)	*na*	*na*	*27%*	*19%*

4.2 MLA Program Participation

Attendance or participation in the many MLA training programs and courses appears to correlate strongly with membership and subsequent awareness levels of available programs.

17% of livestock producers overall have actively participated in one or more MLA programs or course initiatives.

4.2.1 MLA Program Participation by Producer Segment

Participation in MLA programs is represented as a proportion of producers who are firstly aware of the programs. Of the **73%** of livestock producers who are aware of MLA programs, **23%** have attended or participated in one or more MLA programs, 77% did not.

	Participated	**Did Not Participate**
Total Sample	***23%***	***77%***
Northern Beef Producers	21%	80%
Southern Beef Producers	25%	75%
Southern Sheep Producers	25%	75%

- Of the 36% of producers who are aware of EDGE programs, 35% indicated they had participated in or attended an MLA course.
- Of the 34% of producers who are aware of the More Beef from Pastures course, 24% indicated they had participated in or attended an MLA course. (Participation among the Southern Beef Producers who are aware of the More Beef from Pastures program was 25%).
- Of those 31% aware of PIRDS and 30% aware of Prime Time, around 30% indicated they had participated in or attended an MLA course.
- The level of participation in general is significantly higher among MLA members (26% as against 12% among non-members).

Increasing membership and awareness appears to be a sound approach to facilitating course attendance.

4.2.2 Level of Interest in Core MLA Programs by Producers

Intention to participate in MLA's main programs is represented as a proportion or percentage of producers who **are aware** of these programs yet have **not already attended** them. This percentage of the level of interest amongst aware respondents translates into a total % of the target producer segments shown in ( ).

	Target Audience	**Interested / Very Interested**
PIRDS	*All producers (907)*	*23% (6%)*
Prime Time	*Lamb/Sheep producers (279)*	*25% (17%)*
More Beef from Pastures	*Southern Beef producers (321)*	*36% (26%)*
BeefPlan	*Northern Beef producers (297)*	*25% (9%)*
Edge Courses:		
Edge Network	*All producers (907)*	*25% (4%)*
Breeding Edge	*Northern Beef producers (297)*	*28% (3%)*
Nutrition Edge	*Northern Beef producers (297)*	*40% (9%)*
Grazing Land Management	*Northern Beef producers (297)*	*39% (7%)*
Selling Edge	*Northern Beef producers (297)*	*13% (1%)*
Marketing Edge	*Northern Beef producers (297)*	*29% (6%)*

Considerable interest amongst producers exists for most of the widely recognised programs such as the Edge courses and Prime Time. More Beef from Pastures, Nutrition Edge and Grazing Land Management also appear to be popular choices for producers intending to participate in an MLA program.

It is apparent from this study that participation in programs and courses is a function of awareness, awareness of MLA programs and courses is significantly higher amongst respondents who have indicated they are MLA members.

73% of participants are aware of one or more MLA course, this increases to **80%** amongst MLA Members. Overall 17% of producers surveyed have attended or participated in an MLA course or program, this level of participation increases significantly amongst producers who are aware of programs to 23% and higher again amongst members to 26%.

4.2.3 Level of Interest in Other MLA Programs by Producers

Other program topics that producers would like to attend were also evaluated and identified strong support across each producer segment.

	Northern Beef	**Southern Beef**	**Southern Sheep**
Managing People	***19%***	***12%***	***8%***
Natural Resource Management	***26%***	***20%***	***19%***
Business Development & Finance	***29%***	***22%***	***24%***
Marketing	***27%***	***23%***	***24%***
Quality Assurance	***31%***	***25%***	***24%***
Livestock Management & Breeding	***36%***	***41%***	***37%***
Feedbase & Pastures	***39%***	***42%***	***45%***

42% of producers who are aware of the LPI programs indicated they had no interest in attending any other MLA courses such as those above.

4.3 Change in Management Practices

4.3.1 Changed Management Practices as a Result of Course Attendance

Participation in MLA programs appears to be a significant instigator of change in management practices, of those **23%** of livestock producers who attended an MLA program, **65%** have initiated a change in management practice as a result of attending that course, and 35% did not.

	Changed	Did Not Change
Total Sample	***65%***	***35%***
Northern Beef Producers	64%	36%
Southern Beef Producers	64%	36%
Southern Sheep Producers	66%	34%

No significant variations was observed by producer segment, in some cases courses or programs appear to have more influence over change in management practices, e.g. The Nutrition Edge course has recorded a change in management practices amongst 76% of participants.

However, at a practical level, attendance of MLA programs and courses does have **significant influence** regarding the introduction of change in management practice and adoption of new or recommended management techniques being promoted by MLA.

4.4 Adoption of Target Management Practices

Whilst awareness of MLA programs and subsequent participation was a key objective, the underlying objective of the LPI communication strategy is to effect change amongst as many producers as is possible with the available resources. Much of the LPI Survey content is focussed on gathering information that directly relates to the change in management practice either independently or as a result of attending an MLA program or course.

The data shown below is a summary evaluation of the rate of adoption of the Target Management Practices (TMP's) or initiatives being promoted within the MLA's programs that are regarded as critical to the forward progress of the respective livestock industries.

The percentages representing the level of adoption (ie current use) of TMP's highlight what proportion of the base sample from each producer segment (i.e. total segment population) that have adopted that particular management practice.

Not all TMP's could be evaluated within the scope of this survey, however most have been addressed. Where similar data exists from the December 2003 survey, this is included as a comparison.

4.4.1 TMP's – Northern Beef Producers

BUSINESS MANAGEMENT	**Dec '03**	**July '05**
Calculate cost of Production in c/kg	na	53%
Participate in Farm Benchmarking	na	17%
Use a specialist advisor (other than an accountant) at least once a year	na	17%

GENETICS	**Dec '03**	**July '05**
Have a defined breeding objective	na	33%
Use EBV's or Index values in sire selection or purchase (of those aware)	na	38%
Have a documented cross breeding program	na	27%

MARKETING	**Dec '03**	**July '05**
Have a marketing plan for their business	na	32%
Have documented customer specifications *(% of aware)*	na	38%
Weigh cattle to monitor growth	na	52%
Sold cattle over the hooks	na	66%
Have received carcase feedback *(% of seller base)*	na	72%
Have changed management practices as a result of carcase feedback *(% of seller base)*	na	52%

GRAZING MANAGEMENT	**Dec '03**	**July '05**
Monitor available feed quantity and quality relative to animal requirements	na	35%
Use NIRS technology?	na	11%

PASTURE UTILISATION	**Dec '03**	**July '05**
Have a defined pasture utilization target for each paddock (aim to utilise a defined % of pasture growth on an annual basis)	na	38%
Consider the SOI or other seasonal climate forecasts when making stocking rate or other decisions	na	22%
Calculate a forage budget on a regular basis	na	30%
Average and maximum distance to watering points in paddocks *(ref to Q6.7)*	na	-%

REPRODUCTION	**Dec '03**	**July '05**
Assess cows using fat or condition scoring	na	33%
Pregnancy test cows annually	na	41%
Bulls undergo Bull Breeding Soundness Examination before mating	na	31%
Bull Soundness Examination includes assessment of semen morphology	na	56%

Bull joining ratio (mean)	na	11%
Calf weaning timed to preserve breeder body condition and maximise chances of breeders calving again next year	na	20%
First calf heifers managed separately to main breeder herd	na	62%
Second calf heifers managed separately to main breeder herd	na	21%
Proportion of heifers joined at 15 months of age (mean)	na	36%
Proportion of heifers joined at 24-27 months of age	na	46%
Breeder culled for non-pregnancy and/or failing to raise a calf	na	88%
Use a controlled joining season	na	44%
Yard wean calves	na	85%

ANIMAL HEALTH	**Dec '03**	**July '05**
Have a documented herd health plan	na	21%
Know the health status of purchased stock	na	64%
Routine vaccination program for preventable diseases	na	82%
Vaccinate to prevent three-day sickness	na	11%

NATURAL RESOURCE MANAGEMENT	**Dec '03**	**July '05**
Assess land condition on a routine/regular basis – do they use the ABCD framework? Grasscheck?	na	81%
Have a property plan that documents land types on a paddock by paddock basis *(% of producers with business plan)*	na	57%
Have a property plan that documents land condition on a paddock by paddock basis	na	50%
Have a property plan that documents carrying capacity on a paddock by paddock basis	na	57%
Weed control is an issue *(med/high)*	na	86%
Wet season spell paddocks on a rotational basis	na	73%
Use fire as a management tool	66%	62%
Burn to control woody weeds and woody natives (of those who use fire as a management tool)	na	67%
Fenced off riparian areas, wetlands and permanent waterholes	na	28%
Fenced off erosion gullies *(degraded areas)*	na	46%
Water stock mostly by troughs	na	70%
Monitor pasture composition for desirable species and weeds	na	77%
Have weed management plan including where grazing chemical and biological control	na	25%

4.4.2 TMP's – Southern Beef Producers

Comparisons with the December 2003 LPI Survey are based on like results, in some cases variations in question design have produced variables or discrepancies that are difficult to measure.

BUSINESS MANAGEMENT	**Dec '03**	**July '05**
Calculate cost of Production in c/kg	43%	49%
Participate in Farm Benchmarking	4%	16%
Use a specialist advisor (other than an accountant) at least once a year	5%	17%

GENETICS	**Dec '03**	**July '05**
Have a defined breeding objective	26%	34%
Use EBV's or Index values in sire selection or purchase (of those aware)	57%	52%
Have a documented cross breeding program	na	22%

MARKETING	**Dec '03**	**July '05**
Have a marketing plan for their business	30%	24%
Have documented customer specifications *(% of aware)*	66%	44%
Weigh cattle to monitor growth	67%	49%
Sold cattle over the hooks	62%	58%
Have received carcase feedback *(% of seller base)*	50%	57%
Have changed management practices as a result of carcase feedback *(% of seller base)*	na	48%

GRAZING MANAGEMENT	**Dec '03**	**July '05**
Monitor available feed quantity and quality relative to animal requirements*	28%	34%
Use NIRS technology?	na	5%
Rotationally fertilise pasture paddocks for animal production at least every third year.	na	84%
% of land sown to perennial pasture (mean %)	9%	30%
Have done soil test within last 3 years *('03 = soil test at all)*	77%	37%

PASTURE UTILISATION	**Dec '03**	**July '05**
Have a defined pasture utilization target for each paddock (aim to utilise a defined % of pasture growth on an annual basis)	na	37%
Consider the SOI or other seasonal climate forecasts when making stocking rate or other decisions	na	18%
Have assessed pasture dry matter / digestibility	27%	36%
Have calculated a feed budget for the year*[*]	28%	34%
Currently practice rotational grazing	55%	46%

REPRODUCTION	**Dec '03**	**July '05**
Assess cows using fat or condition scoring	44%	42%

[*] same data source.

Pregnancy test cows annually	na	48%
Bulls undergo Bull Breeding Soundness Examination before mating	na	33%
Bull Soundness Examination includes assessment of semen morphology	na	33%
Bull joining ratio (mean)	na	14%
Calf weaning timed to preserve breeder body condition and maximise chances of breeders calving again next year	na	16%
First calf heifers managed separately to main breeder herd	na	72%
Second calf heifers managed separately to main breeder herd	na	20%
Proportion of heifers joined at 15 months of age (mean)	na	50%
Proportion of heifers joined at 24-27 months of age	na	27%
Breeder culled for non-pregnancy and/or failing to raise a calf	na	84%
Use a controlled joining season	na	76%
Yard wean calves	na	61%

ANIMAL HEALTH	**Dec '03**	**July '05**
Have a documented herd health plan	na	26%
Know the health status of purchased stock	na	62%
Routine vaccination program for preventable diseases	na	77%
Vaccinate to prevent three-day sickness	na	3%
Vaccinate to prevent Clostridial Diseases	na	72%

NATURAL RESOURCE MANAGEMENT	**Dec '03**	**July '05**
Fertilise most paddocks every year	36%	51%
Have a property plan that documents land types on a paddock by paddock basis *(% of producers with business plan)*	na	48%
Have a property plan that documents land condition on a paddock by paddock basis *(% of producers with business plan)*	na	43%
Have a property plan that documents carrying capacity on a paddock by paddock basis *(% of producers with business plan)*	na	38%
Weed control is an issue *(med/high)*	69%	86%
Soil Acidity is an issue *(med/high)*	32%	73%
Dryland Salinity is an issue *(med/high)*	10%	32%
Water Quality is an issue *(med/high)*	17%	74%
Soil Erosion is an issue *(med/high)*	30%	57%
Fenced off riparian areas, wetlands and permanent waterholes	na	46%
Fenced off erosion gullies *(degraded areas)*	na	61%
Water stock mostly by troughs	na	62%
Monitor pasture composition for desirable species and weeds *(% of med/high)*	na	81%
Have weed management plan including where grazing chemical and biological control *(% of med/high)*	na	25%

4.4.3 Critical TMP's – Southern Sheep/Lamb Producers

	Merino Producers		Prime Lamb Producers		Sheep Producers
	Dec '03	July '05	Dec '03	July '05	July '05
Assess pasture dry matter	29%	29%	37%	34%	30%
Calculate a feed budget	32%	37%	35%	35%	34%
Have a documented breeding objective	32%	37%	35%	30%	32%
Use EBV's in sire selection	14%	32%	10%	47%	39%
Wean lambs at 14 weeks: a) 12-14 wks b) 14-16 wks	36%	31% 18%	28%	39% 14%	31% 16%
Weigh livestock	46%	34%	67%	45%	38%[1]
Fat score livestock	39%	49%	61%	67%	55%
Target specific markets for their sheep	55%	77%	73%	94%	83%[2]

4.4.4 TMP's – Southern Sheep Producers

BUSINESS MANAGEMENT	**Dec '03**	**July '05**
Calculate cost of Production in c/kg	44%	53%
Participate in Farm Benchmarking	5%	23%
Use a specialist advisor (other than an accountant) at least once a year	8%	30%

GENETICS	**Dec '03**	**July '05**
Have a defined breeding objective	31%	32%
Use EBV's or Index values in sire selection or purchase (of those aware)	39%	39%

MARKETING	**Dec '03**	**July '05**
Have a marketing plan for their business	32%	31%
Describe or have documented customer specifications	65%	83%[3]
Weigh sheep to monitor growth	60%	38%
Sold lambs over the hooks	53%	53%
Have received carcase feedback *(% of seller base)*	40%	47%
Have changed management practices as a result of carcase feedback *(% of seller base)*	na	44%

GRAZING MANAGEMENT	**Dec '03**	**July '05**
Monitor available feed quantity and quality relative to animal requirements*	33%	35%

[1] weigh sheep to monitor growth
[2] aware of market specifications for the sheep or lambs you produce
[3] aware of market specification, 29% of these actually document specifications.

Rotationally fertilise pasture paddocks for animal production at least every third year.	na	78%
% of land sown to perennial pasture (mean %)	16%	23%
Have done soil test within last 3 years *('03 = soil test at all)*	80%	37%

PASTURE UTILISATION	**Dec '03**	**July '05**
Have a defined pasture utilization target for each paddock (aim to utilise a defined % of pasture growth on an annual basis)	na	34%
Consider the SOI or other seasonal climate forecasts when making stocking rate or other decisions	na	20%
Have assessed pasture dry matter / digestibility	29%	30%
Have calculated a feed budget for the year*	33%	35%
Currently practice rotational grazing	47%	35%

REPRODUCTION	**Dec '03**	**July '05**
Assess sheep using fat or condition scoring	53%	55%
Scan for single & twin bearing ewes	22%	25%
Lamb ewes on a pasture with >1200kg green DM/Ha	na	20%
Maintain ewes in condition score 3 at joining	na	71%
Wean lambs at 14 weeks or less	34%	62%
Feed and manage rams 8 weeks prior to joining	na	66%

ANIMAL HEALTH	**Dec '03**	**July '05**
Have a documented herd health plan	na	16%
Know the health status of purchased stock	na	60%
Routine vaccination program for preventable diseases	na	94%
Vaccinate to prevent Ovine Johne's Disease	na	13%
Vaccinate to prevent Clostridial Diseases	na	83%
Regularly test for Drench resistance	na	41%

NATURAL RESOURCE MANAGEMENT	**Dec '03**	**July '05**
Fertilise Most paddocks every year	33%	45%
Have a property plan that documents land types on a paddock by paddock basis *(% of producers with business plan)*	na	41%
Have a property plan that documents land condition on a paddock by paddock basis *(% of producers with business plan)*	na	48%
Have a property plan that documents carrying capacity on a paddock by paddock basis *(% of producers with business plan)*	na	43%
Weed control is an issue *(med/high)*	72%	88%
Soil Acidity is an issue *(med/high)*	38%	69%
Dryland Salinity is an issue *(med/high)*	20%	34%
Water Quality is an issue *(med/high)*	17%	67%
Soil Erosion is an issue *(med/high)*	31%	63%
Fenced off riparian areas, wetlands and permanent waterholes	na	30%
Fenced off erosion gullies *(eroded areas)*	na	62%
Water stock mostly by troughs	na	52%
Monitor pasture composition for desirable species and weeds	na	83%

(% of med/high)		
Have weed management plan including where grazing chemical and biological control *(% of med/high)*	na	25%

5. Conclusions and Recommendations

5.1 Conclusions

The primary objectives of the LPI Communication and Research Adoption strategy is to facilitate the dissemination of R&D information to producers and to encourage practice change.

The Awareness & Adoption survey has collected significant detail on current practices and behaviour with regard to the TMP's that impact on productivity within the relative producer segments.

The outcome of this research highlights the impact on the industry that programs promoted under the LPI banner can have.

- This is evident through the impact course content has had on the **17%** of producers who have participated in, or attended an MLA program. A significant **65%** of program attendees have made changes to their management practices (adopted alternatives) as a result of attending or participating in an MLA program, course or workshop.

- **73%** of producers indicated a level of awareness for MLA programs, **23%** of these have attended a course. This strongly ties attendance with awareness.

    - This varies by program and producer segment, however the Edge courses have 31% of aware producers attending.

- A similar proportion (28%) of course aware producers, who have not yet attended, would like to participate or attend a course.

- Many of the individual programs were not readily recognised by producers, these brands or products have a relatively weak or low profile, however some key course names are widely recognised. Fragmentation of program brands is lessening the effectiveness of the LPI communication strategy and the impact of any follow on discussion amongst producers.

- The proportion of producer adoption of TMP's (contained in this summary report) appears to have varied between surveys, mostly positively and in some instances negatively. This could be the result of sampling or question interpretation issues, however it more likely represents a reflection on the changing prioritisation of management practices relative to the seasonal situation.

- The general increase in the level of adoption of Business Management practices, Natural Resource Management practices and Production related practices is evidence of the trend to introduce efficiency to livestock production and improve producer profitability.

In conclusion it also should be noted that completion of this extensive survey demonstrates the level of commitment respondents have to their respective industry's and the association they make with that and MLA.

5.2 Recommendations

This summary report has focussed solely on the MLA objective of instigating change at a producer level, as a result of this project it is evident that a number of factors will contribute to a rise in program or course participation and subsequent adoption of management practices impacting on production.

The clear message is to **continue to encourage producers** to participate in the MLA's communication, education and training. As a result change and adoption of innovative practices will occur.

MLA must concentrate on improving the following aspects of activity:

- Increase membership, more specifically the regular communication process that goes with membership has a marked impact on increasing awareness amongst producers of the available programs and courses. Creating producer affiliation with MLA through membership drives, or by whatever means possible, is critical to increasing the size of the database of producers that receive regular communication.

- Deliberately widen the LPI communication process to non-members with a view to creating program and course awareness outside of the traditional communication channel. This strategy will almost certainly assist in highlighting the value of membership and encouraging new members, thus in turn consolidating the effectiveness of the traditional member driven awareness and adoption model. This will also involve improving and centralising the database function.

- Consolidate the above activities around MLA's core program brands. Awareness and recall is fragmented due to the large number of courses and programs made available through MLA. To address this, the MLA brand needs to be the first association producers make with any program. Secondly the product or course names need to be rationalised to create a stronger identity for recall and communication by word of mouth amongst producers. This is the most powerful promotion available, if course names are not easily remembered word of mouth and industry noise will water down specific program awareness.

- Course participation leads to significant adoption and change, a large proportion of producers who are aware of MLA courses are lukewarm about attending. MLA personnel (or independent qualitative research) should attempt to gain a better understanding of what is attracting participants. Why does this message not translate to all producers and what does MLA need to do to improve the 'call to action' component of the course communication material.

These recommendations are not in any priority order, some are dependent on others, individually addressing any or all will have an impact on the overall awareness and adoption as evidenced by the survey findings.

6. Appendices

The following appendices are attached in *Axiom_LPI_2005_Report&DataTables.zip*

6.1 Appendix 1 Main data file(s)

Pdf files containing SurveyCraft tables of survey dataset. Various analysis perspectives have been required and due to the volume and complexity of the data several different data processing initiatives have been undertaken.
These include:

- *MLA Producer - Main Data Set v2.pdf*
- *MLA Producer - Beef Enterprise Type.pdf*
- *MLA Producer - Sheep Enterprise Type.pdf*
- *MLA Producer - Producer Segment.pdf*
- *MLA Producer - Q4.57_Q4.58.pdf*

6.2 Appendix 2 PowerPoint file

Detailed PowerPoint report containing the main findings from the survey.
This is listed as:

- *Axiom_MLA_LPI_2005_Report_11-8-05.ppt*