final report

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MLA and AWI

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Sheep Genetics Australia Management Agreement

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1 REPORT PURPOSE

This is a paper for information of the Sheep Genetics Executive and Advisory Committees.

2 REPORT AREAS

2.1 Major Outcomes by Year

2.1.1 2005/2006

Consultation with industry on the SHEEP GENETICS Business Plan and QA manual

Since July 2005 both the SHEEP GENETICS Business Plan and QA Manual have been displayed on the SHEEP GENETICS website and both MLA and AWI's websites. Copies of the two documents have also been circulated to a wide range of industry stakeholders including breed societies, agents and individual breeders. Comment was invited to be made on these two documents over the past months. This consultation period ends on the 30th of September 2005.Lucy Broad from Cox Inall will collate the information and return it to the SHEEP GENETICS executive for distribution so that the appropriate responses can be drafted. It is intended that a formal response to the consultation period be developed and made available to industry.

Once these comments have been received the business plan and QA manual will be appropriately amended and finalised so that they are ready for distribution and use for the commencement of commercial activities.

Following an initial meeting held in November with 10 potential providers to discuss the future of extension for SHEEP GENETICS an extension sub-group meeting was held in Sydney on 15 December to determine the way forward for services and extension needed for SHEEP GENETICS in the future. Those involved with the process were Brian Ashton from Rural Solutions SA, Sue Jarvis from Victoria, Linda Hygate from the McKinnon Project, Ann Ramsey from AWI, Bronwyn Clarke from Western Australia, Allan Casey from NSWDPI, Alex Ball and Richard Apps from SHEEP GENETICS. Of which all members have had significant involvement in either the establishment of SHEEP GENETICS or of past extension processes in the sheep industry.

Several of the people involved are now contributing to the development of the SHEEP GENETICS ram breeders manual and workshop. These people will be contracted over the next three weeks. The first draft of the ram breeders workshop will be available by the end of March 2006.

- **Industry approved quality assurance procedures**

The QA manual has now been reviewed and relevant comments that were collected from an industry group comprising breeders from several different breeds have been included in the document. Some of the changes that have been made to the document have been the establishment of ages of animals for base traits for certain trait groups and the post weaning fleece assessment. The ages at which certain fleece measurement have now been determined and agreed upon and are stated in the revised QA manual.

Allan Casey will present the latest draft of the QA manual on the 7th October.

The Quality Assurance Manual is currently being reviewed by Janet Pattison of SCISCRIBE and will be looking to complete the revision by the beginning of January. Other technical issues that have been discussed and amended include accuracy thresholds, approved indexes, base trait measurements in Management sub-groups and linkage between management groups, particularly between years.

- **SHEEP GENETICS database and WWW access**

David Rubie has completed a test version of the SHEEP GENETICS database. Several datasets from different organizations are being made available to test the importation routines, data validation, transfer to OVIS and reporting functions.

The SHEEP GENETICS website is now currently up and running and can be found at www.sheepgenetics.org.au. The website contains general information on SHEEP GENETICS, and also relevant issues that are under review. Copies of the Business Plan and the QA Manual which are currently under review can be found on the website. The invitation to attend the launch has been posted on the web site. Applications for interested parties to be apart of the SHEEP GENETICS Advisory Committee have also been posted on the website.

The SHEEP GENETICS database is now operational. All available datasets have been merged into the SHEEP GENETICS database. We are still running duplicate TS datasets between Dubbo and Armidale to ensure that all procedures have been correctly imbedded. Work has commenced on the XML component of web submission and delivery. The anticipated date for release is January 2006. We currently are using ABRI web solutions for web delivery. However, I am recommending that we undertake to develop web services within SHEEP GENETICS as it allows more flexibility and customization. The SHEEP GENETICS website is now currently up and running and can be found at www.sheepgenetics.org.au. The website contains general information on SHEEP GENETICS, and also relevant issues that are under review.

The new logos and subscription form are available from the web site.

- **SHEEP GENETICS branding**

All of the SHEEP GENETICS logo's and branding has been completed and have been in use. The style guide for the SHEEP GENETICS brands is available to anyone interested or needing to use the branding for any specific purpose, such as breeders for sale catalogues.

- **Merino Consultative Group**

The merino consultative group has so far held a meeting in Sydney with a positive outcome. On a whole the group are comfortable with the progress of the SHEEP GENETICS and will be meeting again on the 6th October for their second meeting.

2.1.2 2006/2007

- **SHEEP GENETICS database and WWW access**

Duplicate TS datasets are still being run between Dubbo and Armidale to ensure that all procedures have been correctly imbedded. Work is being carried out on the XML component of web submission and delivery and is in its final stages. The anticipated date for release is the beginning of March 2006. The SHEEP GENETICS website is now currently up and running and can be found at www.sheepgenetics.org.au. The website contains general information on SHEEP GENETICS, and also relevant issues that are under review.

The new logos and the subscription form are available from the web site. Letters have also been sent to all SHEEP GENETICS clients inviting them to provide semen catalogues to be displayed on the SHEEP GENETICS website. This will be at a minimal fee and the breeder will be able to provide a brief description of the ram and a photo.

- **Extension program to increase the understanding of genetic information in commercial producers**

Ram Breeders Kit developed. Ram breeder workshops held in key areas around Australia. Sheep Genetics was well represented at field days throughout the year.

MS Field Officers, Anne Ramsay and Bronwyn Clarke have attended various events and held workshops specific to MERINOSELECT as well as targeted key clients.

- **Implement SAP**

The Sheep Genetics team worked in conjunction with the SAP team to test scripts and provide feedback and corrections before going live with all of the Sheep genetics client accounting details.

2.1.3 2007/2008

- Implement extension program to increase number of seed stock clients for both LAMBPLAN and MERINOSELECT.
- Rollout of client and introductory workshops.
- Enhance development of electronic and web interface between Sheep Genetics, data managers and clients including greater reporting and diagnostic options.
- Implement LAMBPLAN maternal across-breed breeding values.
- Implement Corriedale trans-Tasman analysis for routine application. Continue R&D projects with other breeds as requested.
- Develop and implement extension programs for the utilisation of gene markers in both MERINOSELECT and LAMBPLAN.
- Implement new traits and analytical procedures as they are made available from Sheep CRC and Sheep Genetics technical development program.
- Implement education and training program for the utilisation of SHEEPOBJECT.
- Redevelop web services.
- Effective relationships with Sheep Genomics and Sheep CRC

2.1.4 2008/2009

- **Service Providers Update**

Sheep Genetics is currently in the process of conducting webinars for people who provide support services to LAMBPLAN and MERINOSELECT. These webinars are to engage with support service providers by reporting on the Roles and Responsibilities document, and to launch the Support Services Toolkit developed by Anne Ramsay, Bronwyn Clarke and Luke Stephen.

Feedback from the first webinar was largely positive, with the following steps outlined to improve the collaboration process.

- Update Sheep Genetics website with service provider contacts and areas of interest
- Check that service providers are on all Sheep Genetics distribution lists (including breeders update emails and Breeder Bulletins)Provide a newsletter specifically for service providers quarterly
- Host a webinar for service providers following the newsletter release quarterly
- Hold face-to-face meetings with service providers in conjunction with Information Nucleus Field Days
- Host a Service Provider forum on the Sheep Genetics website
- Report on Service Provider activities to MLA AWI and Advisory Committee

- **Sheep Object development**

The development of genetic evaluation for the sheep industries have brought about the need for existing selection indexes to be expanded. A comprehensive breeding objective tool

(SheepObject) has been developed for the Australian sheep industries. This tool will provide initial and regular updating of selection indexes, as well as easy access to customised indexes for individual breeders.

In addition, SheepObject accommodates diverse sheep production systems which encompass:

- pure breeding,
- single and multiple tier cross breeding, as well as
- meat and wool production, and many combinations of these.

Sheep Genetics' first delivery target for SheepObject is to develop and refine standard indexes for the Terminal and Maternal breeds by July 2009. These will be developed and validated leading up to the Sheep Genetics Technical Committee (SGTC) meeting in July. This is currently ranked as a highest priority task by the SGTC.

The next target is the use of SheepObject by genetic advisors, via a web interface. The web interface is already quite advanced, and it is recommended that the first stage development can be considered complete at the June Sheep Genetics Technical Committee meeting.

- **Sheep Genetics Business Model Review**

Scott Williams (SED Consulting) has been contracted to undertake the business model review, and interviews are underway. Some of the representatives from MLA, AWI, Sheep CRC, sheepGENOMICS, Merino Consultative Group, Technical Committee, Advisory Committee and Sheep Genetics subscribers have already been contacted, with others to follow in the coming weeks.

The timeline for the business model review is:

- Draft report with key client feedback by 31 July 2009
- Present information to Executive and Advisory Committees for feedback August 2009
- Draft report due 30 September 2009 for October Board meetings of AWI and MLA
- Final report November 2009

- **sheepGENOMICS / Sheep CRC**

Information from sheepGENOMICS and the Sheep CRC will start to be presented back to industry over the coming months through two pathways. The first is through the 50k SNP research chip. The SNP chip is now being trialled in terms of its ability to predict animals' genetic merit, partly by comparing its results with the ASBVs for industry sires with high accuracy ASBVs.

Also, a number of traits have now been recorded on enough animals in the Information Nucleus to begin to produce meaningful "research" breeding values. This allows you to be informed on what they are telling us, and to look at different ways of expressing these breeding values.

- **Development of Wrinkle ASBV**

The development of a prototype wrinkle ASBV is quickly moving ahead, with an expected launch in mid July. The initial product will be a prototype as further research and development of OVIS is required. This further research involves estimating fixed effect adjustments, correlations with other commercially important traits, linkage, etc.

The current timeline to develop prototype wrinkle ASBVs is:

1. New dataset collated and analysed (June 12)

- Reanalyse body breech and neck wrinkle data
- Re-estimate parameters for these traits (update on Dec 08 analysis)
- Define what the breech traits will be (age stage, how many traits etc)

2. TC sub group review analysis outcomes (June 17)

- Determine if prototype ASBVs are ready to be released or if further work is required

3. Finalise stand alone analysis (July 1)

- analysed in a single trait model, similar to WEC
- Signed off by full TC

4. Launch prototype ASBVs (mid July)

- Available on SG website but not integrated into search function

5. Future work (Dec 2009)

- Estimate correlations between defined breech traits and other commercially important traits
- Integrate breech traits into OVIS
- ASBVs no longer prototype

- **Publications – Status update**

Sheep Genetics currently has a number of publications under development or ready for publishing. A summary of these documents is listed below.

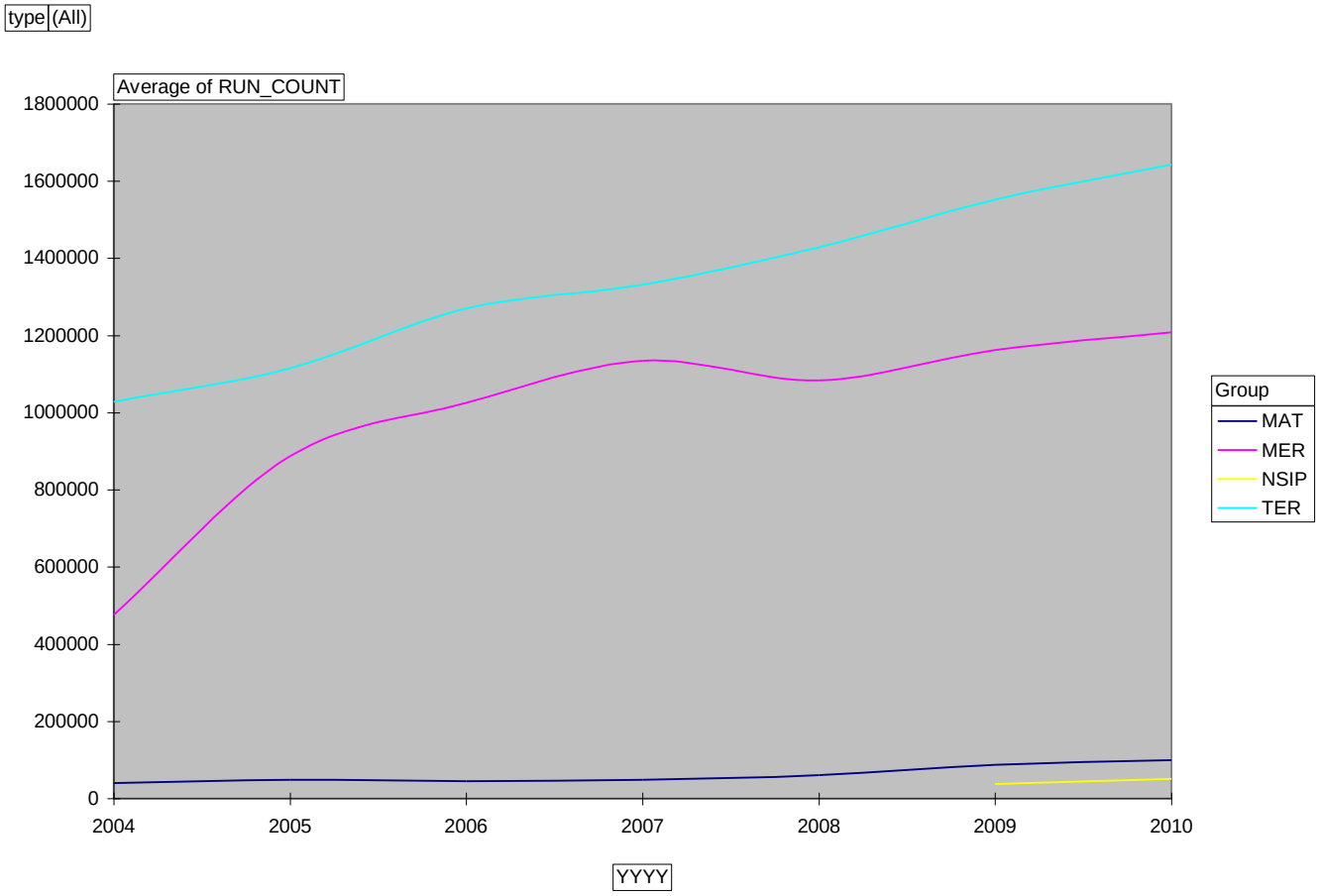
• QA Manual	Development / review
• Sheep Genetics flyer	Development / review
• Breeders Guide	Proof reading
• MERINOSELECT Case Studies	Desk topping
• Support Services Toolkit	Desk topping

- ASBV Pocket Guide Published

2.1.5 2009/2010

- Development of web interfaces for data management and reporting
- Introduce new traits for development
- Implement new breeding values into Sheep Genetics
- Implement OVIS model updates
- Improve the efficiency of Sheep Genetics business model
- Develop and implement new tools to improve Sheep Genetics communications
- Roll out of Making More from Sheep Genetics and Introduction to Sheep Genetics workshops
- Liaison with Sheep CRC and Sheep Genomics
- Sheep Genetics business plan review for 2011-15

2.2 Sheep Genetics Animal Numbers by Run



2.3 Financial Reports by Year

Item	Income 2005/6					Expenditure 2005/6		
	Meat breeders	Merino breeders	AWI funds	MLA funds	Total		AWI Share	MLA Share
LAMBPLAN	$288,908							
MerinoSelect		$66,854						
Industry Development Funds			$113,777	$37,926				
Totals	**$288,908**	**$66,854**	**$113,777**	**$37,926**	**$507,465**			
Personnel			$155,000	$392,000				
Operations								
Analysis contract			$16,373	$16,373		$32,746	0.50	0.50
Web software			$4,952	$4,952		$9,904	0.50	0.50
Tech and Advisory C'tees			$32,231	$32,231		$64,462	0.50	0.50
General expenses			$106,277	$106,277		$212,554	0.50	0.50
Totals			**$314,833**	**$551,833**		**$866,666**		

2006-2007 FY Total Expenditure Vs Revenue

Project Name	WBS Element name	Planned Cost	Actual Cost	Actual Revenue
Sheep Genetics Australia Routine Evaluaiton		**$ 66,288**	**$ 66,288**	
CMA : SHEEP GENETICS Technical and Advisory Committee		**$ 48,178**	**$ 29,911**	
CMA : Ram Breeders Workshop		**$ 40,000**	**$ 14,020**	
CMA : SHEEP GENETICS - Operating costs LAMBPLAN		**$ 40,500**	**$ 91,677**	
SHEEP GENETICS - Operating costs MERINOSELECT		**$ 61,650**	**$ 90,612**	
SHEEP GENETICS Breeder's Guide and Workshop manual projects		**$ 13,160**	**$ 31,600**	
SHEEP GENETICS Roadmap for Business Options		**$ 10,000**	**$ 9,000**	
LAMBPLAN Improving Productivity Support		**$ 700,000**	**$ 827,052**	
SHEEP GENETICS - Lambplan and Kidplan Revenue				**$ 312,613**
SHEEP GENETICS - MERINOSELECT Revenue				**$ 117,054**
Sheep Genetics Australia Management Agreement				**$ 407,826**
MLA Contribution				**$ 322,667**
	Totals	**$ 979,776**	**$ 1,160,160**	**$ 1,160,159**
	SHEEP GENETICS Net Position as at 30.06.2007	**$ 0**		

Sheep Genetics Australia Management Agreement

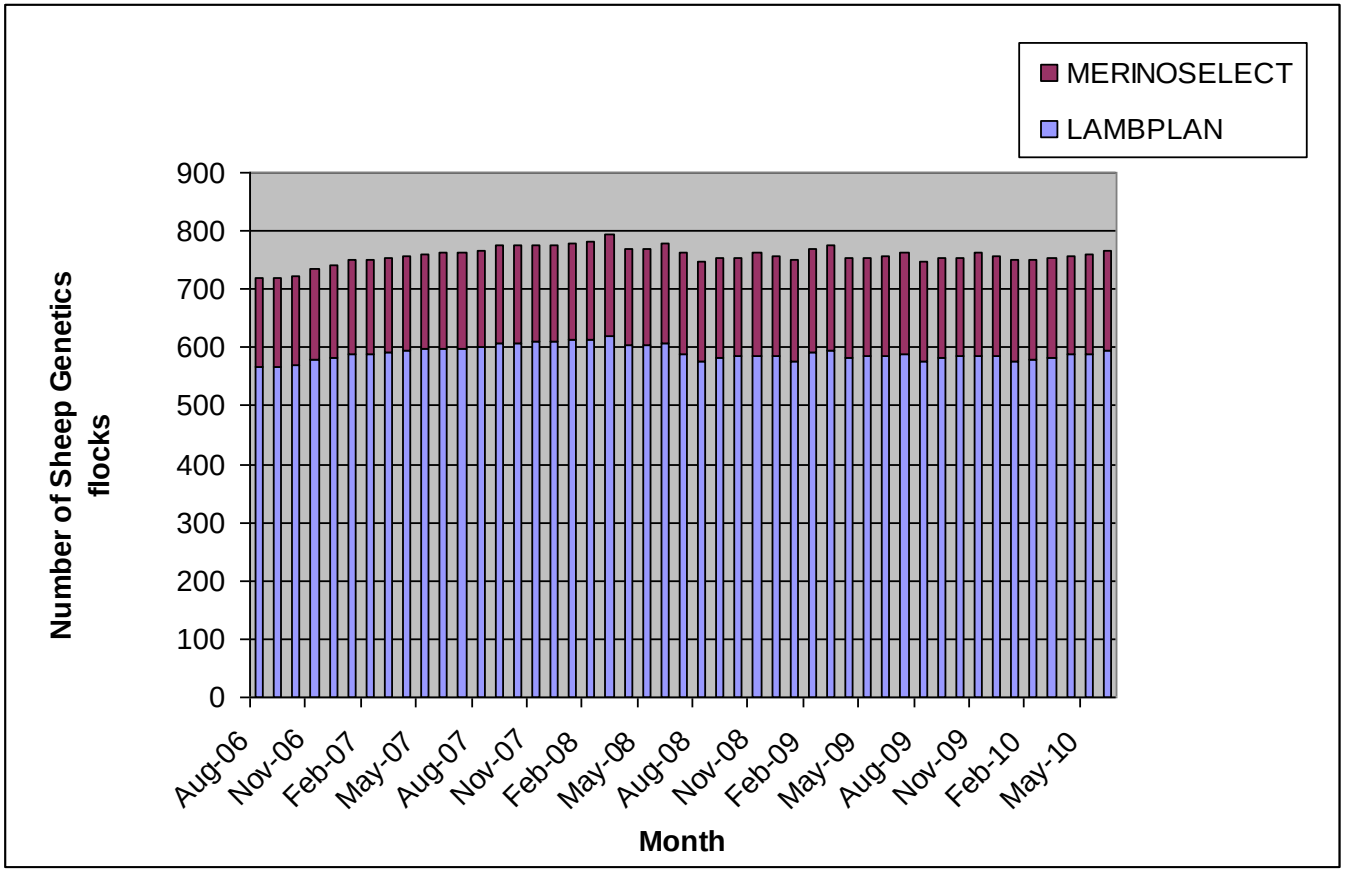
Sheep Genetics Financials 1.07.2007 to 30.06.2008					
Project Code	**Project Name**	**07 -08 Budgeted Expenditure**	**07-08 YTD Expenditure**	**07-08 Budgeted Revenue**	**07-08 YTD Revenue**
B.SHEEP GENETICS.0100	Sheep Genetics Australia Management Agreement			$ 311,310	$314,838.43
	MLA contribution to Sheep Genetics			$ 400,000	$149,612.00
B.SHEEP GENETICS.0117	SHEEP GENETICS LAMBPLAN Revenue - Subscriptions			$ 159,100	$145,113.18
	SHEEP GENETICS LAMBPLAN Revenue - Database Charges			$ 160,000	$174,325.73
B.SHEEP GENETICS.0118	SHEEP GENETICS MERINOSELECT Revenue - Subscriptions			$ 43,100	$33,693.00
	SHEEP GENETICS MERINOSELECT Revenue - Database Charges			$ 82,500	$64,775.57
B.SHEEP GENETICS.0116	SHEEP GENETICS Workshops - Revenue			$ 9,000	$4,810.87
B.SHEEP GENETICS.0005	Sheep Genetics Australia (SHEEP GENETICS) - Routine Evaluation	$ 114,392	$ 114,392		
B.SHEEP GENETICS.0116	CMA: SHEEP GENETICS Workshops - Expenses	$ 40,000	$ 46,668		
B.SHEEP GENETICS.0119	CMA: SHEEP GENETICS Advisory and Technical Committee	$ 42,000	$ 37,233		
B.SHEEP GENETICS.0120	CMA: SHEEP GENETICS Breeder's Guide Production	$ 20,000			
B.SHEEP GENETICS.0121	Implementation of Web Based Data Facility	$ 53,500	$ 35,200		
B.SHEEP GENETICS.0123	Industry Consultation on Business Delivery Options	$ 28,000	$ 27,647		
B.ZSA.2008	SHEEP GENETICS LAMBPLAN Salaries	$ 277,299	$ 247,852		
	SHEEP GENETICS LAMBPLAN Costs	$ 71,650	$ 67,554		
	SHEEP GENETICS MERINOSELECT Salaries	$ 255,969	$ 228,787		
	SHEEP GENETICS MERINOSELECT Costs	$ 79,474	$ 81,836		
	Total	**$ 982,284**	**$ 887,169**	**$ 1,165,010**	**$887,168.78**
	Net Position as at 30th June 2008	**$ (0)**			

Sheep Genetics P & L YTD 2008-2009

	LAMBPLAN	MERINOSELECT	TOTAL
Costs			
TOTAL SALARIES	$ 258,186	$ 262,381	**$ 520,566**
AGBU Routine Evaluation	$ 54,876	$ 54,876	**$ 109,752**
CMA: SHEEP GENETICS Workshops - Expenses	$ 4,127	$ 1,896	**$ 6,024**
CMA: Advisory Committee Total	$ 11,222	$ 11,222	**$ 22,444**
CMA: Techncial Committee Total	$ 5,285	$ 5,285	**$ 10,571**
CMA: Breeders Guide Production	$ 8,909	$ 8,909	**$ 17,818**
Implementation of Web Based Search Facility	$ 9,150	$ 9,150	**$ 18,300**
CMA: Communications 08/09	$ 15,920	$ 15,920	**$ 31,839**
Business Plan Review	$ 8,715	$ 8,715	**$ 17,430**
TOTAL CONTRACTS	$ 109,489	$ 107,258	**$ 216,748**
Total Travel	$ 40,539	$ 33,695	**$ 74,234**
Total Office Expenses	$ 15,571	$ 17,313	**$ 32,782**
Total Computer Services	$ 3,850	$ 3,989	**$ 7,840**
Total Publications	$ 17,516	$ 13,788	**$ 31,304**
TOTAL SUPPORT COSTS	$ 77,475	$ 68,786	**$ 146,160**
TOTAL COSTS	$ 445,150	$ 438,425	**$ 883,474**
	50%	50%	
INCOME			
Total LAMBPLAN membership	$ 137,280	$ -	**$ 137,280**
Total MERINOSELECT membership	$ -	$ 36,675	**$ 36,675**
LAMBPLAN Per Animal Charges	$ 179,602	$ -	**$ 179,602**
Total MERINOSELECT Per Animal Charges	$ -	$ 64,374	**$ 64,374**
Total Other Income	$ 178	$ 443	**$ 621**
TOTAL INDUSTRY INCOME	$ 317,060	$ 101,492	**$ 418,552**
NET POSTION SO FAR	-$ 128,090	-$ 336,933	**-$ 464,922**
Australian Wool Innovation			**$ 236,611**
Meat & Livestock Australia			**$ 228,311**
TOTAL RDC INCOME			**$ 464,922**
PROFIT LOSS			**$ -**

Sheep Genetics P & L YTD 2009-2010		*LAMBPLAN*	*MERINOSELECT*	**TOTAL**
TOTAL SALARIES		*$ 362,260*	*$ 228,987*	**$ 591,246**
AGBU Routine Evaluation		*$ 62,870*	*$ 62,870*	**$ 125,740**
CMA: Workshops - Expenses		*$ 4,437*	*$ 6,877*	**$ 11,314**
CMA: Advisory Committee Total		*$ 6,666*	*$ 6,666*	**$ 13,332**
CMA: Technical Committee Total		*$ 1,910*	*$ 1,910*	**$ 3,819**
CMA: Breeders Guide Production		*-$ 3,345*	*-$ 3,345*	**-$ 6,690**
Implementation of Web Based Search Facility		*$ 23,600*	*$ 23,600*	**$ 47,200**
CMA: Communications 08/09		*$ 2,530*	*$ 2,530*	**$ 5,061**
CMA: Communications 09/10		*$ 4,335*	*$ 4,335*	**$ 8,669**
CMA: Business Plan Review		*$ 21,074*	*$ 21,074*	**$ 42,149**
TOTAL CONTRACTS		*$ 103,002*	*$ 105,443*	**$ 208,445**
B.ZSA.2010.0010	Local Travel	$ 8,013.68	$ 16,692.49	
B.ZSA.2010.0020	Overseas Travel	$ 538.52	$ -	$ 538.52
B.ZSA.2010 0030	Entertainment	$ -	$ 361.23	$ 361.23
B.ZSA.2010 0040	Catering/Staff Amenities	$ 858.56	$ 1,016.25	$ 1,874.81
B.ZSA.2010 0060	Conferences	$ 1,922.70	$ 1,486.33	$ 3,409.03
B.ZSA.2010 0070	Memberships	$ 513.13	$ 513.14	$ 1,026.27
B.ZSA.2010 0080	Phones	$ 2,332.51	$ 2,872.65	$ 5,205.16
B.ZSA.2010 0090	Postage & Couriers	$ 3,132.06	$ 3,278.83	$ 6,410.89
B.ZSA.2010 0100	Stationary & Photocopier	$ 1,306.51	$ 1,178.68	$ 2,485.19
B.ZSA.2010.0110	Magazines & Information	$ 4,143.77	$ 4,793.78	
B.ZSA.2010 0150	Staff Development	$ 1,152.39	$ 1,152.38	$ 2,304.77
B.ZSA.2010 0180	Other Office costs	$ 6,191.06	$ 8,045.12	$ 14,236.18
TOTAL SUPPORT COSTS		*$ 50,105*	*$ 41,391*	*$ 37,852*
TOTAL COSTS		*$ 515,367*	*$ 375,821*	**$ 837,544**
INCOME				
LAMBPLAN membership		*$ 126,735*	*$ -*	**$ 126,735**
MERINOSELECT membership		*$ -*	*$ 37,575*	**$ 37,575**
LAMBPLAN Per Animal Charges		*$ 72,352*	*$ -*	**$ 172,352**
MERINOSELECT Per Animal Charges		*$ -*	*$ 75,664*	**$ 75,664**
Other Income	*(Adjust to balance)*	*$ 381*	*$ 559*	***$ 940***
Total Other Income		*$ 381*	*$ 559*	**$ 940**
TOTAL INDUSTRY INCOME		*$ 299,468*	*$ 113,798*	**$ 413,266**
NET POSTION SO FAR		*-$ 215,899*	*-$ 262,023*	**-$ 424,278**
TOTAL RDC INCOME				**$ 424,278**
PROFIT LOSS				**$ -**

2.4 Client Reports



2.5 Staff Changes

2.5.1 Sheep Genetics

Date	Sheep Genetics Manager	LP Project Officer	MS Project Officer	LP Database	MS Databse	Project Administrator	Project Administrator	Project Administrator (Part time)
July 2005	Alex Ball	Richard Apps	Sam Gill	Stephen Field	David Rubie	Natasha Mildren	Emily Wright	Fiona McLoughlin
November 2006	↓	↓	↓	↓	↓	Vicky Vivers (Casual)	↓	↓
January 2007	↓	↓	↓	↓	↓	Alice Dowling	Alanna Roberts	↓
April 2007	↓	Matthew Dwyer	↓	↓	↓	Vicky Vivers (Casual)	↓	↓
May 2007	Richard Apps	↓	↓	↓	↓		↓	↓
July 2007	↓	↓	↓	↓	↓	Nicole Williams	↓	↓
December 2007	↓	↓	↓	↓	↓	↓	Position made redundant	↓
November 2008	↓	↓	Luke Stephen	↓	↓	↓	—	↓
January 2009	Sam Gill	↓	↓	↓	↓	↓	—	↓
April 2009	↓	Position Vacant	↓	↓	↓	↓	—	↓
August 2009	↓	Hamish Chandler	↓	↓	↓	↓	—	↓

2.5.2 Executive Committee

Dr Paul Swan resigned from AWI leaving his position vacant for several months. This position was filled by Jane Littlejohn.

Date	MLA Manager	MLA Manager	AWI Manager	AWI Manager	Sheep Genetics Manager
2005	Reuben Rose	Rob Banks	Ian Rogan	Len Stephens	Alex Ball
				Paul Swan	
2006			Troy Fisher		
2007	Ian Johnsson	Alex Ball		Geoff Lindon	Richard Apps
2008			Lu Hogan		
2009			Paul Swan		Sam Gill
2010			Jane LittleJohn		

2.6 Technical Committee

Core Committee	Have Participated
Dr Hans Graser – AGBU	Mr Rob Woolaston – Chairman 2005-2008
Dr Daniel Brown – AGBU	Dr Bronwyn Clarke
Mr Andrew Swan – AGBU	Ms Anne Ramsay
Dr Alex Ball – MLA	Miss Christie Iker – AGBU
Mr Allan Casey – NSW DPI	Mr Richard Apps
Mr Geoff Lindon – AWI	Dr Li Li
Dr Robert Banks – Chairman since 2008	Dr Kim Bunter
Dr Julius Van Der Werf – UNE	Troy Fisher
Dr Kevin Atkins – NSW DPI	Jen Smith
Mr Sam Gill – Sheep Genetics	

2.7 Advisory Committee

Date	MLA	AWI	Industry
2005	Alex Ball	Ian Rogan	Richard Bull (Chairman)
	Reuben Rose	Len Stephens	Tom Hanson
	Mark Spurr	Paul Swan	Philip Toland
	Rob Banks		Barry Lang

			Rodney Watt
			Bill Sandilands
			Geoff Lindon
2006	Alex Ball	Ian Rogan	Ian Donges (Chair)
	Rob Banks	Troy Fisher	Philip Toland
	Reuben Rose	Paul Swan	Rodney Watt
			Matthew Coddington
			Ester Price
			Andrew Bouffler
			Craig Wilson
2007	Richard Apps	Geoff Lindon	Ian Donges (Chair)
	Alex Ball	Ian Rogan	Andrew Bouffler
	Rob Banks	Troy Fisher	Matthew Coddington
			Don Pegler
			Phil Toland
			Rodney Watt
			Craig Wilson
2008	Richard Apps	Geoff Lindon	Philip Attard (Chair)
	Alex Ball	Lu Hogan	Matthew Coddington
	Rob Banks		Craig Wilson
			Andrew Bouffler
			Don Pegler
			Andrew Mosley
			Tom Silcock
2009	Sam Gill	Geoff Lindon	Philip Attard (Chair)
	Alex Ball	Lu Hogan	Don Pegler
	Rob Banks	Paul Swan	Andrew Mosley
			Tom Silcock
			Dale Price
			Murray Long
			Mark Mortimer
			Warren Russell

2.8 Technical Committee Report

2.8.1 Routine Genetic Evaluation

For the duration of the project, fortnightly runs of OVIS have been performed for all breeds for which new data has entered the database. Throughout this time there has been significant growth in all the databases. There has also been a growth in the number of analyses being conducted.

During the projects life approximately 382 million records were processed in 1,459 separate routine analyses (on average 30 analyses a month).

AGBU also provides support for MLA staff and breeders with respect to; diagnostic reports, data files, EBV query reports, parameter files, EBV information and analysis information.

2.8.1.1 LAMBPLAN

108 routine fortnightly analyses of OVIS have been performed for Terminal sire database. This number included a number of research evaluations.

There were also 867 analyses for the Maternal breeds during the life of the project, averaging 18 analyses per month from up to 15 different breeds.

2.8.1.2 MERINOSELECT

During the project 204 approximately fortnightly evaluations have been performed for MERINOSELECT databases, including research evaluations. There have been an additional 44 “Merino Try Before You Buy” runs and approximately 186 within flock runs.

Additional functionality was incorporated into the run script to enable SG to deliver smaller within flock runs. These runs are a smaller version of the standard Merino run but are used for unlinked or problematic flocks or groups of animals with no pedigree and basic measurements. This functionality also included the ability to run these analyses at the same time as the normal routine runs.

As a result of the research conducted under SHGEN.113 new routine analyses were developed for visual traits. A new version of OVIS was developed to complete a visual trait analysis independently from the main analysis. This additional analysis is now implemented to run after each MERINOSELECT and TBYB run to produce breeding values for breech and body wrinkle. A prototype analysis has been developed with additional traits, including early and late expressions of breech cover, dag score, fleece colour, fleece rot, fleece character, and staple weathering. This is currently undergoing testing.

OVIS and the input files were also modified to accommodate the inclusion of named syndicates into the MERINOSELECT analysis.

2.8.1.3 KidPlan

Monthly runs of OVIS have been performed for KidPlan database. This resulted in 82 analyses. The KidPlan database now has 10,224 animals.

2.8.1.4 National Sheep Improvement Program of the United States of America

MLA has established an agreement to conduct routine genetic evaluations for the National Sheep Improvement Program (NSIP). AGBU worked with MLA, SG and NSIP staff to evaluate opportunities to collaborate and work through the development of new analyses for NSIP breeds. Currently three new analyses have been developed for Targhee, Suffolk and Polypay breeds from the NSIP database. This process involved importing new data into the SG database, setting up new parameter files for each of the breeds and implementing new runs into the routine evaluation scripts. A large amount of testing and diagnostics were conducted and reported back to SG and NSIP.

This collaboration has worked very smoothly and successfully and has been an excellent demonstration of SG's and AGBU's ability to establish international collaborations.

2.8.1.5 Dohne

MLA has established an agreement with the Dohne society to conduct preliminary genetic evaluations for the society to trial the system. AGBU worked with MLA and SG staff to evaluate opportunities to collaborate and work through the development of a new analysis for the Dohne breed. A new analysis has been scripted for the Dohne breed and run as a "Try Before You Buy" scenario. This process involved importing new data into the SG database, setting up new parameter files for this breed and implementing a new run into the routine evaluation scripts. Testing and diagnostics were conducted and reported back to SG and members of the Dohne society.

This process has also worked very successfully and again has been an excellent demonstration of SG's and AGBU's ability to establish collaborations with other organisations.

2.8.1.6 AMSEA

AGBU has continued to analyses the AMSE CTSE database and produce the Merino Superior Sires publications.

Within flock analyses have been conducted on behalf of the Australian Merino Sire Evaluation Association for the following sire evaluation sites:

Site	2005 drop	2006 drop	2007 drop	2008 drop
Badgingarra (WA)		✓	✓	✓
Elders Victoria	✓	✓	✓	✓
Longreach (QLD)				✓
Macquarie (NSW)				✓
New England (NSW)	✓	✓	✓	✓
South West Slopes (NSW)	✓			✓
Tasmania			✓	

Additional analyses were conducted on behalf of the Australian Merino Sire Evaluation Association to compare ASBVs to EBVS from analysis of AMSEA data only. A report on the comparisons was prepared and presented to the AMSEA Executive meeting on 25 June 2008. As a result of this presentation AMSEA have decided to continue using ASBVS for future editions of Merino Superior Sires.

2.8.1.7 Lambing Ease and Gestation Length

As a result of the research conducted under SHGEN.113 new routine analyses were developed for lambing ease and gestation length. The CATCON program and supporting software were used to implement an addition analyses for each breed with records for these traits.

2.8.1.8 Marker assisted breeding values

OVIS has been enhanced to handle genomic data in the form of marker estimated breeding values (GEBV). These GEBV have been developed using the Sheep CRC's Information Nucleus Flock as a discovery population, and are predictions of breeding value given genotypes derived from a 50K SNP panel.

GEBV are included in OVIS as correlated traits and a major part of the research has been to estimate genetic covariances between MEBV traits and standard OVIS traits. This was achieved for 8 MEBV traits in Merinos, and will be extended to terminal sires and maternal breeds in the near future. The prototype model will be tested as further MEBV's become available through the pilot project.

As part of this development a database of runs has been developed with a series of programs to make the process of developing and co-ordination of runs more streamlined.

2.8.1.9 Index Accuracy

A program was developed to estimate index accuracy. After approval by the Technical Committee the OVIS analysis system was modified so that after each analysis index accuracies are estimated for all the standard indexes.

2.8.1.10 Screening for failed service sires

Removal of failed service sires was implemented into he routine runs scripts.

2.8.1.11 Diagnostics

Diagnostic support was regularly provided to Sheep Genetics staff on a range of issues covering all breed groups. The majority of this diagnostic work was related to changes in ASBVs over time.

Development of a comprehensive database to store summary statistics from each run has continued. This database stores breed, flock, breed by trait, and flock by trait level statistics. These statistics are calculated after each run and stored in the database. OVIS then compares these statistics between runs and will email warnings and even hold results back as required. This database will also be a valuable tool for conducting routine EBV diagnostics.

The COMPARE program was also re-implemented. This program compares the EBVs between consecutive runs for each breed and emails a summary of breeding values and animals that have changed more than anticipated. Improved summaries and formatting of emails which detail changes in ASBVs between consecutive runs were developed.

Test runs of OVIS were conducted as required to evaluate changes made to the OVIS software, the parameter files and the databases. Comparisons have also been made of the EBVs, genetic group solutions and genetic trends from each of these runs. Within flock runs have also been completed to help investigate problems with genetic trends and genetic group solutions.

2.8.1.12 Other activities

To enhance operational flexibility access to OVIS within AGBU was improved so that it could be easily run and maintained from a number of computers. This required moving the OVIS system (source, parameter and executable files) and re-compiling for a number of platforms using a new and more efficient compiler. All these files are now stored in a central location with a number of AGBU staff having access. This creates a backup system if the main server were to fail, and allows large scale test analyses to be performed without interfering with the routine runs.

An internal SQL database system for hosting OVIS files has also been developed. This has simplified the task of preparing data files for research projects.

2.9 Advisory Committee

2.9.1 2005/6

At the beginning of September a media release was distributed inviting interested parties to apply for membership of the SHEEP GENETICS Advisory Committee. Along with the media release, advertisements had been run in the regional papers with a large number of people responding. The closing date for these application was 30th September. As of the end of the month over 40 enquiries had been received, with around 25 people sending in applications.

There were only 2 meetings for the year, one face to face and one teleconference. The second face to face meeting scheduled for April was cancelled due to budget constraints.

The SHEEP GENETICS Advisory Committee Chairman, Mr Ian Donges, visited Armidale to have a meeting with the SHEEP GENETICS Manager and to meet members of the SHEEP GENETICS staff. He was given a shortened version of the information session presentations that are currently being run which provide a very inclusive run down of SHEEP GENETICS and its operational aspects.

The new SHEEP GENETICS Advisory Committee will be meeting for the first time on 18, 19 January 2006 in Armidale so they too can meet members of the SHEEP GENETICS staff. A dinner will be held the evening of the 18th January for the Committee and other influential stakeholders involved in SHEEP GENETICS.

2.9.2 2006/7

Two face to face meetings were held on the 9th of November 2006 and the 4th of April 2007.

Topics covered during the November meeting were:

- Operating Plan
- Review of TOR for Road Map
- Effect of drought on members intake
- Proof of Profit PIRD
- Staff Changes
- MERINOSELECT Field Staff appointed – Anne Ransay and Browyn Clarke
- CRC Information Nucleus
- Sheep Genomics

Topics covered in the April meeting were:

- Road Map Industry Consultation
- DAFF 3 year review
- AC turn-over procedures

- MS Indexes
- CRC Information Nucleus
- MS TBYB
- MS Data Quality Grades

2.9.3 2007/8

Three meeting were held, one teleconference on the 17th of June 2008 and two face to face meetings on the 2nd of November 2007 and the 4th of April 2008.

Topics covered in the November meeting were:

- MS Analysis Update
- Road Map
- Complaints management
- CRC/Genomics

Topics covered in the April meeting were:

- How to increase uptake
- Current and proposed activities
- Rob Banks presented a paper on who receives the value made through genetic gain

The topic covered in the June Teleconference was how to increase breeder confidence in the MERINOSELECT product.

2.9.4 2008/9

Three meetings were held, two face to meetings on the 5th of December 2008 and the 6th of March 2009, as well as one teleconference on the 9th of June 2009.

Topics covered in the December meeting were:

- Industry position paper (what is the role of SG staff and what is the role of commercial service providers)
- On-going role of SG in the genetics of mulesing
- Public listing of individual flocks – level of disclosure through web search system
- Getting started with Sheep Genetics
- Information Nucleus update
- Issues identified last meeting

Topics covered in the March meeting were:

- Achieving better engagement with service providers
- Sheep Genetics role in phasing out mulesing
- Improving confidence in MS data integrity
- Maintaining LP uptake and improving genetic gain

- Demonstrating benefit-cost of ASBVs to industry
- Development of SG business model
- Tactical issues 08/09 to develop and improve Sheep genetics services
- Technical Development
- Extension and communication
- Business status report

In the June teleconference, AC members all gave reports.

2.9.5 2009/10

Main topic of this meeting was the alternative business models for Sheep Genetics going forward. The committee agreed on the following principles.
Agreed Strategic Principles:

1. SG should be involved in the roll-out of genomics
2. SG should remain the vehicle for the delivery of future R&D outcomes
3. The principle of genetic improvement prevails over cost recovery

MLA and AWI through SG have responsibility for verification of genomic and genetic platforms to assure industry value proposition

4. SG should explore other service that can be delivered to the current client base and possibly an expanded client base
5. SG will minimize the cost of delivery of products to the industry

SG should maintain, protect and allow the use of the database for the good of the Australian sheep industry as a whole

6. AC is unable to identify a benefit from changing the current business model but supports the expansion of the service offer where value to the industry can be demonstrated
7. AC is very concerned about any possible moves to sell off or privatize SG because of risks concerning the integrity, credibility and sustainability of the database
8. AC endorses the current governance structure subject to the continuation of current funding arrangements
9. AC recommends that there be ongoing review of the SG business structure dependent on industry development and demand or financial surplus

Teleconference 03.05.10

The main topic of this meeting was approval of the new business plan and proposed increase in prices. The committee agreed on the following motion.

Move that the AC endorse the current 3% increase proposed is at the top limit of what we believe that the current income and a further increase may reduce uptake and animals in the database.

3 REPORT APPROVALS

Prepared by _____
Project Manager

Approved by _____
Project Sponsor

_____
Executive Sponsor

_____
Client Sponsor

4 APPENDICES

4.1 Document Guidelines

4.2 Project Status Report Sections Omitted