



SIL Newsletter

MEAT & WOOL NZ

Genetics

Issue 10

Autumn 2009

Welcome to this newsletter for SIL breeders and others in the sheep industry.

SIL is very pleased to invite you all to a Sheep Genetics Day – “Where we have got to, where we can go” run in conjunction with the NZSAP conference at Lincoln, Thursday 25th June 2009.

Sheep genetics experts will review SIL’s first 10 years in the NZSAP morning session, and after lunch we will give you an update on things new & topical with SIL. The day will end with a forum focusing on where we want to go with sheep genetics in New Zealand.

The day is also a chance to mingle with other people in the sheep industry including farmers, ram breeders, SIL staff and national experts.

We have included the programme and registration form for the day with this newsletter. They are also on our SIL website (www.sil.co.nz). We do require you to register for the day to help us plan for numbers attending, but will accept registrations on the day for a slightly increased registration price.

As part of the ‘new and topical session’ at the Sheep Genetics Day, we will present information on a number of developments we are working on. One of the biggest tools we plan to release is the SIL-ACE search tool (SAST), accessible from our website that will allow you to search for rams using criteria you specify. We will release new protocols for collecting data on ewe longevity or stayability, (see later article on Ewe Replacement Rate protocol) and for collecting data on Bare Points (low cost, easy care) traits. There will also be a session on the new “rejigged” Meat and Growth sub-indexes that will be introduced later this year.

To help focus discussion at the forum, “Where sheep genetics needs to go in the next 10 years”, and to give those of you who can’t attend the chance to have your say, we have set up an online survey. The survey is on our SIL website and should only take 5 – 10 minutes. A summary of the survey and ensuing discussions at the forum will be included in a future newsletter.

We look forward to hearing from you online through the survey or seeing you in person on the 25th June at the conference.

We hope the mating season is going well for you and feed supplies are reasonably plentiful for the upcoming winter. Please feel free to get in touch with us if you have any questions about the Sheep Genetics Day or any other SIL queries. Just call or email silhelp.

Georgie Walker

In this newsletter we will cover:

- Sheep Genetics On-line Survey
- Flocks recording Health Traits now listed on SIL website
- Bare Points Sheep - New measurement protocol
- Growth and Meat sub-index changes
- Ewe replacement Rate - new measurement protocol and codes
- Ram Sale Catalogue template
- SIL eNotes

- Ewe Size
- Ram Buyers guide
- Ewe Efficiency
- Using CTP flocks in your evaluations

Contact SIL

Phone: 0800 silhelp (0800 745 435)

Email: silhelp@sheepimprovement.co.nz

Website: www.sil.co.nz

Sheep Genetics On-Line Survey

SIL needs your ideas! The final session at our upcoming SIL Sheep Genetics Day will have a panel of experts addressing the topic “What do we need from sheep genetics in the next 10 years?” You can put your questions to them. The chairman will use results of an on-line survey to put further questions to the panel.

If sheep genetics are important to you, have your say by completing this online survey. It shouldn't take longer than 5-10 minutes. Key, common issues identified by the on-line survey will be put to the panel of experts to debate. If you can't come to the workshop, you can still have your say. **Find the link to the Sheep Genetics survey at www.sil.co.nz.**

Mark Young

Flocks recording Health Traits now listed on SIL website

Due to frequent enquires to the silhelp line about which SIL breeders are measuring Internal parasite resistance using WormFEC™, Internal parasite resilience or Facial Eczema using RamGuard, we now publish lists of these flocks on our website.

These three health goal trait groups require strict measurement and analysis protocols to be followed. All flocks recording these traits are therefore registered with a 3rd party service provider who specify and monitor application of the measurement protocols.

The new webpage titled **Health Trait Flock Lists** can be found under **Buying Rams** on our website. For each flock you can find the owner contact details, breed and number of years the flock has been testing for the trait in question. Number of years is set at 31 Dec of each year, so a flock with 0 years has started testing this year and a flock with 5 years has been testing for 5 years and is currently in their 6th year.

The Facial Eczema breeder list has an additional column called the RamGuard Rating. The RamGuard Rating indicates the dose rate at which the flock is testing, using a star system ranging from 1 (lowest dose rate) to 4 (highest dose rate) stars.

Georgie Walker

Bare Points Sheep – new measurement protocol

A lot of you would have heard about David Scobie's AgResearch project on low-cost, easy-care sheep. These sheep are defined as having less wool on their points, in particular around their breech and belly. SIL has developed a protocol based on this work that can be used in conjunction with the Dag Score goal trait group.

Bare Point traits can be recorded and reported on by SIL, but currently genetic evaluations are not available. However, Dag Score can be genetically evaluated to provide a Dag Score sub-index and Dag Score BVs.

Bare Point traits include fleece cover scores on the breech and belly, tail length & fleece cover on the underside of the tail, and a leg length (to use as an adjustment for animal size when looking at tail length).

A technical note on Bare Point Traits will be released at the Sheep Genetics Day and will be published on our SIL website. If you would like more information on the Bare Points goal trait group before the 25th June, please contact us.

Georgie Walker

Growth and Meat sub-index changes

A significant reorganisation of the Meat and Growth sub-indexes is being worked on at present and we will release details at the Sheep Genetics Day. Look for more information in the next SIL newsletter and on our SIL website.

There will be 4 main changes to the Growth and Meat indexes:

- Growth and Meat will be totally independent. So Growth with Meat (Gm) and Meat with Growth (Mg) will disappear (Growth indexes will be the same whether or not Meat is in the genetic evaluation).
- **Growth will be split into two sub-indexes** for Dual Purpose sheep - **Lamb Growth** (early growth) and **Adult Growth** (consisting of a ewe weight breeding value) to clearly separate the “benefits” of fast early

growth from the projected effect on ewe size.

- » We are going to use older ewe LW data to better predict genetic merit for adult ewe size (EWT BV). Currently we use up to LW18. We plan to also use LW30 (30 months), LW42 and LW54. Like LW18 these are pre-mating LWs.
- Breeding values in the Meat sub-index will be adjusted to a constant weight. Effectively they will tell us about carcass merit above and beyond carcass size.
- There will be just one Meat sub-index. It will be based on:
 - » A fat BV (fat weight at constant carcass weight) and,
 - » Three lean weight BVs (shoulder, loin and hind leg) to allow discrimination on carcass meat yield where performance measures are available from meat plant assessments or CT scanning.

The old sub-indexes will not be lost immediately. We will phase them out over time and will provide recommendations on when to use the new sub-indexes.

Georgie Walker

Ewe Replacement Rate – new measurement protocol and codes

A new goal trait group to evaluate the stayability/longevity of ewes in the breeding flock has been proposed. This is designed for Dual Purpose sheep as these rams are used to breed flock ewe replacements.

To start this off we have developed a protocol to use on farm to record the reasons why ewes “leave” the flock. We are currently putting the final touches to this protocol and the “ewe exit codes” you can use. It will be ready for release at the SIL Sheep Genetics day and will also be put on our website.

We are not in a position to offer genetic evaluations of this trait now. However, when we are, it will pay to have several years of data already collected in your flock(s) so we strongly recommend that Dual Purpose sheep flocks begin collecting this data.

Georgie Walker

Ram Sale Catalogue template

Over the summer SIL developed a template to use for ram sale catalogues. We would like to talk with those of you on ram sale catalogue or breed committees and discuss the templates with you. We have taken on board comments from you, as well as ram buyers & purchasers in developing the template, to help present genetic information in a more consistent and user friendly format.

Further information will be posted on our website, but in the meantime those of you involved with putting together catalogues can contact us, via **silhelp** or talk to us at the Sheep Genetics Day in June.

Georgie Walker

SIL eNotes

In our last newsletter we included a SIL eNote about ‘Mating Tips’ and invited breeders to register for the SIL eNote service. We had a good response and encourage more of you to sign up for this free SIL Breeder e-mail service.

We have now distributed two eNotes on Mating Tips, and Meat Scanning and are preparing another on Pregnancy Scanning to be released soon.

To register for email delivery of the SIL-eNotes, email silhelp@sheepimprovement.co.nz with your request, providing us with your name and flock or owner code.

All SIL-eNotes are posted on our website, *look for SIL eNotes under Technical Information.*

Georgie Walker

Ewe size

With the changes we are making to the Growth genetic evaluation, where we use more older LWs for ewes to predict genetic merit for adult size, we strongly recommend that all Dual Purpose flocks collect one or more later LWs on their ewes. We need this data to better discriminate between early and late growth. We will have new Growth indexes that provide this discrimination but we need good hard data to maximise the power of this new evaluation.

As a minimum, we recommend all Dual Purpose flocks measure LW18. To get maximum power in the discrimination between early and late growth, measure the pre-mating LW of ewes up to LW54 (54 months or 4½ years of age). SIL will not be using LWs collected on ewes older than 54 months in its genetic evaluation.

Dr Mark Young

Ram Buyers guide

We are planning to produce a Ram Buyers Guide to provide ram buyers with the basics in genetics they need when purchasing rams.

We are in the 'chapter title and content' planning stage at the moment, and will be concentrating on getting the guide out later this year. We have had good feedback from people in the sheep industry and would welcome ideas from you about content of the guide. Please feel free to forward your ideas to us via silhelp email or by post (SIL, PO Box 135, Feilding 4740).

We will give you an update on progress of this guide in our next SIL newsletter.

Georgie Walker

Ewe Efficiency

Grant Shackell, AgResearch has asked us to pass on his sincere thanks for the response to his request for access to SIL Breeder records, which exceeded expectations. To date, 96 respondents have allowed him access to a total of 117 flocks - that is in the region of 1.25 million records. Grant and his team are now having a preliminary look at the data.

Grant found the responses to the questions he posed on the form most interesting. Some breeders offered more than one answer to one or both questions and there was a large diversity of opinion on which component of efficiency was most important (81 responses identified 22 different components), and which component individual breeders would most like to change (69 responses; 18 different components).

Almost half of the respondents registered an interest in also being involved in a research project. Grant will be contacting you.

If you haven't sent in your return it's not too late, Grant is still happy to receive them. If you have lost the form you can contact him at grant.shackell@agresearch.co.nz or by phoning 03 489 9192 and leaving him a message.

Using CPT flocks in your evaluations

We have had requests to use the MWNZ CPT flocks (including data collected when this was the Alliance CPT) in genetic evaluations for other flock groups, to enhance connectedness. The CPT Committee has approved this in principle provided the CPT flocks are NOT used as report flocks i.e. they are only used as analysis flocks.

This allows flock groups to use the CPT flocks to gain or enhance connectedness among their member flocks or to bring into their evaluation other flock groups that would not be connected without the connections the CPT flock(s) provide.

If you want to use a CPT flock in your across-flock evaluation, you must obtain permission to do so from Dr Neville Jopson who acts on behalf of all three CPT flocks. Permission must be sought separately for each CPT flock (Woodlands, Ashley Dene & Poukawa). To obtain permission send a request by email to njopson@abacusbio.co.nz indicating:

1. Which CPT flocks you are requesting the use of
2. Who is making the request (your name)
3. Which flocks or flock group the evaluation is being carried out for
4. How often these evaluations will be carried out
5. Which traits are being evaluated
6. What reporting is planned for (across vs. within flock reporting)

Dr Jopson can approve use of CPT flock data for this purpose. He will liaise with flock manager(s) to obtain permission from flock owner(s) on your behalf. The intention is that this process is reasonably quick while providing SIL Bureaus and Across Flock Report Managers with a single point of contact, for obtaining approval to use CPT flock data for the specified purpose. The CPT committee needs to know the extent of this usage which is why they require the above information from you.

Dr Mark Young

| Contact your SIL bureau: | Bureau: | Contact: | Phone: |
|--------------------------|---|-----------------------------------|---------------------------|
| | The New Zealand Animal Breeding Trust | Clare Callow / Barbara Beckett | 06 354-9119 / 04 526-8497 |
| | FlockLinc | Chris Logan | 03 325-3838 (extn 8620) |
| | Geneplan | Alan Warren | 03 688-1131 |
| | Genetic Gains | Julia Aspinall | 03 216-3455 |
| | Livestock Administration & Account Services | Joanne Pinfold / Christine Ramsay | 06 323-4156 |
| | NZ Performance Sheep Breeders | Murray Meads / Linda Shailer | 06 323-4484 |
| | NZ Performance Recording Services Ltd | Ken Moore | 03 338-8078 |
| | NZ Sheepbreeders Association | Lyndsay Gough | 03 358-9412 |