



# SIL Newsletter

MEAT & WOOL NZ

Genetics

Issue 8

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*Welcome to the SIL newsletter.*

*Since the last newsletter we have seen the drought persist in some regions before easing. This will no doubt impact on future production but some farmers have reported surprisingly good scanning results after this challenge, and we hope this leads to a relatively good lambing season for all of you.*

*When times get tough an investment in good genetics is part of a sound recovery strategy. Your ram buyer clients want affordable rams that deliver high performance in their farming conditions. We are working on tools to help you make more effective use of genetic information that SIL produces. This can help your own breeding decisions as well as helping you find the best animals from your flock to suit a buyer's needs. Read more under my article about the "ACE search tool".*

*A hot topic for many breeders and their clients is that of ewe survival or "stayability" or longevity. Georgie Walker looks at what these terms mean and how we can begin to collect data to better address this in the future.*

*Lamb survival is something you will be observing very soon, perhaps already for some of you. Sharon McIntyre looks at key issues to consider in data recording that influence the SIL analysis of Lamb Survival.*

*Usage of the SIL help line (telephone 0800-silhelp or email [silhelp@sheepimprovement.co.nz](mailto:silhelp@sheepimprovement.co.nz)) continues to grow. This facility is there so that if you have a question you can fire it off to us right away. We can then get back to you to discuss the issues you raise.*

*Out of our silhelp work we have been reminded that some questions just keep coming up. Certain features of performance recording and the SIL genetic evaluation system lead to the same queries from different breeders and ram buyers. We want to focus on some of these. We plan to do this via a workshop series provided there is sufficient interest. Read more in Georgie Walker's article titled "10 for 10 workshop series".*

*We are continuing our column in Country-Wide every second month. Please let us know how you think it is going and of any topics that would be useful to address. Use silhelp to drop us an email or leave a voice message.*

**Mark Young**

## **In this newsletter we will cover:**

- ACE search tool
- Ewe survival, stayability or longevity – what's in a name?
- "10 for 10 workshop" series
- Stayability – what can you do now?
- Collecting lamb survival data – Best Practice
- Getting your SIL newsletter by email

# Finding good animals more easily – the ACE Search Tool

Currently, results of the 2-monthly SIL ACE genetic evaluation are published as “Trait Leader Lists” on the SIL website ([www.sil.co.nz](http://www.sil.co.nz)). Our agreement with SIL ACE participants restricts us to only reporting on top-ranked sires for the trait index on each report.

We have received requests for access to information from more animals. Some of these lists are for less than 10% of the animals evaluated and so many very good animals are “just off” these lists. Some of these may have the balance of merit across key traits that breeders or ram buyers, are wanting.

Our beef industry uses a tool to trawl through large scale genetic evaluations to find animals that meet specific criteria. We believe that the sheep industry needs such tools to obtain the next lift in rate of genetic improvement.

For example the search tool could search for animals of a specific breed and age, with an index greater than 500, but with a minimum BV for weaning weight and an NLB BV between 0.15 and 0.25. In addition you could restrict the search to flocks in your region or to a specific flock.

## What needs to be done to get this up and running?

SIL envisage this search will be done over the internet. A simple print out of results will be produced. We anticipate being able to deliver a test version by this time next year, if not before.

To use this search tool we intend to change the agreement we have with participating breeders so that the tool can report information from more animals. All breeders with flocks in SIL ACE will be sent a letter outlining the changes planned for this agreement.

**Key point** – SIL is changing the agreement on what animals can be reported on from SIL ACE. Participating flock owners will be sent a letter outlining these changes.

*Mark Young*

# Survival, stayability and longevity – a ewe trait

In the SIL system ‘SURVIVAL’ refers to the survival of a lamb from birth until weaning, with SUR (“direct” survival) predicting the lambs ability to live (lamb vigour) and SURm (maternal survival) predicting the ewes ability to keep her lamb(s) alive (mothering ability).

SIL is introducing a new trait called ‘STAYABILITY’ which is a measure of how long a ewe stays in the breeding flock. It is sometimes called “longevity” or “ewe survival”. Some families may show less “stayability” because their ewes die or they are culled because they fail to produce a lamb or produce a poor lamb(s), they contract a disease or they manifest a physical fault.

Note that ram “stayability” is a different trait. Many of the reasons a ewe is culled do not affect rams. However, you can also record reasons that rams are culled as a separate trait.

If you want to look at ewe stayability in the future, you can begin collecting data now. Basically you need to record a reason or reasons for every ewe that leaves the ewe flock and when it leaves. The following Ewe stayability article what information you can begin collecting as a first step toward this goal.

**Key point** – SIL has a new trait called “stayability” that is a measure of how long ewes stay in the breeding flock.

*Georgie Walker*

## 10 for 10 Breeder Workshop series

SIL is offering to run workshops where you help decide what questions and answers will be covered. See the enclosed green sheet for more information.

*Georgie Walker*

# Ewe stayability – what can you do now?

A number of you have expressed interest in SIL providing a measure of genetic merit for ewe stayability. We are currently working on this with the aim of introducing recording codes and guidelines for the 2009 breeding season.

The basic concept is simple – how long a ewe stays in the breeding flock. However there are many reasons for the ewe to have left the flock e.g. death or culling as a result of injury, disease, or poor reproductive performance. Some of these can be further broken down into when she died (during pregnancy, lactation or when dry), which disease, lambing problems, mothering ability, fertility or fecundity, and structural problems with feet or udder. Finally she may fail on her SIL figures and be culled so a ewe with better figures can be brought into the flock. The list is huge and the combination of subjective and objective measurements mean the trait is complex.

This complexity is why we would like your feedback. We want your ideas on ewe stayability such as the main reasons ewes don't "stay" in the ewe flock and things to consider when recording. Unfortunately the SIL advisers cannot easily write these down if you telephone us (they don't do shorthand!). So we would prefer it if you sent us your ideas by letter or email.

**Please send your ideas to the silhelp email address given at the end of the newsletter or in a letter posted to Georgie Walker at PO Box 135, Feilding 4740.**

In the meantime, you can begin to collect ewe stayability data. Simply record reasons for why any ewe leaves the flock after she has been selected to enter it, including ewes that were mated for the first time. This will include such things as didn't get in lamb, died before lambing or aborted. This information may help you use a future coding system that SIL devises for ewe stayability. Later you can code up and add this data for previous ewe losses to help build a picture for your flock.

**Key point** – You can start collecting useful data now for future analysis of ewe stayability. For all ewes that leave the flock, record reasons why.

*Georgie Walker & Mark Young*

# Collecting lamb survival data – Best Practice

**Lamb survival is a trait that can impact on farm profit dramatically.** At present, SIL defines Lamb Survival in terms of deaths between birth (or pregnancy scanning) and weaning. Cause of death is not taken account of.

**Recent research by AgResearch scientists has shown that comprehensive datasets lend themselves to more accurate prediction of breeding values for this trait.**

This work has led to a more sophisticated examination of lamb deaths which can be recorded on SIL. In the future SIL may offer genetic evaluations of data of this type.

Please ask us about this if you want to know more about the AgResearch method.

SIL is working to develop a way to include Lamb survival data into the large SIL ACE evaluation where there is good data. While it is reasonable to expect that a lot of historic data may not be appropriate for such an evaluation, we should be working to collect good lamb survival data from now forward.

**What can you do to ensure your lamb survival data is the best it can be? Simply following these rules will maximize the accuracy of analyses using lamb survival data from your flock.**

1. Record dead lambs for a ewe in your lambing book e.g. if a ewe has two lambs and one is dead, tag the live lamb and record that the ewe had another lamb that died.
2. Some breeders record the birth litter size of lambs so a surviving twin is recorded as born a twin. This is a double check that can be used to resolve a rare mistake in recording. Some breeders use pregnancy scanning data to identify how many lambs a ewe is expected to have. This can help assign litter size in tricky situations where a lot of ewes lamb close together.
3. Record all lambs that die. SIL has lamb fate codes you can use (see table over page).
4. Record the date an animal died where you know this.

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5. While some of you use the same fate code for any lamb that dies at or near birth through to weaning, you can also use different codes to indicate when a lamb died e.g. fate codes of J (died at birth), K (died between birth & docking) and 1 (died later).
6. At weaning, code any lambs that do not have a weaning weight, as dead. Typically, most of these lambs never turn up again.
7. Minimize biases caused by subjective interpretation e.g. unless you can be sure a lamb dies through no fault of its own (misadventure e.g. run over or fell in creek), simply record it as dead. The SIL analysis system will identify dam families with poor mothering ability or families where there are unusually high numbers of "chance" deaths.
8. A special case – using the DNA parentage system – you need good pregnancy scanning data to define ewe lambing performance and lamb survival.

Birth fate code affecting survival	Description
J	Died at birth
K	Died between birth and tailing
L	Died later
M	Death by misadventure

You should discuss your recording system with your bureau, particularly if you are changing it from the way you did it previously. They can help you maximize the value of your lamb survival data in a SIL genetic evaluation.

**Key points** – In the future, SIL plans to include Survival in the ACE evaluation. To maximize accuracy of lamb survival data, record all lambs born and provide "dead" fate codes for all animals that die or disappear.

*Sharon McIntyre & Charlie Ensor*

As mentioned in a previous newsletter our SIL newsletter is available to be sent to you as electronic copy instead of by post as paper copy.

To sign up for the newsletter by email send us an email (at [silhelp@sheepimprovement.co.nz](mailto:silhelp@sheepimprovement.co.nz)), and include the following information

- Your full name,

and one of the following;

- the SIL flock code for one of your active flocks if you are a SIL breeder

or

- Your reason for interest in the SIL newsletter eg farm advisor if you are not a SIL breeder.

Please note this is a request to get your newsletter by email and cease to get it by post.

The email sent to you will have the newsletter attached as a pdf file.

Sign up today and you'll receive your next SIL newsletter faster than by post and can store it on your computer for future reference.

**Key point** – We can deliver your SIL newsletter by email

*Mark Young & Georgie Walker*

## Contact SIL

Phone: 0800 silhelp (0800 745 435)

Email: [silhelp@sheepimprovement.co.nz](mailto:silhelp@sheepimprovement.co.nz)

Website: [www.sil.co.nz](http://www.sil.co.nz)

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