



Decisions made at mating time are very important for within and across flock connectedness, for limiting pedigree errors and for obtaining the best quality information for your genetic evaluations.

To ensure the best possible genetic evaluation predictions from your data here is a guideline on what you can do mating:

- A) Complete and submit a mating list
- B) Plan adequate connectedness
- C) Use data auditing reports & connectedness graphs

## A) Complete and submit a mating list

A mating list records all of the ewes in the breeding flock and the ram they were mated to for the year.

### Why?

- 1) Identifies sires of lambs via dam identification
- 2) Reduces the potential for pedigree recording errors at lambing both for the sire and dam identification
- 3) Enables a clean up of your database identifying any dead or culled ewes that haven't been coded
- 4) Enables sires' SIL id's to be verified by your bureaus

### How?

- 5) Complete a list such as a Sires Used list (these are available from your bureau)
  - a) Submit this list to your bureau well before lambing
  - b) Record **all** mated ewes and mating rams (MRAM)
  - c) Record any ewe deaths or culls during or after mating
  - d) Record all ewe hoggets mated to rams regardless of whether they have shown signs of being mated or not
  - e) Record all ewes mated to follow up rams and the ids of the follow up rams
  - f) Include all barren ewes in your list submitted to your bureau and with the appropriate DFATE (dam fate) code

### What happens if you don't?

- 6) Breeding Values can be biased (too high or too low)
- 7) Reproduction breeding values can be biased and/or inaccurate
- 8) Animals can be assigned to the wrong families
- 9) Reports can be produced with ewes included that are no longer in the breeding flock

**For more information on Mating Lists** refer to your bureaus

## B) Plan adequate connectedness

Connectedness is the term used when 2 or more groups of animals are genetically connected by a common sire(s) thereby allowing SIL to calculate the necessary environmental adjustments and produce unbiased genetic evaluations.

### Why?

1. It enables unbiased comparisons of animals from different flocks, years, and ewe age groups
2. Genetic comparisons without connectedness are often biased

### How?

1. Connect years
  - a. Use at least 1 ram from the previous year
  - b. Record measurements for at least 20 progeny per connecting sire, per year
2. Connect ewe age groups
  - a. Use at least 1 ram across the 3 different ewe age groups (hogget, 2th and mixed age) within a year, or the 2 age groups if not hogget mating
  - b. Record measurements for at least 20 progeny per connecting sire, per ewe age group
3. Connect flocks if involved in across flock evaluations
  - a. Use at least 2 rams in common with 2 or more flocks in the same year
  - b. Record measurements for at least 20 progeny per connecting sire in all flocks
4. When estimating number of ewes required to produce progeny measurements remember that reproduction traits benefit from more progeny with measurements
5. It is recommended you use at least 2 rams to obtain connectedness in case one ram is infertile, injured or sick during mating

### What happens if you don't?

6. Poor connectedness in flocks can result in biases in breeding values (*i.e.* some breeding values too high or low)
7. Poor connectedness between flocks can result in biased breeding values for some flocks and may mean those flocks will not be used in across-flock reports

**For more information on Connectedness** refer to our website and the technical notes under Across Flock Evaluations.

### **C) Use data auditing reports & connectedness graphs**

Data Auditing (DA) reports are a summary of your data that is on the SIL database. Connectedness graphs show how well flocks are connected for different traits

#### **Why?**

1. Enables you to check your data, in its entirety, is on SIL
2. Shows which, and by how much, flocks are connected for various traits

#### **How?**

3. For mating data, ask your bureau for table M1: Mating & Lambing Summary from the Data Auditing Tools & Reproduction & Survival (DAT-RS) reports
4. For within flock connectedness information ask your bureau for tables L3: Sires used across years & L5: Sires used across ewe age groups from the DAT-RS reports
5. For pedigree recording completeness ask your bureau for table L9: Lambs missing parentage (numbers) from the DAT-RS reports
6. There are other data auditing tables available for checking lambing results and lamb survival results
7. For across flock connectedness ask your bureau for connectedness graphs

#### **What happens if you don't?**

8. Missing or incorrect data can result in some animals not getting the breeding values they should have
9. Missing or incorrect data can bias breeding values for some animals and their families
10. Inadequate connectedness within flocks can bias breeding values
11. Inadequate connectedness between flocks means we cannot validly compare BVs and indexes between flocks. It may mean that your flock is not included in across-flock reports

**For more detailed information on Data and Connectedness reports** refer to the SIL website and the technical notes under Tools for Breeders and Across Flock Evaluations.

### **Upcoming SIL-eNote topics**

- Eye muscle Scanning
- Pregnancy Scanning

### **Noticeboard**

- New SIL newsletter coming out in February
- SIL presenting at NZSAP conference in June: Programme developed for SIL Breeders, more information in the upcoming SIL newsletter

### **Contact details & further information**

SIL-eNotes are designed to give you some quick tips and reminders on how to get the best out of performance recording and genetic evaluations with SIL. For further information or if you have any questions you can look at our SIL website or contact our SIL helpline.

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

**Phone:** SILhelp – 0800 silhelp (0800 745 435) **Email:** [silhelp@sheepimprovement.co.nz](mailto:silhelp@sheepimprovement.co.nz)

To unsubscribe from this mailing list, just reply to the message at any time with “**Unsubscribe SIL- eNotes**” in the subject line. If your email address is going to change and you want to keep receiving this service please update your email details with your bureau and send your new contact details in a reply to this message.

**If you want to receive SIL eNotes by email, please send an email message to: [silhelp@sheepimprovement.co.nz](mailto:silhelp@sheepimprovement.co.nz) with the words “Subscribe eNote” and one of your SIL flock numbers or SIL owner code in the subject line.**  
**Note: All SIL-eNotes can be found on our SIL website**