

## SIL DNA Parentage Basics

---

*This note pertains to the basic requirements for successful SIL DNA Parentage*

### TSU Sampling

- TSU samples are required from all breeding rams and ewes (possible parents), as well as all lambs
  - Ram samples should be taken at mating, for any rams not previously genotyped
  - Ewe samples should be taken at mating (or docking), for any ewes not previously genotyped
  - Lamb samples should be taken at docking
- Once samples are taken, send them to your chosen laboratory as soon as possible
  - If using 'Dry' TSUs (no preservative), store samples in freezer as soon as they are taken and keep cool when in transit; if using 'Wet' TSUs (includes preservative), store samples in refrigerator and send to lab as is
- When all samples have been submitted to your chosen laboratory, processing and results take approximately 4-6 weeks

**Caution:**

For best results, ALL live lambs must be sampled.

### Mating, Pregnancy Scanning and Lambing Records

- It is very important to record mating and lambing mobs (these will become mate and lamb group measurements on SIL):
  - Mating records for ewes and rams should be carefully recorded at time of mating and sent to your Bureau
  - Pregnancy scanning and foetal age records should be carefully recorded for all ewes (including barren ewes), and sent to your Bureau
  - Lambing records for ewes and lambs should be carefully recorded at lambing and sent to your Bureau
- SIL requires LAMBGP, PREGSC, FAGE, MATEGP and/or MRAM to be loaded to complete DNA parentage:
  - All breeding ewes require Mate Group (MATEGP) and/or Mate Ram (MRAM), pregnancy scanning (PREGSC), foetal age (FAGE) and Lamb Group (LAMBGP) traits
    - Including Wet/Dry ewes
  - All breeding rams require a Mate Group (MATEGP) trait
  - All lambs require a Lamb Group (LAMBGP) trait
  - If all live lambs are not sampled, ewe (DFATE) and lamb (BFATE) fate codes of X must be correctly used for those mobs to ensure accurate DNA parentage

**Caution:**

If all required data is not provided to your Laboratory and Bureau, this can affect both DNA parentage accuracy and lamb survival percentage, culminating in possible poor results for both.