

### New Genetics Tool: First release scheduled for April

Development of B+LNZ Genetics' new Genetics Tool is progressing as per timelines and the first release will be April.

This tool and the wider system around it will carry its own name – nProve – signalling the fact it is an entirely new genetic evaluation system for New Zealand – one that will, in time, serve multiple productive species.

nProve draws on information from the New Zealand Genetic Evaluation (NZGE) and will encompass the functionality of all the old tools – BreederFinder, FlockFinder and RamFinder – but provide greater transparency and the ability to "mine" your own data more deeply.

Over the coming year, updates will be rolled out, to help you access data in a user-friendly manner and to support farmer decision-making around ram selection.

Over time, the name "nProve" will effectively replace "SIL", reflecting (a) the fact the tool is informed by completely new software and back-end technology, and (b) so it is relevant to other species.





# **Opportunity to provide feedback on new Genetics Tool**

With the new genetics tool due for launch in April, we are seeking relevant industry parties to participate in workshops to provide input.

Workshops will be held remotely, using communication software (which will be provided) that enables us to demonstrate concepts and collect your feedback.

#### More details

Register your interest to participate in the workshops.



#### Connectedness

February is when SIL's three-year connectedness and reporting period is adjusted to include the previous year's lambing (2017) and drop the oldest year (2014).

The current year range is 2015-2017. Some breeders may find they have dropped connectedness for certain traits and indexes, which indicates that their connections were more than three years old, or they may have been connected via another flock that has lost connectedness. SIL recommends that connectedness should be planned <u>at least</u> every second year.

Now is a good time to check your flock connectedness prior to mating. To provide good connections, SIL recommends 20-25 measured progeny. This is a big ask for traits such as reproduction, but it is important to retain and capture lambing data on daughters of link sires. I.e. 10 daughters retained with 2 lambing records each, or 20 daughters with 1 lamb record each = 20 records.

Check with your bureau or B+LNZ Genetics if you have questions about how you are connected to the main NZGE grouping.

For info on the principle of connectedness refer to the Best Practice Guide

## **Record your ewe liveweight**

At previous breeder forums, SIL has indicated breeders should be connected for both lamb growth and adult size to allow fair comparisons, and recommended all dual purpose flocks record adult size at mating (LWMATE).

To allow breeders time to respond, connectedness has been based only on lamb growth to date. However, the intention is to require connectedness for lamb growth AND adult size next season.

We recommend taking a LWMATE record this autumn for all dual purpose flocks that have not been recording this trait.

## **Body condition score**

Mating is a good time to consider capturing a body condition score on ewes. If you are weighing your ewes to collect LWMATE, also consider recording BCSMATE. It is also a good time to tidy up live ewes on SIL by fating off ewes not retained, preferably with an exit fate code.

BCS technical note on SIL | BCS module on B+LNZ website

# **Pre-mating**

- February and March are good months for measuring WormFEC resistance and Worm Resilience in progeny of sires, ahead of mating. There are protocols to follow for each to ensure quality data. Contact your bureau, Annie or Max if you need more information.
- Liveweight at 6 or 8 months (for both rams and ewes) and scanning for eye-muscle area should also be considered now.
- If progeny numbers for some sires are low (less than 20-25), consider measuring all ram and ewe lambs with ultra-sound. It will also add accuracy on the female side.



## Wool Survey: What's your opinion on wool traits?

SIL is currently reviewing wool evaluations. As part of this, we want input developing SIL indexes for crossbred and mid-micron wool breeds. The indexes are intended to assist sheep breeders and their clients when making selection decisions over a range of wool traits.

Thank you to those who have participated so far.

By completing the survey below, you provide us with valuable information which will help ensure that the indexes are relevant to your situation and requirements.

Take survey



# **B+LNZ Genetics Beef Progeny Test: Mating update**

The last cohort 1 progeny are being processed and initial results will be presented at two B+LNZ Genetics Beef Progeny Test (BPT) field days in May.

About 2200 cows have been mated annually (using AI) across the test's five sites, with 52 sires used in the 2017 intake (the fourth mating). Breeds used included Angus, Hereford, Stabilizer, Charolais and Simmental – a mix of international and New Zealand, heavily used, benchmarked and young unproven sires.

Young bulls dominated the intake, because they are typically the most genetically advanced, help to reduce generation interval, and ultimately accelerate genetic gain.

#### Genetic gain = Intensity x Accuracy x Variation ÷ Generation interval

See Events below for field day details.

BPT Sire list BPT Performance Report



## Early days with antral follicle count research

As part of the Trans-Tasman Beef Cow Profitability Programme, ultrasound ovarian scanning to detect oestrous/age at puberty and antral follicle count prior to mating is underway in heifers from seedstock and research herds in both New Zealand and Australia.

The project records the number of antral follicles greater than 2mm. This measure has been associated with heifer pregnancy rates in crossbred beef heifers and lifetime reproductive performance in dairy cows. If the same is true of these beef heifers, the appeal of a single

ultrasound scan to predict early and lifetime reproductive performance is significant. However, it is too early to confirm if this is the case.

Preliminary analysis suggests that age at puberty, proportion cycling and antral follicle counts are likely to be heritable. However, larger data sets are needed to validate the findings and confirm whether these traits are related to fertility outcomes in heifers and over the lifetime of the cow. It is therefore not yet possible to say any of the new measurements are likely to inform EBVs – new or old – in Breedplan.



## **Terminal Sire Sheep Progeny Test update: Maraetotara**

At the end of January, two lines of lambs were processed at Progressive Meats Ltd. This was the second cohort of lambs for the terminal sire progeny test run on Horizon Farming's Maraetotara block. The average hanging weight for each line was 16.31kg and 15.98kg, while dressing yields were 43.2% and 42.5%, respectively.

Lambs born on the Hawke's Bay property in spring 2017 have sires from 22 different breeding operations. The breeds represented were Texel, Suffolk, Southdown, South Suffolk, Poll Dorset, Kelso Terminal, Focus Prime, Charollais and Longdowns.

Additional measurements collected in plant were: tenderness (using Carne Technologies probe), yield (via the Marel system) and intramuscular fat (using both hyperspectral imaging and near-infrared machines). Some of these measurements will contribute towards the new SIL meat module (due mid 2018) and inform eating quality research BVs.

Thanks to the breeders, helpers and second-year Smedley cadets who pitched in and made it all happen.

## Farming's social license: A genetic solution

Earlier this month, the New Zealand Merino Company and B+LNZ Genetics hosted a genetics day for sheep farmers at Duncraigen farm, Southland. The event focused on the future of sheep meat production and opportunities that genetics could create for farmers.

Highlights from speakers were:



**Rosie Bosworth, Agritech specialist**: Plant-based protein and cultured meat is real and will compete with New Zealand meat products. We need to consider where our New Zealand story and product sits.

Watch video



**Melissa Clark-Reynolds, B+LNZ Director**: Consumers aren't buying plant-based product by accident, so let's not waste money limiting who can call their product "meat". Instead, let's concentrate on where our New Zealand product can be most valuable and have its own point of difference.

#### Watch video



Aimee Charteris, Genetics specialist: We can select our animals to produce a profitable, high-quality product that also meets animal welfare standards. There is a genetic component, as well as a feed component, and the future of farmed meat is up to all of us to promote and create. Work with all members of our product chain and make it centred around the market.

Watch video



#### Sheep Central Progeny Test: Hub site sires 2018

The link below contains a list of rams used at the progeny test Hub sites, including links to the Next Generation sites.

#### Sire List (2018)

Any requests to use the semen must be approved by the owner of the sire. <u>Nadia McLean</u> (AI coordinator for the CPT) must also be notified of the requirement for extra semen straws. This is essential to avoid miscommunication over total number of semen straws needed.

Please email Annie O'Connell if you have any questions about the rams listed.

#### **EVENTS**





# **Beef Progeny Test Field Days**

- 1 May, Mendip Hills Station
- 8 May, Rangitaiki Station

Further details to come.

# **Bull Buying Workshops**

9.30am–3pm, 17 April Wairere Angus, 36 Wairere Road, Ohangai Hawera

9.30am–3pm, 3 May Raupuha Shorthorns, Mahoenui, King Country



# Power of the Beef Cow Field Day

If you want to know more about Paparata Station's beef breeding operation and visit this iconic property, then save the date and attend the 'Power of the Beef Cow' field day.

#### Wednesday 7 March | 10am-4pm Paparata Station

More Details



The team (from left): General Manager Graham Alder, IT Programme Manager David Campbell, Lead Scientist Dr Michael Lee, Science Manager Eleanor Linscott, Genetic Evaluation Technical Manager Sharon McIntyre, Sheep Genetics Manager Dr Annie O'Connell, Beef Genetics Manager Max Tweedie and Office Administrator Pam Schofield.

More information about team



The future's in the genes

For more information visit **www.blnzgenetics.com** 

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