Gateway Gazette

Beef, Sheep and Deer.

Issue 58 | December 2021

With a hit and miss start to summer hopefully you've managed to get some baleage done between the downpours.

Although the warm and wet conditions are good for grass growth it's also very favourable for parasite survival which, coupled with slow grass growth early on, has reduced growth rates on some farms. On the plus side the store market is underpinned by export prices at the moment and prices remains strong. Hopefully Canterbury turns it on for us all and the New Year brings some decent sunshine with it!

Wishing you a very Merry Christmas from everyone at Gateway Vets

Farmer Interview
Evan and Clare Chapman – Rockburn

Tell us about your farming operation.

Rockburn is a 540ha (510ha effective) sheep and beef property, in the Kakahu area. It's mainly rolling to steeper country and prone to dry Summer and Autumn weather. We run 2700 breeding ewes, 540hoggets and 395 Wagyu cattle.

How does your rotational grazing system work?

Ewes with lambs at foot are boxed up into larger mobs at tailing, and moved daily. Over the following few weeks mobs are joined together, until there are just three mobs, each containing 900 ewes, and approx 1500 lambs. These are rotationally grazed on 4ha paddocks, with either daily or twice daily shifts. Rotation length is 24 days.

What's the theory behind this?

By building up a feed wedge ahead of stock, ewes and lambs are able to go onto pasture covers of 2500-3000kgDM/ha, with post grazing residuals at 1500kgDM/ha. This allows ewes and lambs to have a fresh pick of grass and clover every day; boosting lamb growth rates and allowing feed to be conserved so there are good covers ahead of lambs at weaning. Lambs are killed at 42kg liveweight.

Farmer Interview
Evan and Clare Chapman – Rockburn

And what about the twice daily shifts?

One mob of 900 ewes (and 1500 lambs), as well as a mob containing 150 R2 Wagyu cattle and 300hoggets with lambs at foot, are shifted twice daily. These mobs are run on steeper country, with the paddocks split with a three-wire along the contour of the paddock. Mobs graze the top half of the paddock during the day, and are shifted to the bottom of the paddock in the late afternoon. By forcing mobs to camp at the bottom of slopes overnight, this has massively increased fertility in these areas.

How does the Wagyu Operation work?

The contract is with Firstlight Wagyu, and the finished product ends up in the States. Wagyu X Fresian/Jersey calves are bought in at 90-95kg. Wagyu growth rates are slower than conventional beef breeds, so they are taken through two winters - their first on kale and baleage, their second on fodder beet and hay. They are killed at 650-700kg, with special note taken that they are prime – as this hugely effects their marbling score.

How do you cope with the dry summer and autumn periods?

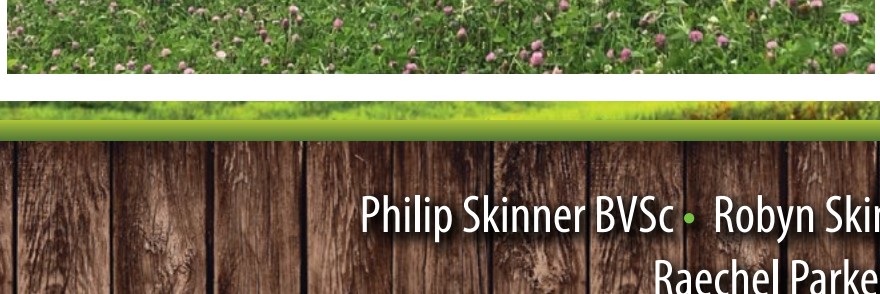
We have found that perennial ryegrasses don't hold on as well on our property through those dry periods, so have started experimenting with other plant species. Over the past few years, different multi species 'regenerative' mixes have been planted.

What is your take on regenerative farming?

We are using it as a tool to cope with dry periods and improve soil fertility. We've also found that lambs grazing the multi-species crops have yielded better than those on standard ryegrass and clover pastures. The theory is to graze a third, trample a third, and leave a third of the pasture. This means that stock get the best pick while grazing, and that carbon is returned to the soil to improve fertility, and plant biomass. It also means that moisture is better retained under these higher covers and the pasture holds on better in dry conditions. We've found that in late spring you need to graze a little harder so plants don't go to seed and drop quality. Often cattle follow lambs on the regenerative mixes to clean up some of the taller and less palatable plants.

What mixes have you tried?

A variety of mixes have been used, often with 10 or more plant species. At the moment pastures include mixes of at least four grass species, clovers, chicory, plantain, oats, silverbeet, vetch and rape. The bulk of the pasture is permanent, with a few annual species to provide extra metabolisable energy in that first year. Other "rocket fuel" mixes are targeted to finishing lambs - higher in legume content, and lacking grass. These will have grass species stitched in after 2 years.



Are there any other changes you've made?

Wagyu and fattening lambs are offered a free choice mineral mix – separate compartments containing just magnesium, salt, copper, boron, sulphur, rock phosphate, humates, folic acid or zinc. The lambs seem to target different minerals at certain stages of the season.

Parasite Update

Nina Jaine BVSc
and Raechel Parker BVSc

This season there appear to be high numbers of parasites around – all of our in clinic faecal egg counts have been high. This is likely due to a lot of properties being tight on feed at set stocking, with lighter condition ewes spitting out more worms than usual, and warm wet weather favouring parasite survival. Lambs subsequently are exposed to a higher worm challenge and therefore benefit from that early drench.

All lambs grazing pasture will be exposed to larval challenge. Infection with worms reduces production through appetite suppression, reduced grazing and the initiation of an immune response, which requires lots of energy. If we are seeing clinical signs of parasites – scours, weight loss, dehydration – then this is the end stage of disease and lambs will have already taken a big knock. At this stage lambs will be spitting out huge numbers of worm eggs, contaminating pasture for the future.

PARASITE EFFECT ON LAMBS	RESULT	
↓ Appetite	↓ Dry feed intakes	↓ **Growth Rates**
Gut Damage	↓ Nutrient absorption	
Trace element loss	Trace element deficiency	
Poor protein metabolism	↓ Muscle growth ↓ Carcass quality	

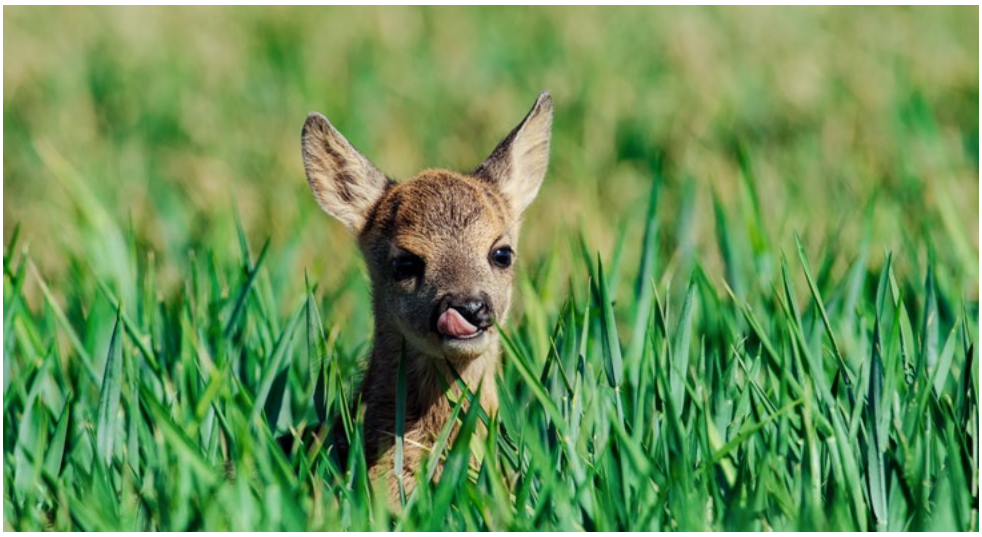
A successful worm management program should aim to minimise exposure of young stock to worms. This is why we recommend drenching of lambs every 28days, from weaning onward. This will limit lambs contaminating pasture, while still allowing any resistant worms to be diluted out with susceptible worms. Some properties will also need a preweaning drench (usually 3-4weeks prior to weaning), if Nematodirus worm species are a problem on your farm.

Have you considered using a novel drench such as Zolvix or Startect at weaning? Especially worth a thought if you are aware of wormer resistance on your farm. Using a novel at this time will kill resistant worms picked up from ewes, so lambs don't carry them forward onto weaning paddocks.

- ✓ Good pasture covers will limit how many worms are eaten
- ✓ Grazing ewes behind lambs will help to clean up large numbers of worms
- ✓ Co-grazing sheep and cattle will reduce the number of worms on pasture

Feeding Lactating Hinds

Raechel Parker BVSc



It can be easy to forget them when we're trying to let nature take its course and busy doing long days in the tractor, but making sure feed is in front of hinds as we go into peak lactation is vital for optimizing fawn growth rates and keeping condition on their backs their backs through summer.

The energy requirement of a hind doubles during lactation, they need approx. 60 MJ ME/d to feed a rapidly growing fawn and keep some condition on themselves. What does that look like? Covers of 1800 – 2200 kg DM/ha (5+ cm) of green, leafy pasture with at least 15% legume, plantain or chicory. This can be hard to achieve with peak lactation being 6 weeks post fawning when alot of pastures are losing quality, so it's worth getting some neighbouring paddocks set up for them to move onto. Consider using some cattle to clean up ahead of them or maybe they can move onto bailage regrowth; if this is not possible then supplementary feeding with grain or good quality bailage may be necessary. Remember they also need 7L of water a day to produce plenty of milk.

Fawn growth rates of 400g/d should be achievable if nutrition is right. Keeping hinds in good BCS sets them up for an earlier conception, meaning earlier fawns with more time to grow and hit reproduction and production targets the following year.

Making sure fawns have access to high quality feed means their rumens will develop quicker, improving feed intakes and reducing the stress and yersinia risk at weaning too.

Working Dog WOF

We now do a vaccine run for working dogs where we carry out an annual health check and vaccine on farm.

The best part?

We don't charge mileage if you have 5 or more dogs to be seen.

Ph: 03 693 9060 | Fax. 03 693 9065 | Email. clinic@gatewayvets.co.nz
5 Woodbury Road, R D 21, Geraldine 7991, New Zealand | Open Monday to Friday 8am-5pm, Closed Saturday & Sunday

Get them fat, get them gone

Raechel Parker BVSc

Optimizing lamb growth rates post weaning

As we head towards weaning you'll all be gearing up to get the best out of your lambs this summer if you choose to keep them on. Optimizing live weight gains (LWGs) improves production efficiency, increases feed availability for other stock classes and improves meat quality throuogh more marbling and less tough connective tissue.
Less days on farm reduces risk of lamb losses, effects of disease and carbon footprint - a quickly finished lamb is less environmentally expensive.
So how do we get there? Pasture, pasture, pasture…
and a few other things.

POST-WEANING GROWTH RATES	
Live Weight Gain	Comment
<50 g/d	Poor
50 – 100g/d	Average
100-200g/d	Above average
200 – 400 g/d	Very good

PASTURE – Quality and Quantity

It's all about quality. Growing lambs have big energy demands but small stomachs so just remember **– they can't increase intakes to compensate for poor quality pasture.**

Fast growing lambs utilize the top third of pasture (11+ MJME/kg DM) where all the good stuff is; below this lambs end up eating too much stem and leaf sheath with poor MEs and lots of worm larvae.

Ryegrass alone is unlikely to sustain LWGs of over 250g/d. **Species supporting high LWGs include clover, lucerne, chicory, rape and summer forage brassicas.**

The best growth rates will always be pre-weaning. No pasture matches ewe's milk, although clover comes a close second!

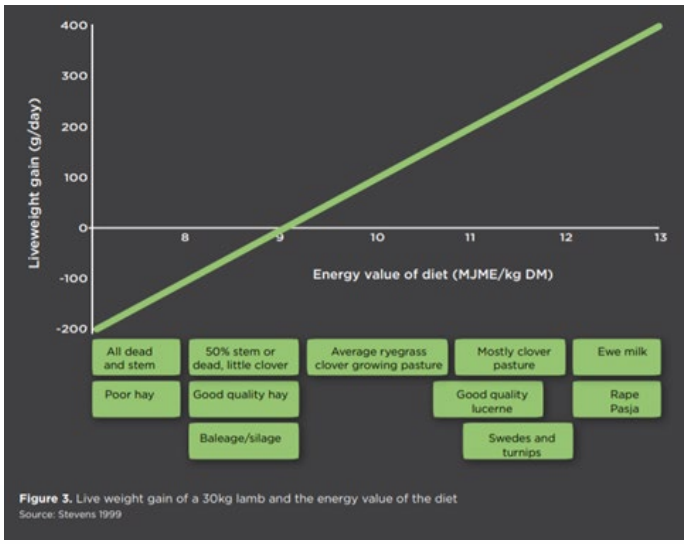


Figure 3. Live weight gain of a 30kg lamb and the energy value of the diet
Source: Stevens 1999

Feed quality and quantity for fast growing lambs[1]

- ✓ Aim to feed 4-5% of live weight
- ✓ 1.5kg DM/day for a 30kg lamb
- ✓ Residual 1400–1500kg DM/ha on pasture (3-4cm in spring)
- ✓ Utilisation 70% on summer green feeds e.g. rape or chicory.

PARASITES – It's still mainly about the pasture

Lambs with no worm challenge grow 50% faster than lambs with a high worm challenge drenched with a fully effective wormer every 4 weeks

90% of a worm population is on the pasture, with only 10% in the lamb, pasture management is therefore the crux of successful parasite control and hitting those LWGs. Drenching is important of course, but the majority of that 90% sits down in the lower stem so, if you can keep lambs eating the top third before moving on, their parasite exposure will be minimal.

Despite your best efforts periods of poor growth are unavoidable at times. The good news? Once a lamb is 40% of it's adult body weight it can compensate for a period of poor performance.

WHAT ELSE?

Pasture management and parasite control are just two of many factors gearing you up to get lambs finished quickly. A few other things need to be in order for your lambs to best utilize the pasture available to them post weaning:

- ✓ Ewe and sire genetics
- ✓ Ewe nutrition and body condition score (BCS)
- ✓ Trace element status
- ✓ Feed availability
- ✓ Pre-weaning growth rates
- ✓ The weather!

Tables and targets taken from Beef + Lamb NZ – Growing great lambs workshop resource book. June 2014.

Trace Elements – Get Yourself Covered

Nina Jaine BVSc

For optimal lamb and calf growth, all aspects of animal health should be considered. The majority of lambs and calves grazing in Canterbury will benefit from supplementation with trace elements – especially selenium and cobalt.

Selenium is very important for growth and production. If youngstock are drenched every 4weeks with a selenised product, this will be adequate for selenium supplementation.

Cobalt is an essential part of vitamin B12 which is needed as an energy source in animals. Pasture cobalt levels are lowest during Spring and Summer. If stock graze pasture that is low in cobalt, this shows up as vitamin B12 deficiency. Lambs with B12 deficiency have a loss of appetite and poor growth rates – they may be starving even on good feed. Other signs include a watery discharge from the eyes and washy wool. Drenches often contain cobalt, however oral cobalt only lasts for a short time in the body. Giving a short acting injection of vitamin B12 (Prolaject) will last approximately 4 weeks, so can be given alongside monthly drenches. Alternatively a one off injection of Smartshot will give you 6 months cover.